



SOMAIYA VIDYAVIHAR
UNIVERSITY



Conference of the EuroMed Academy of Business

in association with

K J Somaiya Institute of Management Studies & Research

Conference Theme

Business Theories & Practices Around the World



Editors

Dr. Monica Khanna | Dr. Preeti S. Rawat | Dr. Yakov Weber



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Foreword

On behalf of our Institute, we welcome you to the EuroMed India Conference being organized and hosted from 5th - 7th February 2020 at K J Somaiya Institute of Management Studies & Research, Mumbai. The conference has attracted submissions from across the globe and is compiled together in this compendium.

There are multiple themes under which the papers have been categorized.

Some recent areas of research have been explored such as, developing a model for predicting stock market movements using probabilistic neural network (PNN), the relationship between bitcoin in the USA and Australia trade volume with respect to three developed and emerging countries stock market index.

Few authors have submitted review papers like the theories of internalization and the eclectic paradigm of the banking sector and foreign direct investment (FDI).

Studies focusing on various organizational themes viz., ethical workplace climate in nonprofit organizations, applying a new Deming theory to improve the competitiveness of organizations in an environment of economic decline exhibits some interesting implications. Some quality and process related studies such as the role of total quality management and its implementation on the administrative processes of higher education, organizational change capacity (OCC) pave the way for rigorous future research. Studies demonstrating challenges of implementation of business theories practiced globally with some possible intervention, challenges faced by small and medium enterprises (SMEs), challenges of the construction industry, understanding the relation of gold prices with stock indices of various developed and developing economies discuss global viewpoints.

The studies on gender and women focus on themes like the role of unconscious bias in the selection of women, the use of social media to overcome gender-related barriers of Indian women entrepreneurs, relationships between dual-earner couples' work hour arrangements and men's and women's own preferences for reduced work hours seem promising in the present day scenario.

Some studies in the area of organization behavior throw light on variables like the role of cross-cultural training on expatriates' productivity in IT industry and sensitize the reader on culture and its importance for the expatriates, the mediating role of thriving for emotionally reactive (neurotic) employees and innovative behavior, performance of self-managed teams, leadership models focusing on interactive behavior and collaborative learning, the concept of well-being and overall meaning of life and life satisfaction.

Similarly, there are some country-specific studies like the study on Omani women participation in SMEs and their success and failure, impact of China's policy of 'One Belt, One Road' on Chinese tourism, the study on Regional Comprehensive Economic Partnership (RCEP) and key concerns for India in RCEP, the role of human capital in the sustainable growth of the UAE, analysis of dynamic

structure of money supply in Ukraine and methods for its optimization, to empirically investigate the relationship between role duality & investor confidence with respect to Indian firms, TESCO and its success in the Republic of South Korea, influencing factors of rural consumer-to-consumer electronic commerce in China, the role of tourist flow and social network evolution in the context of destination development in China-ASEAN border areas, and online shopping behavior of millennials in India.

The compendium also has papers on themes like challenges of the current food system to feed the growing global population and a study on narrative communication messaging as a driver to raise public awareness to risks of Type 2 Diabetes (T2D).

We, EuroMed & K J SIMSR welcome you wholeheartedly for this prestigious conference. We also hope that you will leverage this fruitful opportunity of learning and networking for collaborative research in the future.

Our best wishes to each participant and pleasant stay in India!

Thank you

Dr. Monica Khanna
Conference Chair
Director, K J Somaiya Institute of Management Studies & Research

Dr. Preeti S. Rawat
Conference Co-Chair
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A MIND-GENOMICS CARTOGRAPHY FOR IMPROVING PUBLIC AWARENESS TO DIABETES

Gabay, G., Gere, A., Moskowitz, H. R. & Zemel, G.

Introduction

Type 2 Diabetes (T2D) is a major cause of increasing mortality incurring vast expenditures. Direct costs of T2D account for \$1.31 trillion and additional indirect costs account for 35% of the total burden [1-3]. T2D is one of five leading causes of premature death in high-income countries [4-6]. In 2017, around 415 million adults suffered from T2D [4]. Estimates suggest that over the next decade, 642 million adults will suffer from T2D [2]. Moreover, T2D, thus far diagnosed among adults, is now expanding to adolescents and children, making it THE epidemic of the 21st century [5]. So far, all interventions to maintain Glycemic control achieved sub-optimal outcomes [7-17]. Lack of Glycemic control leads to progress of T2D resulting in a range of health complications, morbidity and disability [4,5,7].

Tremendous efforts to halt the expansion of T2D involved: behavior-modification programs, pharmacological interventions and educational interventions. Whereas policy makers viewed these efforts as promising means to affect modifiable determinants of T2D (i.e., obesity, sedentary lifestyles, smoking, stress), research evidence remains inconsistent [18-20]. Moreover, most interventions failed as program-compliance challenged patients and due to the global shortage in clinicians which limited program accessibility [21-26]. Research on pharmacological interventions suggests that lifestyle modifications, are, in fact, more efficacious [27]. No findings of other specific pharmacological interventions were published in papers. Last, research on educational interventions demonstrated contradictory results exposing provision barriers which inhibited intervention deployment [28-30]. In sum, to date, hypotheses of evaluation studies for interventions for control, prevention, and delay of the onset of T2D, have not been corroborated.

Two recent study that tested awareness among high risk British adults and among Americans, reported that half of participants demonstrated gaps in awareness of risks, symptoms and related behaviors [31, 32]. Researchers recently acknowledged that individual-level prevention approaches are, respectively inadequate and thus unable to reverse epidemic trends, costly, and unscalable for targeting the healthy population [33]. Since lack of public information is a major

barrier to risk awareness, researchers suggest the importance of increasing vigilance in reducing risks of T2D by addressing gaps in public awareness [2, 4, 6, 7, 26, 30, 34].

Numerous institutions, including the World Health Organization, have recommended mass communication messaging to improve public awareness [34]. Studies in medicine, public health, and health communication, however, targeted patients rather than the healthy population [31, 34, 35]. Creating public awareness of the healthy population was thus far seen as less important than improving practices of patients [36]. The few studies that tested communication messaging for public awareness regarding general health issues, featured linkages among awareness behavior and health outcomes [34, 37]. While research on communication messaging in general health topics is growing, the topic of communication messaging to the healthy population in T2D, is unexplored [33, 36, 38, 39, 40].

One study presented a successful communication messaging campaign on determinants of T2D, but only engaged youth, and thus its reach was limited [33]. Another study on communication messaging in T2D revealed that awareness of risks increased in the one Indian city where it was conducted [41]. Whereas studies on communication messaging in T2D are scarce, findings of these two studies suggest that public campaigns may effectively raise awareness among many different segments of the healthy population and may reverse current concerning paths of behavioral trends in modifiable drivers of T2D [33]. Since all groups in the population suffer from the burden of T2D, this epidemic should be addressed, as other healthy issues, by effective communication messaging. An alternative as yet unexplored way to respond to previous calls to reduce risks of T2D is to test and optimize messaging among healthy people. This study begins to close the literature gap by testing communication messaging for awareness of T2D risk among healthy people. A systematic examination of effective campaigns indicates that in health disparities narrative statements have a persuasive impact on attitude change and behavioral modifications [42, 43]. Facets that draw on the narrative persuasion theory, have been reported to bring individuals in the population to accept greater responsibility for their health [44]. In this study we draw on the theory of narrative persuasion in the daily life experiences of healthy people touching on risk awareness of T2D.

The aim of this study was to fill the above theoretical, methodological and practical gaps in the state of the art. Theoretically, to best of our knowledge, no prior study tested narrative communication messaging for healthy populations regarding risks of T2D [54-55].

Methodologically, we test unexplored communication messaging among healthy individuals through a multi-disciplinary view, examining narrative messaging from different perspectives. In terms of practice, this research project assesses the impact of A variety of qualitative different messages as drivers of perceived risk of T2D. We propose to apply the knowledge by a classification tool developed based on the impact of the narrative communication messages.

The theoretical framework and hypotheses development

By the narrative persuasion theory, a narrative comprises cohesive and coherent statements that may make up a story with an identifiable beginning, middle, and end and provide information about a daily phenomenon [45]. Schank and Berman [46] identified specific types of narrative communication statements that either convey a point to another party or receive information from another party. Much of the health communication literature has reflected this paradigm [45]. Narrative statements in communication on health-behaviors are a scientific way of relying on empirical and experimental methods to discover, describe, or elucidate some domain of interest through which we develop our understanding of the world, providing a distinctive way of constructing reality. (45, 47, 48]. Most research on effects of narrative statements in communication has been conducted in the fields of communication and psychology and not in health. Narrative statements in communication messaging may be effective in the health-behavior context, as they are the basic mode of human interaction that we use in our day-to-day lives as the primary means to influence others [49, 50]. Thus, rather than directly relating to modification of health behaviors, the narrative approach of communication messaging considers the persuasion impact as dominant and interpretive. Therefore, some narrative statements in communication regarding perceived risk of T2D may have a stronger effect than will others.

Hypothesis 1: Different narrative communication messaging will have a different effect on perceived

risks of Type 2 Diabetes.

Since the narrative persuasion theory is interpretive, it explores the impact of each communication statement asking: for whom; under what circumstances; how; and when does each statement achieve optimum effects [43]. The extent to which narrative statements in communication will influence individuals may, therefore, differ among them. Narrative statements in messaging communication that are employed specifically for T2D, could be more

effective than general health related messaging because they touch on well-known determinants of T2D. We hypothesize that the ability of narrative statements to raise awareness of T2D risks, may depend, in part, on the extent to which people “identify” with the different narrative statements [39]. Communication messaging, therefore, may carry a different appeal to homogeneous groups of people who are defined by similarity in their pattern of responses to narrative persuasion statements (i.e. mind-set segments) regarding risks in T2D.

Hypothesis 2: Different narrative communication messages regarding risk of Type 2 Diabetes will carry a different appeal for different people by mind-set segments

Narrative statements in communication messaging may also impact beliefs of healthy individuals about who is responsible for addressing and engaging in health behaviors, thereby, shaping their perceptions about their risks of T2D [51-53].

Hypothesis 3: Different narrative communication messages will have a greater impact on perceived responsibility for health behaviors to avoid risks of Type 2 Diabetes.

METHODS

The sample

Conjoint measurement refers to a class of research procedures in which the respondent is provided with a set of systematically varied combinations of features (questions and answers) and rates the combination, providing an estimate for the part-worth utility of each answer [56]. Since our objective is to develop a model of messaging for each respondent, the question of sample size devolves into a question of the number of respondents needed before the average model across respondents becomes stable [56-58]. WHEREAS sociologists study behaviors of large groups of people and deal with the percent of people who achieve a given score, experimental psychologists deal with individual behavior focusing on the magnitude of a response and looking at means, and the stability of the mean as a predictor of the performance of the dependent variable. Thus, in Mind-Genomics, since results are based upon the average rating assigned to a narrative statement, the size of the sample is not a question of the stability of the average rating, but rather the stability of the model averaged across the different respondents. Data on utilities from several conjoint measurement samples confirm previous observations on base size studies and indicates that much of the information can be obtained with lower bases than the typical base size and the same conclusions can be made with base sizes around 50 [58, 59]. Therefore, the sample comprised 50 respondents, healthy American

adults with 25 females and 25 males, ages 31-44 (n=12); 45-55 (n=18) and 56+ (n=18). Respondents were selected by Luc.id, Inc., a panel provider of on-line samples. Respondents represent a cross-section of the typical respondent.

The Instrument

We structure statements that tell a story and attend to coherent statements with a clear beginning, middle, and end [45, 60-62]. Since narrative communication messaging that relates to only one perspective, may carry bias, reducing the complexity in our world and inhibiting effective awareness for different target audiences, this study combines among narrative persuasion statements from several perspectives: the psychological perspective (individual's behavior), the sociological perspective (perceived contextual factors), the economics perspective (social structural elements and costs) and the health management perspective (health services). We structure statements by an experimental design guided by Mind-Genomics, a new conjoint based scientific approach [63-65] best described a 'cartography of the mind.' Mind-Genomics examines responses of people to different stimuli in daily life [66-68]. Mind-Genomics maps an experience by identifying its different facets, determining to what facets the person attends, and how important each facet is for each person. Mind-Genomics reveals how people react to the specifics of the messaging, looking at the nuances, WHEREAS accounting for the richness of the experience. Mind-Genomics segments different groups of people by their different viewpoints, so-called mind-sets.

The dependent variable

The dependent variable is perceived risks of T2D, measured by the extent of importance each respondent attributes to each driver of risk on a 1-9 rating scale.

Independent variables

four categories of narrative statements: determinants of T2D, healthcare needs, expectations and support and responsibility. Each category comprised four narrative statements about T2D, each from different disciplines.

Each respondent evaluated a unique set of 24 combinations of narrative messages that are each independent of all other messages by experimental design, with each category comprising a minimum of two statements, or a maximum of four statements. By virtue of the Mind-Genomics experimental design, the 16 statements are statistically independent of each other. The structure of the 24 combinations remained the same, ensuring statistical independence of

the predictor variables for subsequent regression. Effective statements of messaging regarding risks of T2D needs not only proper framing, but also avoiding the activation of negative attitudes and resistance to the message itself [67]. The specific combinations changed, however, due to a permutation scheme allowing the experiment to cover many more of the possible combinations of statements using today's standard experimental designs [20, 69-71].

With 50 respondents, the researcher covers 1200 statements (50x24), rather than repeating the same 24 statements 50 times. Table 1 shows the categories and statements. Respondents rated the importance of each statement in shaping their perceived risk of T2D on a 1-9 rating scale. Response biases were overcome by presenting the respondent with combinations of statements assembled by an experimental design, which mixes and matches different types of ideas to test combinations of statements by categories that drive the perceived risk of T2D [34, 69, 72-77]. To test the instrument, reliability was established by the split-half method. The entire data set was divided into two equal groups, with each respondent contributing data equal to both groups. Each group is used to estimate the coefficient of the messages. Three sets of coefficients were created: from the total panel, and from each half-set. The two half sets of data were highly correlated with data for the total panel (0.90 for group 1; 0.87 for group 2).

	Question A: T2D determinants
A1	By living longer there is a greater chance of suffering from T2D
A2	T2D is dangerous without treatment
A3	Diet and exercise are key to T2D prevention
A4	T2D is the most profound disease of this century
	Question B: Healthcare Needs
B1	It's OK to self-manage T2D
B2	People with T2D use a lot of health services
B3	Frequent doctor promote medication-adherence
B4	T2D requires a lot of medications
	Question C: Expectations
C1	It's a doctor's role to educate patients about T2D
C2	The internet is all you need to learn about T2D
C3	A doctor should refer people to reliable educational materials about T2D
C4	People should know all the possible treatments of T2D

	Question D: Support
D1	Family support is important to manage diabetes
D2	Learning how others cope with challenges is beneficial
D3	Participation in workshops helps prevent T2D
D4	Belonging to a community helps maintain health behaviors that prevent T2D

Table 1. The four categories and the four narrative statements in each category

ANALYSIS

The experimental design ensures that an individual-level regression model can be run on the data. The original 9-point rating scale, anchored at both ends, was transformed to a binary scale (i.e., Ratings of 1-6 were considered ‘not important,’ and transformed to 0. Ratings of 7-9 were transformed to 100), to denote that these were important. The data were then subject to ordinary least-squares regression (OLS). The regression equation was run for total panel and for each key subgroup (total, gender, age), incorporating all relevant data into one regression model for the group. WHEREAS the regression model suggests that a standard error around 4.0 or so characterizes the different coefficients, as a rule of thumb in Mind-Genomics coefficients of 8 or higher tend to be statistically significant and to co-vary with measurable external behavior which might serve as a validation.

As in conjoint analysis, regression coefficients reveal the impact (degree of agreement) of communication messages. The pattern of strong performing (positive) coefficients across different subgroups, especially mind-sets, suggest the nature of what is important for the respondents who are assigned to the mind-set. The mind-sets are created by clustering the coefficients across all of the messages. There is no need for Beta values for the coefficient because in the modelling the messages are represented as either 0 (absent from the combination) or 1 (present in the combination) [78].

RESULTS

The rated importance of the information presented by the narrative statements on T2D varied across groups. Respondents in the youngest group rated information as unimportant. Members of the other age groups rated the information as moderately important and very important. Males had a higher additive constant indicating that they will require less specific information to reach risk awareness than will females. The differences in response patterns of different

groups showed that there are three distinct mind-sets. Table 2 shows the coefficients for the total panel and for the three mind-set segments reflecting different patterns of responses to the importance of each narrative statement contributing to the perceived risk as emerged from Mathematical K-clustering analysis.

		Total	Mind -Set 1	Mind -Set 2	Mind -Set 3
	Base	50	18	13	19
	Additive constant	59	62	43	67
	Mind-Set 1 – The patient is in control, and must take responsibility (psychology)				
A3	Diet and exercise are key to T2D prevention	8	17	4	3
A2	T2D is dangerous without treatment	7	14	8	-1
	Mind-Set 2 – The doctor is very important (sociology)				
C3	A doctor should refer patients to educational materials about T2D	-3	-13	20	-11
C1	It's a doctor's role to educate patients about T2D	-4	-13	16	-9
C4	A patient should know all the possible treatments of T2D	0	-3	12	-7
	Mind-Set 3 – Help from others is important (Social structure & Services)				
D3	Participation in workshops for patients helps manage T2D	2	-12	-2	19
D1	Family support is important to manage T2D	5	0	0	16
D4	Belonging to a community of patients helps support others with T2D	1	-10	-3	15
B3	Frequent doctor visits help adherence to T2D treatment	4	4	-8	11
D2	Learning how others cope with T2D is beneficial	3	-5	4	8
	Elements which are not key to any mind-set (Cost & Health services)				
B2	People with T2D use a lot of health services	-3	-4	-13	2
B4	T2D requires a lot of medications	-5	5	-22	-4

A4	T2D is the most profound disease of this century	-3	4	0	-10
B1	It's OK to self-manage the T2D	-17	-14	-27	-13
A1	By living longer there is a greater chance of suffering from T2D	-9	1	-5	-20
C2	The internet is all you need to learn about diabetes	-26	-24	-4	-42

Table 2. Coefficients for total panel and the three emergent minds-sets based upon the patterns of coefficients of narrative statements

Figure 1 presents sample distribution by mind-set segments and Figure 2 presents sample distribution into mindset-segments by age group.

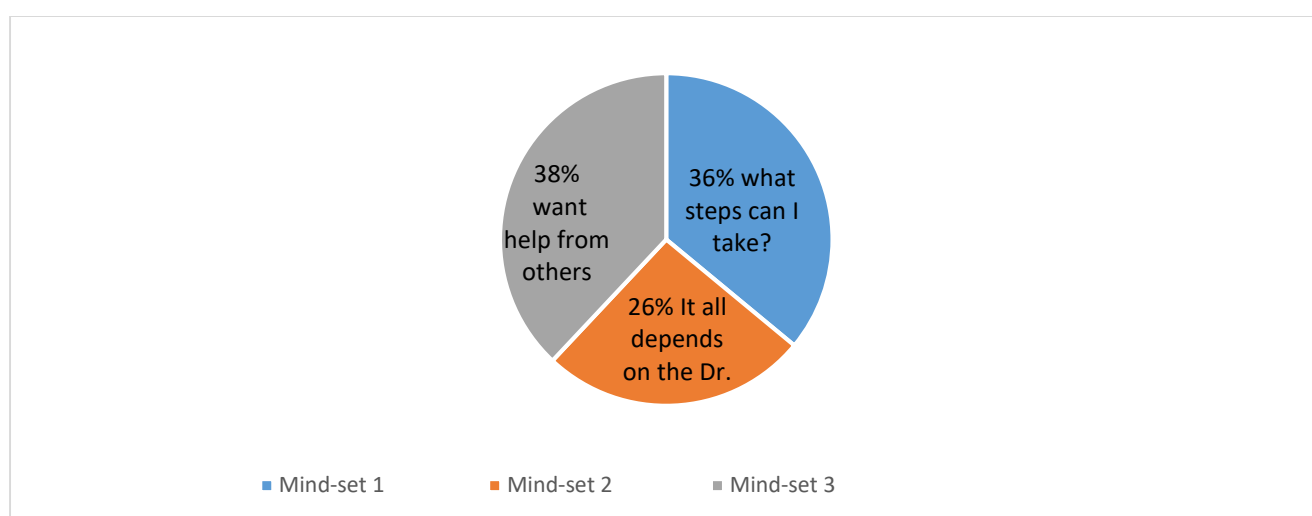


Figure 1. Risk Awareness of T2D in Healthy Individuals

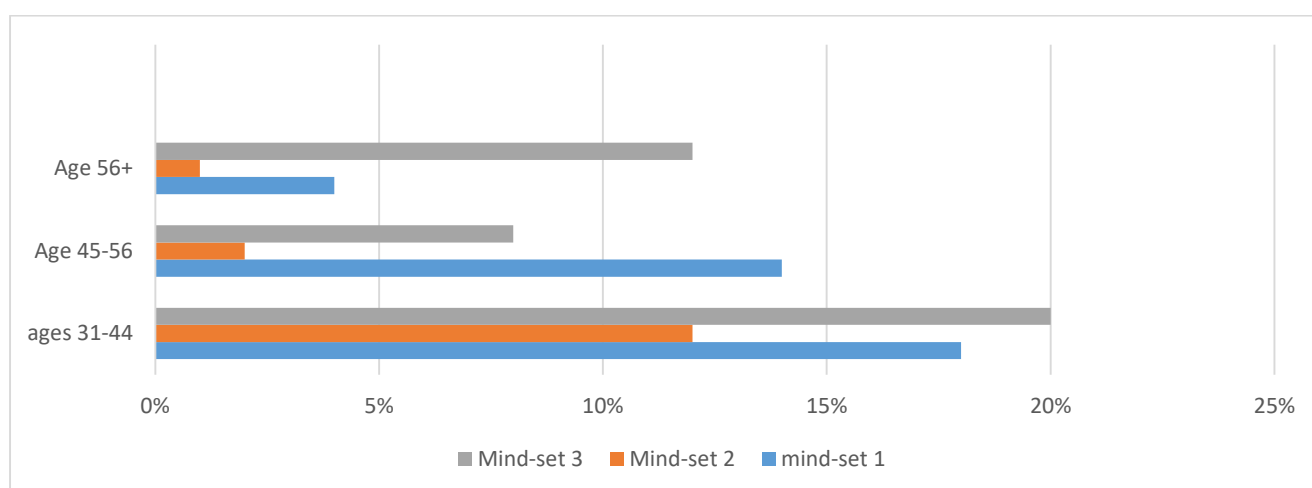


Figure 2 Distribution into Mind-sets by Age

Applying narrative communication messaging for raising awareness to T2D

To identify which communication messaging should be used in practice, we applied the personal viewpoint identifier (PVI) which is created a new for each study and in this case revealed the mind-set of an individual through a simple, 30-second interaction. The respondent completed a short, 6-question evaluation, with the pattern of the responses linked to membership in one of the three mind-sets. The six most discriminating narrative statements were chosen to create the PVI which then created a binary scale on which new participants may rapidly indicate their answers. Based on these answers, the Mind-Genomics system instantly presents the sample mind-set membership for the individual in the population, who can then be given the most effective messaging for the mind-set to which the individual appears to belong. The PVI is available at: <http://162.243.165.37:3838/TT37>

DISCUSSION

This study tested narrative communication messaging as a driver to raise public awareness to risks of T2D. This study contributed theoretically, methodologically and practically. Theoretically, this study extended the narrative persuasion theory testing narrative communication messaging in the health context, focusing on risk awareness in T2D. Methodologically, this study explored narrative communication messaging through a multi-disciplinary view, from different perspectives. Practically, findings direct professionals on a local level and on a national health policy level to use narrative communication messaging that impact the risk perception of healthy people, by mind-set segments, regarding T2D.

Findings show that all study hypotheses were corroborated. Findings also suggest that just as narrative messaging was effective in public campaigns on general health issues, it can be effective for public campaigns targeting awareness of risks in T2D for the healthy population [33].

As for hypothesis 1, stating that different narrative communication messaging will have a different effect on perceived risks of T2D, findings suggest that a number of narrative statements, that may be used on local level by professionals appear to be ineffective, and may create antagonism and anxiety, rather than raise public awareness of risks of T2D and navigate individuals towards the adoption of healthy behaviors. Such messages are: *People with T2D use a lot of health services; T2D requires lots of medications; T2D is the most profound disease of this century and; living longer raises the risk of suffering from T2D*. This finding may be attributed to the underlying communication orientation in these narrative statements.

Ineffective statements fall under the category of content-oriented messaging which focuses on 'what the public should know about T2D'. WHEREAS content-oriented messages are popular, they do not promote behavioral change, particularly compared to change-process oriented communication which was found to be a 'make or break' factor in behavioral modifications, including in T2D [55, 79, 80].

As for hypothesis 2 stating that different narrative communication messages regarding risk of T2D will carry a different appeal for different people by mind-set segments, data shows that response patterns to narrative statements differed among groups of people, differentiating them by mind-set segments. People who are members of mind-set1 will react to narrative statements that depict individuals as having control and able to take responsibility for their health stressing the psychology view (e.g., *Diet and exercise are key to T2D prevention; T2D is dangerous without treatment*). This finding supports previous findings on the role of communication that promotes perceived control in behavioral modifications [80-82]. Outreach to people belonging to mind-set 1 should entail information on: steps in the behavioral change process; what may assist them throughout the change process; what internal and external resources they may use; and how they may overcome barriers [80]. Messaging is to be inspirational and hopeful enhancing self-efficacy [49]. People who belong to Mind-set2, the smallest mind-set segment, will positively react to narrative statements which depict the doctor as a resource stressing the sociological view (e.g., *A doctor should refer patients to educational materials about T2D; It's the doctor's role to educate patients about T2D; A patient should know all the possible treatments of T2D*). This finding supports previous studies on the sociological role of trust in physicians and the public expectation from physician to inspire them in adopting healthy behaviors [81-83].

People who are members of Mind-set 3, will positively react to narrative statements which depict help from others stressing the economics and health management view (e.g., *Participation in workshops helps prevent T2D; Belonging to a community helps maintain healthy behaviors to prevent T2D; learning how others cope with challenges is beneficial*), focusing on community and available supporting health services. These findings support previous studies that claimed that communication messaging in national public campaigns may improve awareness of T2D risks in healthy populations and among different segments of the population [33, 41]. Study findings echo previous findings on the strong impact that messaging of narrative statements may have on attitude change and behavioral modifications [42, 43]. As

for hypothesis 3, stating that different narrative communication messages will have a greater impact on perceived responsibility of individuals to modify their health behaviors and avoid risks of T2D, the membership of people to mindset-segments entailed differences in their perceived responsibility. Perceived responsibility for reducing risks of T2D ranged from self-responsibility (segment 1) to doctor's responsibility (segment 2) and to community as having a role in helping its healthy members prevent risks of T2D.

Practice Implications

The knowledge derived from this research enables policy makers to accord the most effective narrative communication messaging to each person and group in the population, by the mindset segmentation, in the sample. The segmentation by mindset suggests that a public communication campaign with the same messages for all, will be futile. When designing campaigns to raise public awareness of risks of T2D, content-oriented messages should be omitted. Figures 1 and 2 indicate that segments of Mind-sets 1 and 3 are about the same size but as age increases, on one hand the perceived importance of this information increases but perceived individual's responsibility to modify risk behaviors decreases. People in the oldest group (56+) who are under the highest risk of T2D, attribute the highest authority to doctors compared to people in other age groups and expect support of doctors, the community and health services (i.e. workshops) in behavior modification to prevent T2D. These data suggest that narrative campaigns targeting people who are older than 45 years old but with people 56 years old, narrative messaging statements are to be based on the change-process orientation rather than content-oriented statements. Last, three campaigns are to be designed, each targeting people in a different mindset-segment and each focusing on a different perspective. One campaign entailing messages of perceived control over health (psychology), another campaign entailing messages of advice from trusted professionals (sociology) and the third campaign offering health-services (i.e., workshops and mentorship of supporting individuals) (health management) for maintaining healthy behaviors.

Conclusions

This study closed a knowledge gap in the state of the art examining multi-perspective narrative persuasive messaging as means to raise awareness of T2D in healthy populations. This study presents a new approach to raise public awareness of risks of T2D through narrative messaging by mind-set segmentation. To enhance the effectiveness of raising awareness of T2D risks and to wisely allocate budgets, health professionals, policy makers and public campaign designers,

are urgently called upon to use the VPI, ask the right few questions to identify the belonging of each individual in the healthy population to a mindset-segment in the sample and use the appropriate narrative communication messaging in raising awareness. The theoretical, methodological and practical knowledge derived from this study will enable policy makers and professionals to accord the most effective narrative communication messaging to each person and group in the population, by the mind-set segmentation, in a cost-effective manner.

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OVERCOMING BARRIERS TO WOMEN ENTREPRENEURSHIP IN INDIA: THE ROLE OF SOCIAL MEDIA

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Keywords: women entrepreneurship, social media, barriers to entrepreneurship, digital economy.

“India is already a difficult market to do business in because we have too many other procedural battles to fight, and it is worse for female entrepreneurs. From a funding perspective, from a mentorship perspective, you’re pretty lonely out there. Access to capital is still all-male; there is a barrier there.”

- Sairee Chahal, founder of women-only jobs portal SHEROES (Sushma, 2018)

Introduction

Even though the proportion of Indian women entrepreneurs is still small, the number of new business registrations by women has risen from 2-3% in 2012 to 8-10% in 2017 (Goel, 2019). Women entrepreneurship in developing countries is mostly still connected with necessity entrepreneurship (De Vita, Mari and Poggesi, 2014). Women exhibit 20% or greater likelihood of citing necessity motives compared to men (GEM, 2017). Our study is exploring a phenomenon new for India: a type of woman entrepreneur that is not driven by necessity, but has other motives to start her business.

This study investigates how Indian women entrepreneurs use social media to overcome barriers related to their gender.

Literature review

Entrepreneurial ecosystem is much harder for women than men. Women experience greater difficulties in acquiring venture capital, lack financial resources and skills; have fewer informal

support systems and networks, and have less direct relevant experience than men (Jennings and Brush, 2013). They are also less likely to start a new business and are growing less quickly.

In addition to objective factors, women often perceive themselves and the entrepreneurial ecosystem in a less favorable light than men (Langowitz and Minniti, 2007). Even though this holds globally, contextual factors are nevertheless very important (Welter, 2011). The research on women entrepreneurship has been disproportionately conducted in developed countries (De Vita, Mari and Poggesi, 2014).

Women entrepreneurs in India face a myriad of obstacles including restrictive cultural values and norms, social structures focused on traditional gender roles and bureaucratic government practices (Sharma, Dua and Hatwal, 2012; Ghani, Kerr and O'Connell, 2014; Torri and Martinez, 2014). However, Indian women entrepreneurs seem to face lower level of work-family conflicts than in the West (Das, 2000) and tend to have different motives to start the business (Kothari, 2017).

Women entrepreneurship in Indian context seems to be under-researched. The few studies that exist mostly research necessity women entrepreneurs, while founders that come from middle-class backgrounds were not the focus of research in Indian context so far.

The rise of social media platforms after 2008 caused increased interest by researchers into how SMEs adopt and use social media for business purposes (Bulearca, Marius Bulearca, 2010; Meske and Stieglitz, 2013; Wamba and Carter, 2014). Findings from these studies indicate that SMEs use social media for a multitude of purposes ranging from branding and marketing (Michaelidou, Siamagka and Christodoulides, 2011; Weman *et al.*, 2012) to observing customer behavior (Fischer and Reuber, 2011), including browsing and purchasing strategies (Hennig-Thurau *et al.*, 2010). There is a need for companies to understand the extent to which customers wish to engage with companies on social media (McKeown, McGowan and Durkin, 2013). The benefits of social media for SMEs notwithstanding, this medium is not without its own share of challenges, significant among them is that only a mere 15% of marketers were able to quantify the impact of social media on their businesses (Moorman, 2015). Social media presents a myriad of opportunities for women entrepreneurs to overcome obstacles they face in establishing and running their business.

Data and Methods

There is little research on non-necessity women entrepreneurs in India. As we are exploring new phenomenon (von Krogh, Rossi-Lamastra and Haeffliger, 2012), we used grounded theory approach (Glaser and Strauss, 1967; Charmaz, 2006) for this study.

Our data sources include 15 interviews with Indian women entrepreneurs, press articles, participant observation and existing literature. We developed semi-structured questionnaire that covered general questions about the founders and their business, questions specific to women entrepreneurship and questions about interviewees' use of social media for business purposes. As research progressed, we revised the questionnaire and adapted certain questions or added new ones. We started with a general research question about how women entrepreneurs use social media and gradually focused on how they use social media to overcome barriers related to their genders.

We have interviewed two types of women entrepreneurs: small business starters (e.g. gym, fashion retail, travel agency) and high-growth startup founders. Five interviews were conducted face-to-face and ten over electronic communication (Skype or WhatsApp). All interviews were conducted in English, recorded and transcribed verbatim. We coded the transcriptions according to recommendations for qualitative research (Gioia, Corley and Hamilton, 2013). We used Nvivo software for coding and analysis.

Results

We have focused on two categories of women entrepreneurs in India - one which has used her personal/family funds to start the venture and the other which has sought venture capital funding.

Most of interviewees have received familial support for their ventures. It appears that family plays a significant role for women entrepreneurs particularly in India in scaling up the business or constraining it. Their families were quite supportive of their passion to start their own ventures and even helped them in some way or another.

Social media is enabling them to expand their market share in other parts of the country too besides their place of operation.

Recognition is an important factor for all women. They want an identity of their own. Social media provides that platform wherein which they are able to tangibly establish their own identity.

Most of the women interviewed so far have started their businesses in that field in which their passion lies.

In spite of banks and NBFCs (Non Banking Financial Companies) offering loans at easy terms especially designed to encourage women entrepreneurs, there are few takers. Most of the women interviewed have not availed of this facility, either on account of prevailing bureaucracy or to avoid the feeling of indebtedness.

Conclusions

We have explored new kind of women entrepreneurs who face different set of problems from necessity entrepreneurs. They tend to be better educated, with better business skills, family support and financial background. Even though they claim to be risk-takers, they tend not to exploit government financial schemes or go for bank loans. This has had a cascading impact upon the scalability aspect of their business with most women restricting the growth of their business in the absence of adequate funds.

Social media has the potential to mitigate for lack of resources in ventures started by women entrepreneurs. However, many entrepreneurs still do not fully exploit this opportunity or if they do, they approach it non-strategically. One possible reason is lack of skills in professional use of social media for business. There is an opportunity for both government initiatives and private providers of education to fill this gap. In addition to financial incentives and subsidies for women entrepreneurs, educating the founders in the use of social media could bring substantial improvement in their success rates.

Our research contributes to women entrepreneurship and social media literatures. It explores new phenomenon in a (compared to the West) under-explored Indian context.

Keywords: women entrepreneurship, social media, barriers to entrepreneurship, digital economy.

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RESEARCH ON NATIONAL TOURISM SUPPLY CHAIN COLLABORATION ALONG THE BELT AND ROAD-- TAKING CHINA AND NEW MATAI AS EXAMPLES

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Abstract

With the improvement of the living standards of residents and the increasing demand for outbound tourism, higher requirements are put forward to the efficient response of the tourism supply chain. Singapore Malaysia and Thailand three countries are the hotspots for the outbound travel of Chinese. The synergy of tourism is the whole tourism. Therefore , the key is important for the research of New Matai and China's tourism supply chain. According to the six factors of tourism, combined with the actual development of tourism supply chain of China and new Matai and the main influencing factors of tourism supply chain coordination, building supply chain cooperation index with indicators such as the intensity of railways in the region and the number of Internet servers. Judges the tourism supply chain cooperation level between China and new Matai based on the cooperation index and finds out the problems in the tourism supply chain. And uses the composite collaborative model to analyze Chinese and new Matai tourism supply that The development status, Then identify the synergistic factors affecting the

tourism supply chain between China and new Matai. According to the problems existing in the tourism supply chain between China and Southeast Asian countries, by applying supply chain synergy theory, combined with the future development trend of tourism supply chain, we will propose specific solutions to improve the coordinated development of China and new Matai tourism supply chain , And it will promote the healthy development of the tourism industry in the four countries.

Keywords: tourism supply chain; synergy; composite synergy model; index of cooperation.

Foreword :

With the deepening of economic globalization, in the face of the slowdown in global economic growth, China has implemented the "One Belt, One Road" strategy in the critical period of the new round of technology and industrial revolution. The economic development of the countries along the Belt and Road Initiative has great differences, economic and political cultures are numerous, and the population is large, which has created a huge demand for tourism. At the same time, the tourism industry, as an emerging industry, plays an important role in promoting the economic transformation and development of countries along the line. In order to better promote the Belt and Road strategy, we must accurately grasp the global economic development trend, give full play to the huge potential of the tourism market along the way, and use the tourism industry as a propeller for the development of the national economy to promote the all-round development of the countries along the Belt and Road. As a research hotspot in recent years, the tourism supply chain can promote the efficient and balance development of the tourism industry, improve the service level of tourism, promote the healthy development of the tourism industry, and promote the national economic development. As a major node in the Belt and Road, Singapore Malaysia and Thailand has a pivotal role. China is the largest source of tourists for Singapore Malaysia and Thailand. The two sides have close links in tourism and have a relatively broad market with good development prospects. China and Singapore Malaysia and Thailand at present, there are a series of problems such as information asymmetry and tourism barriers in the development of tourism supply chain, which seriously affects the development of tourism industry in China and Singapore Malaysia and Thailand. The coordinated research on the tourism supply chain between China and the new Matai three countries is conducive to the rapid and high-quality development of the tourism industry and promotes the common development of the countries along the Belt and Road. The

composite collaborative model was established and the tourism supply chain cooperation index model was established to find out the development status and existing problems of the tourism supply chain between China and Singapore Malaysia and Thailand, and proposed specific measures to promote the coordinated development of tourism supply chain between China and Southeast Asian countries.

Literature Review :

Combining the concept of synergy, the concept of synergy theory is clarified, the corresponding synergy method is mastered, and then the supply chain coordination is combined. Finally, the literature review of the tourism supply chain gradually is carried forward, the theme is more specific and clear, and the concept is clearer. The analysis of the tourism supply chain will be more scientific and accurate, and accurately identify the problems in the tourism supply chain.

Collaboration :

Collaboration is a science based on many aspects. Chen Jia (2016) ^[1] believes that the degree of synergy of subsystems is variable, and the value range is $\{-1, 1\}$. When the degree of synergy is positive, each subsystem promotes each other. Collaborative development, when the degree of synergy is negative, the organization is not coordinated. They believe that open and scientific management must be realized, and the degree of systemic synergy will develop. Du Dong (2008) ^[2] believes that collaborative management is to link the information of after-sales, production and inventory of collaborative entities, and to flow information through all links, and to achieve the best resource utilization. Chen Chunhua, Zhu Li, Liu Chao and others believe that collaboration is the division of labor and cooperation of all parts of the system, sharing resources, and achieving the unity of individual goals and overall goals. Liu Yan (2012) ^[3] believes that synergy refers to breaking the barriers between resources, realizing the sharing and flow of resources, information and other elements, and finally achieving the benefits of $1+1>2$. Su Letian, Du Dong (2015) ^[4] believe that the society is gradually developing towards networked organizations, and the focus of future collaborative management research should be the collaborative management of network organizations. AKKEMANS (2004) ^[5], after a lot of analysis, concluded that trust relationship and transparency are important factors. Collaboration is the coordination and cooperation between the various subsystems and elements in the system to promote the overall development of each element and system. Of course, the coordination of the system also needs to be achieved through means of information sharing, establishment of cooperation mechanisms, and resource sharing.

Supply chain collaboration :

Different scholars have proposed a large number of supply chain synergy theory. Taylor D A (2004) ^[6] believes that supply chain collaboration is based on synergy and supply chain. Supply chain coordination plays an active role in reducing resource waste and improving the overall response speed of the supply chain. Anderson D and Lee H (1999) ^[7] believe that supply chain collaboration is a new management model (supply chain main division of labor cooperation, resource sharing, shared risk, and ultimately maximize the overall efficiency of the supply chain). Collaborative development of supply chain as the current research focus, Chen Hao, Tian Yuan (2018) ^[8] believe that through the coordination of contracts can coordinate all links and subjects of the supply chain, so that the operation of the supply chain can be based on evidence. Wang Qingxiao (2016) ^[9] believes that the use of contractual norms and relationship mechanisms to jointly manage the supply chain is more conducive to the stability and coordination of the supply chain. While the contract defines the behavioral norms of the supply chain, a good trust relationship is a supplement to the contract. Further development. Lu Shan, Gong Yu (2016) ^[10] In the supply chain coordination, a relationship mechanism should be established to make supply chain enterprises trust each other, promote supply chain information sharing, and cooperate with each other to encourage enterprises to establish cooperative relationships and optimize resource allocation. Significantly reduce internal risks in the supply chain. Guan Lixin, Liang Wei, and Ma Yanhua (2018) ^[11] believe that the government also plays a big role in supply chain coordination. The government should play the role of strategic decision maker in supply chain coordination, establish a scientific supply chain collaborative governance mechanism, and accelerate supply. Chain technology innovation and research, improve supply chain laws and regulations. Dai Hongwei, Tan Yajing, Zhou Weihua (2018) ^[12] believe that the real-time sharing of information in the supply chain can effectively reduce costs, promote symmetry of supply chain information, and improve supply chain synergy. Zhang Yinghua, Peng Jianqiang (2016) ^[13] believed that the supply chain information coordination mechanism should be constructed so that information such as supply and demand and forecasting in the supply chain can be shared in real time, reducing resource waste caused by misalignment of supply chain information and improving supply chain efficiency. Zhu Qinghua (2017) ^[14] proposed that supply chain coordination should combine future development and develop a green sustainable supply chain. The information sharing mechanism in supply chain coordination is beneficial to improve the accuracy of supply chain; contract mechanism and relationship governance are conducive to standardizing supply chain

operation and establishing supply chain partnership; supply chain coordination needs to rely on supply chain development strategy guidance, while government Macro guidance also plays an important role in the development of the supply chain.

Tourism supply chain collaboration :

Tourism supply chain collaboration is a further expansion of supply chain collaboration. Page S (2003) ^[15] believes that the tourism supply chain is the chain involved in providing services to tourists, including food, clothing, housing, travel complaints, and after-sales treatment. Song H , Zhang X (2008) ^[16] It is believed that the tourism supply chain consists of tourists, agents, travel agencies and suppliers, and the four parts are closely interdependent. Li Xiangyun, Ren Fangran (2017) ^[17] believes that the tourism supply chain is the link involved in all the resources needed to meet the needs of tourists. Liu Hao (2011) ^[18] believes that the tourism supply chain includes tourism product development, operation, after-sales and other links, it is a functional network structure. In terms of information sharing: Chen Tao, Li Wei (2013) ^[19] proposed the key role of tourism supply chain information sharing and data processing in the tourism supply chain in the context of big data era. Bai Haixia (2017) ^[20] pointed out that the construction of tourism supply chain information sharing platform is conducive to creating a customized and personalized tourism supply chain. Jiang Yan (2017) ^[21] After analyzing the coordination factors of tourism supply chain, it is concluded that in the demand of tourists, the information of demand and supply in the supply chain should be coordinated, and the overall situation of the supply chain can be reflected in time, and the supply of information can be used to drive supply. Chain synergy. Yang Jing, Huang Fucui (2012) ^[22] proposed a multi-functional tourism supply chain coordination mechanism based on products, information and capital, and constructed the tourism supply chain synergy from the aspects of product supply and demand mechanism, demand forecasting and capital flow. Yang Dejin, Xu Hong (2017)^[23] proposed to establish a regional information platform to share information in the tourism supply chain, realize real-time sharing of technology flow, capital flow, logistics and other aspects in the tourism supply chain, and promote the coordinated development of tourism supply chain. Kernel PR (2005) ^[24] It is believed that tourism and other industries have something in common, and all companies in the tourism supply chain need to cooperate with each other. oy S, Siva kumar K, Wilkinson L F (2004) ^[25] Pointing out the networked nature of tourism market, the main suppliers of supply chain seek to build a

strategic alliance form to share resources and improve their competitive advantages. At the same time, they can build barrier-free tourist areas in the region, realize the sharing of information and tourism resources in the region, and satisfy the six elements of tourism. The demand for the integration and development of the main enterprises and the public sector in the region. Chen Gezhi, Liu Jingyan, (2017) ^[26] The study shows that the realization of the contract to clear responsibility and clear the breach of contract to share, is conducive to reducing the risk and uncertainty of the supply chain. Wang Kewen, Xu Huiqi (2012) ^[27] believed that the development of tourism supply chain should combine the trend of economic globalization and big data development to develop a green and sustainable tourism supply chain. The coordination of tourism supply chain and the coordination of supply chain have commonalities. The cooperation of tourism supply chain also needs to be established by the establishment of information sharing mechanism, the constraint of contractual relationship, and the construction of cooperative relationship. At the same time, the development of tourism supply chain should be consistent with the future development trend is to develop a green and intelligent tourism supply chain.

Collaborative research on tourism supply chain is conducive to reducing the operating cost of tourism industry, improving the efficiency of tourism supply chain, improving the service level of tourism and promoting the transformation of national economic structure. At present, the research on tourism supply chain is mostly based on information coordination, benefit distribution and mechanism contract. The research methods are mostly single-viewpoints, and most of the research methods are qualitative research methods. There is less research on the collaborative research of tourism supply chain between countries and regions. The collaborative research on tourism supply chain between China and Singapore Malaysia and Thailand will be a powerful supplement in this field. This paper will use the composite collaborative model and the establishment of the tourism supply chain cooperation index research method to study the synergy between China and the new Matai tourism supply chain, which not only has a certain complementary effect on the regional tourism supply chain research field, but also for China and the Belt and Road. The coordinated development of the tourism supply chain along the line also has a large reference role.

Construction of Supply Chain Collaboration System and Development Index Model

Construction of Tourism Supply Chain Development Index Model

According to the characteristics of tourism supply chain and the development status of China's new Matai three countries, combined with the principle of order parameter selection, the development parameters, internal coordination and development scale are the first-order indicators. The specific indicators are as follows:

Table 1-1 Development Index and Order Parameters

Primary indicator	Secondary indicators	Indicator content	Indicator reference basis
Development quality	Tourist satisfaction	Tourist satisfaction is a tourist's evaluation of the tourism process, including the service personnel attitude and the comprehensive feelings of the six elements of tourism. It is a true reflection of the travel process and tourism services. Tourist satisfaction and the tourism supply chain are positively correlated relationship.	Chen Xiaoyong, Yin Mingzhou ^[28] , Ma Yiliang, Dai Bin ^[29] , MengQingsong, Han Wenxiu ^[30] .
	Number of service providers (% of total employment)	The employment level of the service industry can reflect the degree of development of the tertiary industry to a certain extent. The greater the proportion of employment in the service industry, the more developed the tertiary industry, indicating that the industrial structure is more reasonable and more suitable for tourists' all-round demand for tourism.	
Scale of development	Reception scale	The total number of tourist receptions in the region reflects the attractiveness of regional tourism. The larger the reception scale, the larger the regional tourism market, reflecting the relatively perfect	

		regional tourism supply chain, which can meet the all-round demand for large-scale tourists.	
	Tourism income	It refers to the overall income of regional tourism, which can also reflect the scale of regional tourism and the per capita expenditure of regional tourism. If it has the higher the tourism income, it will have the better the development of regional tourism.	
Internal coordination	Regional railway network density	As a substitute indicator of the convenience of transportation, the density of regional railway network is used to reflect the convenience of traffic in the tourist area. The density of the railway network is directly proportional to the convenience of regional traffic. The developed traffic guarantees the active flow of people and things in the tourism supply chain. .	
	Number of internet servers	The number of Internet servers refers to the number of Internet servers in the region. As a substitute indicator of the degree of informatization development, it reflects the degree of regional informatization development to a certain extent. The higher the degree of informatization, the better the reduction of information transmission is not timely, inadequate and not The waste of resources brought about by symmetry greatly reduces the loss of the supply chain, enhances the informatization degree of the tourism supply chain and improves the coordination degree of the tourism supply chain.	

The six index weights are integrated into the tourism supply chain cooperation index, representing the degree of synergy of the regional tourism supply chain, and the tourism supply

chain cooperation index is K . The formula for the cooperation index is :

$K = R_1\lambda_1 + \dots + R_i\lambda_i + R_6\lambda_6$ (R_i is the standard value of the evaluation index i , and λ_i is the weight of the index i).

Using the tourism supply chain cooperation index as the evaluation value of the regional tourism supply chain synergy, we can analyze the current development stage of the tourism supply chain of China and the new Matai three countries, and draw the development status according to the stage. The current situation and existing problems of tourism supply chain in China and Southeast Asian countries. Division of tourism supply chain cooperation stage :

Table 1-2. Reference Table of Tourism Supply Chain Cooperation Stage

K	0-0.4	0.4-0.6	0.6-0.8	0.8-1
Tourism supply chain cooperation stage	Starting stage	Early stage of development	Preliminary formation stage	Integration stage
Characteristics	Only the intention of cooperation is proposed, and internal development is still independent, but it is only a preliminary exploration of cooperation.	Carry out some basic cooperation in tourism resource planning and other aspects	Regional cooperation has taken initial shape, but internal correlation and collaboration are still low, and it is still in the stage of homogenous and isomorphic development.	In the integration stage, resources are fully realized, enterprises trust each other, cooperate with each other, and supply chain develops in an all-round way.

The process of tourism supply chain cooperation is a process of continuous deepening. According to the law of deepening cooperation, the tourism supply chain cooperation stage is divided into four stages. According to the K value, the stage of cooperation between China and the new Matai tourism supply chain is divided. (The division of K value cites the division of

regional tourism cooperation stage. The selection of indicators and the determination of weight in this evaluation index system combine the actual market structure of China and Singapore Malaysia and Thailand and the data acquisition.)

Tourism Supply Chain Complex System Collaborative Model

Composite system M (China and New Matai Tourism Supply Chain Collaboration) = $f(S_1 , S_2 , S_3 , \dots , S_i)$, Where S_i is the i subsystem($i=1 , 2 , 3 , \dots k$) , Each subsystem together constitutes the entire composite system , And $S_i = f(S_{i1} , S_{i2} , S_{i3} , \dots , S_{ik})$, Subsystem S_i It consists of each subsystem. For the composite factor, the system performance can be higher than the sum of the subsystem performance, and the effect of one plus one is greater than two, and the composite factor is an essential component for the coordinated operation of the system.

This paper selects China with Singapore Malaysia and Thailand as the main research subjects, and the tourism supply chain complex system is $M=f(S_1 , S_2)$, S_1 For the new Matai tourism supply chain subsystem, S_2 For China's tourism supply chain subsystem. The subsystem consists of several order parameters. The order parameters of Singapore Malaysia and Thailand tourism supply chain subsystem is $A=(A_1 , A_2 , A_3 \dots A_6)$, $A_1 , A_2 , A_3 \dots A_6$ Corresponding to Singapore Malaysia and Thailand tourist satisfaction, railway mileage, reception scale, tourism income, Internet server, service industry employment; The order parameter of China's tourism supply chain is $B=(B_1 , B_2 , B_3 \dots B_6)$, $B_1 , B_2 , B_3 \dots B_6$ Corresponding to Chinese tourist satisfaction, railway mileage, reception scale, tourism income, Internet server, and service industry employment. A 、 B It reflects the development status of Singapore Malaysia and Thailand brigade and the Chinese tourism supply chain.

Power function (x_i) , Indicates the extent to which each indicator contributes to the subsystem, $U(x_i)$ The value ranges from 0 to 1, and is in a positive relationship. The larger the value, x_{ij} The greater the contribution of the indicator to the subsystem, the more favorable the

subsystem synergy. Its formula is: $u(x_i) = \begin{cases} \frac{x_i - \alpha_i}{\beta_i - \alpha_i} & i \in [1, 2, 3, \dots, k] \\ \frac{\beta_i - x_i}{\beta_i - \alpha_i} & i \in [k+1, k+2, \dots, k+n] \end{cases}$

among them x_i . The relaxation variable for Singapore Malaysia and Thailand tourism supply chain or the Chinese tourism supply chain, the value range is $\alpha_i < x_i < \beta_i$, β_i , α_i Separately x_i The upper and lower limits of the critical point of the index value (in the actual calculation process), β_i , α_i Take the maximum and minimum values of the indicator data separately).

Subsystem coordination calculation: The sum of the power values of the subsystem order parameter is the effect of the subsystem on the coordinated development of the entire composite system, but the overall performance of the system is not simply a sum of the indicators, the formula is:

$$u(S_i) = \sum_{i=1}^n \lambda_i U(x_i), i \in [1, 2, 3, \dots, k]; \lambda_i > 0 \text{ and } \sum_{i=1}^n \lambda_i = 1.$$

In the middle $u(S_i)$ The degree of coordination of the i subsystem to the overall system, ranging from 0 to 1, when $u(S_i) = 0$, Indicates the lowest degree of synergy, synergy and $u(S_i)$ In a positive relationship. λ_i Indicates the weight of the order parameter, used to represent x_i The proportion of the indicator in the subsystem and the contribution. $U(S)$ The range is -1 to 1, when $U(S)$ it is negative, the composite system develops in a negative direction, otherwise it is the opposite.

The formula for compound synergy is:

$SM = \lambda \sqrt{|u_i^{t1}(A) - u_i^{t0}(A)| * |u_i^{t1}(B) - u_i^{t0}(B)|}$, among them $\lambda = \begin{cases} 1 \\ -1 \end{cases}$. When the subsystem is in forward coordination, λ is 1. The composite synergy uses the change of time to represent the change of the system's degree of homogeneity, indicating the change process of t_0 to t_1 synergy. (If $t_1 > t_0$, it will develop in the positive direction, otherwise it will be the opposite)

Collaborative analysis of tourism supply chain

Tourism supply chain coordination degree calculation

The analysis of the new Matai tourism supply chain needs to be based on the actual situation of the new Matai three countries, based on the six parameters of tourist satisfaction, railway mileage, reception scale, tourism revenue, Internet server and service industry employment. , data collection, obtained the data of Table 1-3:

Table 1-3. 2007-2017 New Matai Three Kingdoms Tourism Supply Chain Related Data

index years	A ₁ Tourist satisfactio n	A ₂ Railway mileage (km)	A ₃ Recepti on scale (person)	A ₄ Tourism income (million)	A ₅ Internet server	A ₆ Service industry employees (% of total employment)
2007	80.25	6096	43394000	47639000000	2014	56.862
2008	84.2	6094	44414000	51678000000	3165	57.168
2009	87.83	6094	45284000	46267000000	4719	56.072
2010	84.46	6094	49674000	56126000000	7482	56.216
2011	81.54	7314	54334000	68502000000	15131	59.031
2012	85.26	7577	58485000	76812000000	20018	58.741
2013	79.1	7577	64161000	86469000000	21985	59.341
2014	77.15	7577	64111000	83808000000	31691	61.698
2015	78.2	7685	67695000	82810000000	145999	62.239
2016	80.28	7742	72201000	89495000000	522374	62.895
2017	79.68	8256	75443000	100217000000	724023	63.253

The data in Table 1-3 comes from the National Bureau of Statistics of China, the National Bureau of Culture and Tourism, and the World Bank. The data spans from 2007 to 2017.

The analysis of China's tourism supply chain needs to be based on the actual situation in China. Based on the six parameters of tourist satisfaction, railway mileage, reception scale, tourism revenue, Internet server and service industry employment, the data collection will be carried out. Get the data in Table 1-4:

Table 1-4 2007-2017 China Tourism Supply Chain Related Data

index years	A ₁ Tour ist satisfac tion	A ₂ Railway mileage (km)	A ₃ Recepti on scale (person)	A ₄ Tourism income (million)	A ₅ Internet server	A ₆ Service industry employees (% of total employment)
2007	83.00	63000	54720000	37233000000	785	38.802
2008	85.23	75000	53049000	40843000000	1159	40.385
2009	87.43	82000	50875000	39675000000	1604	42.056
2010	85.57	87000	55664000	45814000000	2631	43.613
2011	85.09	93000	57581000	48464000000	5100	45.528
2012	86.87	98000	57725000	50028000000	6999	47.348
2013	75.46	103000	55686000	51664000000	13314	49.238
2014	73.94	112000	55622000	44044000000	26989	51.206
2015	79.00	121000	56886000	44969000000	66054	53.351
2016	76.54	124000	59270000	44432000000	289923	54.852
2017	80.12	125000	60740000	32617000000	622142	55.870

The data in Table 1-4 comes from the National Bureau of Statistics of China, the National Bureau of Culture and Tourism, and the World Bank. The data spans from 2007 to 2017.

The power value of each indicator reflects the contribution value of the index to the subsystem. The greater the power value, the larger the contribution value of the index to the subsystem. The calculation of the power value is an important prerequisite for the system coordination calculation.

Calculate the power value of Singapore Malaysia and Thailand order parameter indicator:

$$\text{Formula } u(x_i) = \begin{cases} \frac{X_i - \alpha_i}{\beta_i - \alpha_i} \\ \frac{\beta_i - X_i}{\beta_i - \alpha_i} \end{cases} \text{Substituting}$$

g into Singapore Malaysia and Thailand data, the index value $U(E_{ij})$ of the new Matai tourism supply chain is obtained. The calculation results are shown in Table 1-5:

Table 1-5 Singapore Malaysia and Thailand Tourism Supply Chain Order Parameter Indicators

index years	A ₁ Tour ist satisfac tion	A ₂ Railway mileage (km)	A ₃ Receptio n scale (person)	A ₄ Touris m income (million)	A ₅ Internet server	A ₆ Service industry employees (% of total employment)
2007	0.2903	0.0009	0.0000	0.0254	0.0000	0.1278
2008	0.6601	0.0000	0.0318	0.1003	0.0016	0.1773
2009	1.0000	0.0000	0.0590	0.0000	0.0037	0.0000
2010	0.6845	0.0000	0.1959	0.1827	0.0076	0.0233
2011	0.4110	0.5643	0.3414	0.4121	0.0182	0.4787
2012	0.7594	0.6859	0.4709	0.5662	0.0249	0.4318
2013	0.1826	0.6859	0.6480	0.7452	0.0277	0.5289
2014	0.0000	0.6859	0.6464	0.6958	0.0411	0.9102
2015	0.0983	0.7359	0.7582	0.6773	0.1994	0.9977
2016	0.2931	0.7623	0.8988	0.8013	0.7207	1.0000
2017	0.2369	1.0000	1.0000	1.0000	1.0000	1.0000

The value of each index in Singapore Malaysia and Thailand tourism supply chain order parameter has gradually increased with the passage of time. The Internet server efficacy value has increased rapidly in the past three years, indicating that the role of information in the tourism supply chain coordination is becoming more and more important. However, the satisfaction of tourists is fluctuating, indicating that the overall level of tourism needs to be improved.

Calculate the power value of the Chinese order parameter indicator: formula

$$u(x_i) = \frac{\frac{x_i - \alpha_i}{\beta_i - \alpha_i}}{\frac{\beta_i - x_i}{\beta_i - \alpha_i}}$$

Enter the Chinese data to get the power value $U(L_{ij})$ of the China Tourism Supply

Chain Index. The calculation results are shown in Table 1-6:

Table 1-6 Efficacy values of China's tourism supply chain order parameter

index years	A ₁ Tourist satisfactio n	A ₂ Railway mileage (km)	A ₃ Recep tion scale (person)	A ₄ Touris m income (million)	A ₅ Internet server	A ₆ Service industry employees (% of total employment)
2007	0.0099	0.0000	0.3898	0.2423	0.0000	0.0000
2008	0.0124	0.1935	0.2204	0.4319	0.0006	0.0927
2009	0.0148	0.3065	0.0000	0.3706	0.0013	0.1906
2010	0.0127	0.3871	0.4855	0.6929	0.0030	0.2819
2011	0.0122	0.4839	0.6798	0.8320	0.0069	0.3941
2012	0.0142	0.5645	0.6944	0.9141	0.0100	0.5007
2013	0.0017	0.6452	0.4877	1.0000	0.0202	0.6114
2014	0.0000	0.7903	0.4812	0.5999	0.0422	0.7267
2015	0.0055	0.9355	0.6093	0.6485	0.1050	0.8524
2016	0.0028	0.9839	0.8510	0.6203	0.4653	0.9404
2017	0.0068	1.0000	1.0000	0.0000	1.0000	1.0000

China's tourism supply chain order parameters in the railway mileage, reception scale, tourism income, service industry employment staff value is relatively high, indicating that the scale of tourism industry development and infrastructure has a positive role in promoting the tourism supply chain.

Standardize the data to avoid the impact of data inconsistency in measurement units, making the results more scientific and persuasive. The SPSS analysis software is used to standardize the data of 1-3 and 1-4, and the correlation coefficient matrix of the index is obtained. Then the SPSS is used to analyze the relationship matrix to obtain the standard deviation, and the formula is substituted into the formula: $\lambda_i = \frac{R_i}{\sum_{i=1}^n R_i}$. R_i is the standard deviation. (i=1, 2, 3, ..., n) The final index weights are shown in Table 1-7.

Table 1-7 China and Singapore Malaysia and Thailand indicator weights

index years	A ₁ Tourist satisfaction	A ₂ Railway mileage (km)	A ₃ Reception scale (person)	A ₄ Tourism income (million)	A ₅ Internet server	A ₆ Service industry employees (% of total employment)
New Matai	0.128	0.178	0.188	0.185	0.132	0.189
China	0.155	0.217	0.144	0.040	0.248	0.196
China and Singapore Malaysia and Thailand	0.132	0.185	0.192	0.169	0.129	0.192

The weight reflects the importance of the indicator in the system. The difference in the weight of the six indicators is relatively small, indicating that the tourism supply chain is operated by multiple factors, and each part is indispensable.

Calculate the synergy between the new Matai tourism supply chain and the degree of cooperation in China's tourism supply chain: the degree of synergy is used to indicate the level of system synergy. According to the formula $u(S_i) = \sum_{i=1}^n \lambda_i U(x_i)$, Substitute the weights in Tables 1-7 with the efficacy values in Tables 1-5 and 1-6 to calculate the synergy between China and Singapore Malaysia and Thailand Tourism Supply Chain. (λ_i Weight for order parameters, $U(x_i)$ The power value of the order parameter) ;

According to $SM = \lambda \sqrt{|u_i^{t1}(A) - u_i^{t0}(A)| * |u_i^{t1}(B) - u_i^{t0}(B)|}$, Calculate the overall degree of synergy, the results are shown as 1-8:

Table 1-8. Cooperation between China and Singapore Malaysia and Thailand Tourism Supply Chain in 2007-2017

main body years	Singapore Malaysia and Thailand synergy	Chinese synergy	Synergy between Singapore Malaysia and Thailand and China
2007	0.066179232	0.067357	
2008	0.142756039	0.111252	
2009	0.13958131	0.121305	-0.011805
2010	0.163659433	0.239577	0.015558
2011	0.386355701	0.31702	0.162292
2012	0.497464698	0.361866	0.092761
2013	0.508753486	0.375327	0.0225
2014	0.549810391	0.417689	0.023508
2015	0.626328616	0.510665	0.056934
2016	0.794175122	0.661006	0.124922
2017	0.932899674	0.806045	0.144416

According to Table 1-8, the trend analysis of the cooperation degree between China and New Matai tourism supply chain is shown in the following figure, which reflects the synergy degree of Singapore Malaysia and Thailand, the degree of synergy between China, and the synergy between China with Singapore Malaysia and Thailand. As shown in Figure 1-9:



Figure 1-9. Trends of cooperation between 2007-2017 Singapore Malaysia and Thailand and China's tourism supply chain

According to the cooperation between the three countries and China's tourism supply chain in 2007-2017 and the overall synergy between China and the new Matai tourism supply chain, the trend of tourism supply chain synergy is drawn. It can be seen from the trend chart that the new Matai three-nation tourism supply chain and China's tourism supply chain continue to grow. The synergy of with Singapore Malaysia and Thailand tourism supply chain coordination degree from 2007 to 2017 is 0.066 and 0.93 respectively, while China's 2007 from 0.067 in 2007. Increased to 0.8. Judging from the cooperation degree between China and Singapore Malaysia and Thailand tourism supply chain, the cooperation degree of the new Matai three countries' tourism supply chain is generally ahead of China, and China's tourism supply chain has a large room for improvement. Judging from the overall degree of cooperation between China with Singapore Malaysia and Thailand tourism supply chain, China with Singapore Malaysia and Thailand tourism supply chain maintained a steady upward trend, but it is still at a stage of low development level, with relatively slow growth and room for improvement.

Tourism supply chain cooperation stage judgment

K (Tourism supply chain cooperation index) = $\lambda_1 R_1 + \dots + \lambda_i R_i + \lambda_6 R_6$ (λ For weight, R is the standard value of the indicator) , SPSSS tandardized R_i Separately -0.40876 , -0.40875 , -

0.40624 , 2.04124 , -0.40873 , -0.40876 , λ_i Separately 0.132 , 0.185, 0.192 , 0.169,0.129, 0.192. Into the formula $K=\lambda_1R_1+\lambda_iR_i+\lambda_6R_6$, Get the value of K 0.0061,Where the K value belongs to 0-0.4 Interval , It is concluded that the cooperation between China with Singapore Malaysia and Thailand tourism supply chain is in its infancy.

At this stage, the cooperation intention of the two sides' tourism supply chain has just been proposed. It is limited to the proposal of the overall framework of cooperation. There is no regional authority to coordinate the planning. The planning and operation of the tourism market are separate, the homogenization phenomenon is serious, and the tourism infrastructure is lagging and distributed. Unbalanced, the performance of China and Singapore is relatively complete, and the infrastructure construction in Thailand and Malaysia is relatively backward. The information is difficult to share and the efficiency of the supply chain is reduced. It is difficult to meet the needs of tourists to eat, travel, and purchase. China and the new coordinated development of Matai tourism supply chain is lagging behind.

Development Status of Tourism Supply Chain with Singapore Malaysia and Thailand

Through the compound collaborative model get the development of the cooperation degree between China with Singapore Malaysia and Thailand tourism supply chain and the tourism supply chain cooperation index. We get that The characteristics of China with Singapore Malaysia and Thailand tourism supply chain are in their infancy, and the combination of qualitative analysis method is used to draw China and new. Development Status of the Three Kingdoms Tourism Supply Chain:

Unbalanced industrial structure development. China is relatively reasonable in terms of industrial structure, but it is still in a critical period of industrial restructuring. The development of secondary industries in Thailand and Malaysia lags behind, and it is difficult to meet the huge demand for goods in the tourism industry. The primary and tertiary industries account for a relatively high level, but they are still at a low level. At the stage, it is difficult to meet the all-round needs of tourists, and the number of tourists has caused difficulties in law and order. In the tertiary industry, the three countries have huge dependence on China's huge tourist population inflow. Thailand is highly dependent on China's tourism market. In Malaysia, Singapore is weaker. Excessive reliance directly leads to the characteristics of the tourism

industry serving the Chinese, resulting in a lack of motivation for the transformation and upgrading of the tourism industry. At the same time, the tourism industry in Singapore and Malaysia has certain exclusion, and it has barriers to entry in the tourism market. It is difficult to introduce a new operating system and limit the innovation and development of tourism ^[31].

Lack of information integration and sharing platform. There is no corresponding information coordination mechanism between China and Southeast Asia. The information is difficult to share and integrate. It is difficult for tourism suppliers to make relevant predictions on the changes in demand for tourism, food, housing and transportation. As a result, it is difficult for the tourism supply chain to provide accurate services for tourists. Enjoy the most comfortable service, resulting in low visitor experience and low satisfaction. At the same time, it is difficult to capture and transmit the information of tourism supply chain demand. The inefficient investment of tourism resources has caused a lot of waste of tourism resources. The information asymmetry has led to a lack of information reference for the development of a large number of tourism resources, and the poor complementarity of tourism products has made the tourism industry in the region less attractive. In terms of evaluation, tourists cannot obtain first-hand evaluation of tourism sites, and it is difficult to objectively grasp the actual situation of tourism sites. Tourist travel planning has a certain degree of blindness, and the non-sharing of information is not conducive to the supervision of the tourism process.

The supply chain lacks a cooperative relationship. Even though China and the new Malaysian countries are deepening cooperation in tourism, countries are operating independently, lacking a unified operation platform, and it is difficult to achieve cooperation in many aspects. There are a large number of resources and information asymmetry. The national tourism strategic planning is limited to domestic development. From the perspective of the overall supply chain of the four countries, the overall supporting planning and operation of the tourism supply chain are carried out, resulting in the overall supply chain operating efficiency is not high, it is difficult to form regional brand effect and adsorption rate, the overall competitiveness is not strong; for the overall perspective of the supply chain In view of the lack of supply chain cooperation mechanism, it is difficult for enterprises in the supply chain to reach a cooperative relationship. Travel agencies and Internet service providers as the main enterprises coordinate the enterprises in the supply chain as a whole, but the main enterprises in the supply chain do not completely maintain the cooperation intention. Suppliers can serve tourists autonomously, avoiding a series of expenses incurred by travel agencies as

intermediaries, resulting in loose cooperation between the two parties and their own governance ^[32].

The contract relationship is confusing. Due to the lack of reasonable contractual constraints, in the process of tourism supply chain operation, the market principle of price optimization is generally followed. In order to reduce costs, tourism supply chain enterprises generally choose tourism service providers with low quotations, which leads to difficulties in entering the market for quality service enterprises. The overall service level of the chain is relatively low; the cooperation relationship between enterprises in the tourism supply chain is complex, and there are often multi-directional cooperation and opportunism, which are interrelated and cross-corrupted, resulting in chaotic cooperation and unstable cooperation, resulting in a complicated operation of the tourism supply chain. The inefficiency of the tourism supply chain has resulted in a low level of coordination in the tourism supply chain.

The infrastructure is not balanced. Traffic, catering, public services, accommodation, etc. The development of the four countries is uneven, China and Singapore are relatively complete, Malaysia and Thailand are relatively inadequate infrastructure, and mainly concentrated in tourism-intensive areas, resulting in the lack of tourism infrastructure in other tourist attractions, regional tourism development Restricted, for the peak season, Malaysia and Thailand hot tourist attractions have limited reception capacity, tourists are difficult to divert, and it is easy to cause a series of problems such as traffic jams and crowded spots, which affect the visitor experience.

China and Singapore Malaysia and Thailand Tourism Supply Chain Collaborative Strategy

The development of tourism industry requires the following factors: stable and harmonious international relations, policy-driven, rational and orderly development of tourism resources, and coordinated development of tourism supply chain ^[33], in which supply chain coordination includes the coordination of tourism resources and the active government departments. Guided, stable market environment, etc, so the research on tourism supply chain synergy can solve many problems in the tourism industry and promote the healthy development of tourism industry, so find out the current situation of the development of tourism supply chain between China and Singapore Malaysia and Thailand. The solution is conducive to the balanced development of the tourism industry and the tourism market, and promote the coordinated

development of the tourism industry of both sides, thereby promoting the implementation of the Belt and Road Initiative strategy. The specific countermeasures are as follows:

Industrial structure and supply chain synergy development

Industrial structure: China is in a critical period of economic transformation. The development of the secondary industry of the new Matai three countries is lagging behind. It can promote the development of the second industry of the new Matai three countries through capacity transfer, actively carry out industrial integration, and provide consumers with professional and price. At the same time, China can learn from the experience of the development of the tourism industry in Southeast Asia, promoting industrial transformation and upgrading, and promote the balanced development of the industrial structure of China and the new Malaysian countries.

Establishing a mechanism of tourism supply chain information coordination

Establishing an information sharing platform to realize the timely transmission of information throughout the tourism supply chain ^[36], so that all links in the tourism supply chain can timely grasp the real-time changes in supply chain demand, and clarify the demand information of tourists' preferences, traffic, complaints, etc. During the travel process. Meeting the needs of tourists and improving the satisfaction of tourists. The six elements of tourism are mutually influential and independent, and each element even has the phenomenon of associated influence. The main body maintains information barriers for competitiveness. This feature makes the coordination of tourism supply chain very difficultly. The establishment of big data as the core tourism supply chain, through the real-time sharing of information and the mining of relevant data of tourists, so that all links in the tourism supply chain can obtain the latest information in real time, reduce the blindness of all links in the supply chain, to realize the profit of tourism supply chain Maximize ^[37]. Of course, the coordination of information requires the support of hardware systems, accelerate the construction of information infrastructure, and provide hardware support for the development of information sharing coordination mechanism.

Establishing a regional tourism supply chain alliance

Establishing a strategic supply chain alliance mechanism led by the four governments^[38], which will involve all relevant departments of the tourism supply chain, and the upstream and downstream enterprises will be integrated into the entire supply chain alliance system, and formulate supply chain operation norms, information transmission and integrity. The

standardization makes the operation of the tourism supply chain alliance scientific and orderly, and at the same time provides a variety of cooperation methods and resources for the alliance, so that the entire brigade supply chain alliance main division of labor and cooperation, complementary advantages, orderly competition, and the coordination and win-win of the supply chain main body .

Construction of Contract and Relationship Mechanism in Tourism Supply Chain

The contract in the supply chain clearly stipulates the code of conduct and rights and obligations of the two parties in the process of cooperation and cooperation, and reaches a consensus on the issue of the two parties' distribution, reduces the randomness of the subject's behavior in the supply chain, and provides basic agreement guarantee for the cooperation of the tourism supply chain. For tourism suppliers, the signing of the contract is conducive to providing order guarantee for their own production, reducing the risk of unsalable products and ensuring the stability of the operation of the tourism supply chain . At the same time, establishing a supply chain relationship system and integrity mechanism to promote mutual trust and cooperation among supply chain entities, establishing a tourism supply chain alliance, and promote coordination of supply chain entities.

Public infrastructure

Strengthening the investment in infrastructure in the region, to make overall planning, reduce the duplication of public infrastructure construction, maximize the effectiveness of each public infrastructure, and secondly accelerating the efficiency of transportation and communication, to improve the efficiency of transportation and transportation, and meet the full range of needs of tourists. Providing material foundation guarantee for the coordinated operation of tourism supply chain.

Summary and outlook

The composite collaborative model is used to derive the development trend of China and Singapore Malaysia and Thailand tourism supply chain from 2007 to 2017. The tourism supply chain cooperation index is used to judge the cooperation stage between China and Singapore Malaysia and Thailand tourism supply chain, and the qualitative analysis method is used to find out China and new. Matai tourism supply chain synergy development process, and propose specific solutions to promote the coordinated development of China and Singapore Malaysia and Thailand tourism supply chain, promote the coordinated development of China and

Southeast Asia tourism supply chain, and enhance tourism in China and Southeast Asia Level and form typical examples to promote the further development of the tourism industry along the Belt and Road. However, there are still some shortcomings in the research. The new Matai three countries in Southeast Asia are selected as the main research subjects. The six major indicators such as tourism revenue and railway network intensity are used as the index system, which cannot fully represent the prevalence of tourism supply chains along the Belt and Road. The problem, at the same time, the difficulty of data acquisition also leads to difficulty in selecting indicators. It can only be replaced by corresponding alternative indicators, and the time span of data is small. It does not combine the trend of green sustainable development of tourism supply chain, which leads to some limitations of the research. The next step will be to combine the future development trend of the tourism supply chain, further expand the breadth and depth of indicators, and study the impact relationship between various indicator systems to further identify the practical problems existing in the coordinated development of China and Singapore Malaysia and Thailand tourism supply chain and propose a solution

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TRANSFORMING DEMING'S PARADIGM: UTILIZING POSITIVE PSYCHOLOGY TO BRING ABOUT QUALITY IMPROVEMENT WITHIN ORGANIZATIONS

Dr. Vijay Pereira Dr. Michael Babula and Prof. Glenn Muschert

Introduction

Research in quality management has identified that one of the greatest challenges for contemporary companies is to produce high quality products and services to compete on a global scale. Thus, there has emerged an entire field dedicated to the study of what management scheme leads to the highest quality improvement within organizations (see recent work by Lasrado and Pereira, 2018, that portrays quality management global excellence standards, including in the UAE context). This was especially true for companies in countries that have suffered economic decline, or new economically emerging countries (Pereira et al. 2020a & 2020b). Deming (1982) developed a systems model that transformed post-World War II Japanese companies, which directly contributed to the subsequent Japanese economic miracle. While Deming identified 14 points to improve quality, he was clear that *driving fear* out of the workplace was most central to reducing inefficiency in the production process. The impediment to efficient production in recent years, has been that many companies have turned to new Taylorism, using digital technologies to mechanize and monitor the workforce (Lund & Wright, 2001). Deming then forewarned against new Taylorism by arguing that monitoring workers would produce fear. Since the rise of new Taylorism, the USA has witnessed the 2009 bankruptcies of multi-nationals such as Ford and General Motors as well as the rise of significant national trade deficits. This paper proposes and applies a *new Deming theory* that we envisage will improve the competitiveness of organizations in an environment of economic decline and will serve as a model for companies in economically viable nations. We utilize a well-established methodology of a unique case-study (Siggelkow, 2007). More specifically we chose a Turkish company and the context of Turkey, as a case in point, and would extend it to a larger study involving up to 10 other companies with a sample of ($n = 400$) employees.

Literature, Methodology and Rationale

A major limitation to Deming's paradigm is that contemporary austerity does not permit the reduction of uncertainty in the workforce by, for example, giving employees a job for life or large financial bonuses to teams. The objective of this project is to overcome financial

limitations by drawing on the research highlighted by the *Greater Good Center* at the University of California Berkeley, whose research in positive psychology has introduced strategies to reduce anxiety, depression, and resentment in organizations. Such interventions have the potential to generate positive emotions at work (Seligman & Steen, 2005; Sheldon and Lyubomirsky, 2006; Breines & Chen, 2012; Nakamura & Csikszentmihalyi, 2014; Tibbits et al., 2006; and Carter, 2015). Our project will be unique and innovative in that we intend to pilot new and enhance existing positive psychology interventions to reduce fear in the workplace. LaPiere (1934) demonstrates that attitudes do not always reflect actual behavior. Reinforcing actions with behavior will produce stronger positive reactions than many of the existing interventions which rely on journaling alone. We will measure the effectiveness of our new interventions by developing psychometric measures of life satisfaction, depression, anxiety, and maladaptive guilt.

To deploy a new Deming paradigm, it is necessary to locate a country which has recently suffered major economic decline so as to repeat the success Deming had in post-war Japan, and hence make a case for Turkey. Turkey's economy is in crisis. Added onto this economic crisis is a huge influx of Syrian refugees into Turkey who have taken up positions working in factories around the country. This has produced an environment conducive to test a new Deming paradigm. The team has already secured the cooperation of a large manufacturing business in Turkey that supplies linens to companies such as Walmart in USA and John Lewis & Partners in the UK. This company's workforce consists of mainly Syrian refugees and the company has invited the team to carry out an application of our *new Deming theory*. This company would be ideal to start a pilot test which could then be expanded and extended to a larger study involving up to 10 other companies and sample of ($n = 400$) employees. Our contact has indicated that their partners in Turkey are willing to participate in the main study. The eagerness to participate is owing to the devaluation of the Turkish lira. These businesses are purchasing supplies in dollars and selling their products in Turkish lira and they are looking for ways to reduce costs associated with waste in order to remain profitable. Overall, we envisage that the findings from this study can be generalized and extended to other emerging countries.

Wider Impact

The importance of this paper cannot be understated for post-industrial economies. Babula et al. (2015) argued that an unabated decline in quality products and services was harming the

competitiveness and profitability of the USA and its allies. Currently, many emerging countries are yet to realize the tremendous opportunities from the potential location of manufacturing facilities within its borders. In such emerging countries, there is plenty of available land and affordable labor. Nonetheless, in order for them to become competitive in manufacturing, they will need to produce high quality products and this paper will deliver a workable model to accomplish the task. This project will pioneer a new paradigm for manufacturing and quality management for emerging countries.

Bio Sketch

Dr. Vijay Pereira has a PhD in business and management and has published extensively with regard to sustainability, business strategy and models, business excellence and human capital in the workplace. He has over 100 publications, including 8 books, the most relevant here being *Achieving Sustainable Business Excellence: The Role of Human Capital* (Palgrave Macmillan), and his forthcoming article in the top ranked journal, *Applied Psychology: An International Review*. Dr Michael Babula has a PhD in Psychology from the University of London and MBA in Finance and has published multiple articles restoring the importance of Deming's philosophy, specifically the book *Motivation, Altruism, Personality and Social Psychology* (Palgrave Macmillan, 2013) and multiple articles in *The Journal for Quality and Participation*. Prof. Glenn Muschert has a PhD in sociology and has published extensively with regard to social dynamics in vulnerable populations. His publications include *Global Agenda for Social Justice* (Policy Press, 2018) and in dozens of academic journals in sociology.

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ANALYSIS OF THE MONEY SUPPLY IN UKRAINE AND METHODS OF ITS OPTIMIZATION

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Abstract

Purpose The purpose of this paper is to analyze the dynamic and structure of money supply in Ukraine and to create methods of its optimization.

Design/methodology/approach The following methods were used: logical, historical, statistical, analysis, synthesis, grouping; economic and mathematical, in particular correlation & regression analysis; induction and deduction, analogy, etc.

Findings The analysis showed that the money supply in Ukraine is insufficient to serve the needs of the economy, as well as there are imbalances in the structure of the money supply. The level of influence of macroeconomic indicators on the size of money supply by means of constructing a model of connection between the gross domestic product, the consumer price index and the monetary aggregate has been analyzed. It allowed to establish a rather strong direct relationship between the factors studied in the model and monetary aggregate M3. The use of economic-mathematical modeling allowed to predict the indicator of the monetary aggregate M3 in the short-term perspective. In order to achieve optimal amounts of money supply, strategic and relevant tactical directions based on the interrelationships between them have been defined.

Research limitations / implications The study was limited the money supply during 2010-2018 years in Ukraine in order to maintain the modern peculiarities of money supply in Ukraine and to make the proposals for its optimization in the short- and middle-term perspective.

Practical implications The paper provides evidence for the money supply in Ukraine and authors' proposals for its optimization, which should lead to increased recognition for government, National Bank of Ukraine, banks et al. for its peculiarities and challenges for short- and middle-term period.

Originality/value The paper examines the development and main trends of money supply in Ukraine with proposals of its optimization. Authors' proposals (in distinct from the similar

researches) take into account the Euro integration choice of Ukraine. A generalized research framework is proposed to aid future studies of money supply.

Keywords: *Money Supply, Monetary Aggregate, Gross Domestic Product, Consumer Price Index, Velocity Of Money, Monetary Policy, Models, Optimization.*

Introduction

In recent years Ukraine has been in a state of economic and political crisis and social tensions that can be observed in the main macroeconomic indicators, the money supply in the country is not an exception, in particular, its balance, structure and adequacy of volumes to service the economy.

The problems of the money supply is relevant for most countries of the world, particularly for the developing countries, because the balance and adequacy of the money supply is the key to economic growth in a country, increasing the mobility of economic entities, their economic activity, in particular, the establishment of international trade and economic relations, financial settlement operations. The optimal structure of the money supply is the identifier for the effectiveness of monetary policy in the country and effective functioning of the banking system as a whole. According to new public choice of Ukraine, the European integration development, the issues of optimality of money supply and their relevance to the needs of the economy are topical and need further research. Therefore, it stipulated the choice of the research theme, determined its purpose and objectives.

Literature

The problem of essence, structure and boundaries of money supply was the subject of study in the nineteenth century. Thus, representatives of monetary school (C.J. Overstone, R. Peel, D. Ricardo R. Thorence, 1994) believed the money supply to be of exogenous nature created exclusively by the Central Bank. D. Ricardo (1994) noted that the economy is inherent in the mechanism of equilibrium of demand and supply for money that is why every country has the amount of money objectively necessary for the functioning of the market economy. However, the representatives of the banking school (T. Tuck, A. Wagner, G.C. Mill, 1967) had the point that the entire banking system creates the money supply endogenously based on the needs of the market economy. The certain aspects of the money supply, monetization of the economy were investigated by the Nobel prize winners in Economics such as P. Samuelson, F. Hayek, M. Friedman (1996). According to M. Friedman (1996), the main problem of monetary policy is to ensure consistency between the supply and demand for money. M. Friedman (1996)

believed that the increase of money in circulation must correspond to the rise in the gross national product, and the money supply growth must have an even pace. Nowadays the European governments use M. Friedman's "money rule" in combination with other methods, for example, with the stimulation of production, reduction of taxes, regulation of prices and income, etc. to achieve the economic effect.

Ukrainian scholars, such as A. Galchynsky, O. Bazhanova, K. Geits, P. Kachan, M. Krusha, P. Savluk, A. Iukhymenko, A. Shchetynyn (2010) justify the specifics of the money supply and its role in the economy. In particular, O. Bazhanova (2013) noted, that the size and structure of the money supply characterize the condition of the market. The change in the money supply directly affects the formation of an effective demand on the markets, hence the economic development. We agree with A. Shchetinin (2010) that the money supply is not homogeneous and the improvement of commodity-money relations has become increasingly complex due to new financial instruments that appear in the process of development of money circulation.

The analysis of scientific sources revealed that theoretical and practical aspects of optimality of money supply are characterized by a lot of problems. There is an imbalance in the money supply, in particular the monetary aggregates in the money supply, limited money supply, which affect the insufficient level of monetization of the economy and deepens the process of stagflation in the economy. Therefore, the aim of the study is a further analysis of the volume and structure of money supply, determination of its relationship with the main macroeconomic indicators of the state and methods of its optimization.

Methods

In the course of the work the following methods were used: logical, historical, statistical, analysis, synthesis, grouping; economic and mathematical, in particular correlation & regression analysis; induction and deduction, analogy, etc.

Findings and Discussion

The structure and dynamics of the money supply in the countries of the "post-Soviet model" are analyzed; a comparative analysis with other countries is carried out.

It should be noted that the number of aggregates of money in different countries, for example, in France, two in Germany and Switzerland – three in the US – four in the UK – five, while among the former models are characterized by four monetary aggregates: M0, M1, M2, M3. The most liquid monetary aggregates are M0 and M1, however aggregates M2 and M3

are less liquid but are more profitable. Indicators M0 and M3 are considered to be more important for the domestic practice since the coefficient of monetization of the economy, proportionality of prices and the purchasing power of the monetary unit, etc. are determined with their help.

The structure and dynamics of money supply of the countries of the "post-Soviet model" in 2018 are given in Fig. 1.

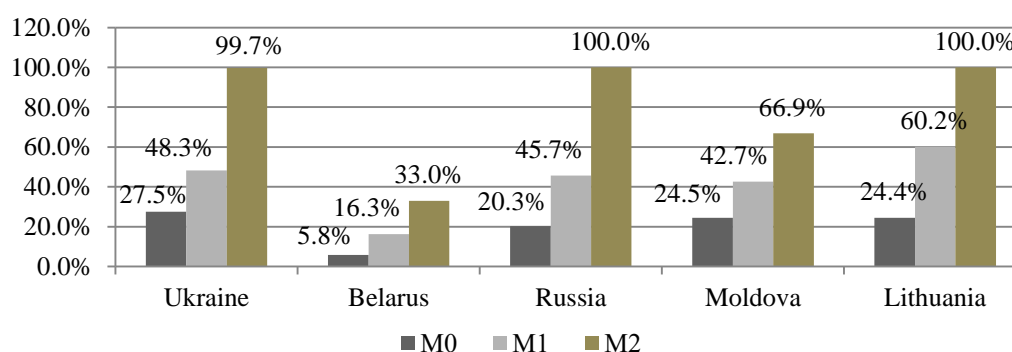


Figure 1. The structure of the money supply among post-Soviet countries in 2018

Source: built by the authors on the basis of official NBU data <https://bank.gov.ua>

According to Fig. 1 the aggregate structure of the money supply in some post-Soviet countries was calculated and it proves to be heterogeneous. However, there is a significant proportion of the money aggregate M0 in the structure of money supply, indicating a high specific weight of cash in circulation. In Ukraine this figure is the highest that is 27.5 %, while in Moldova and Lithuania it is 24.5 %, in Russia it is 20.3 %, in Belarus the share of money supply in circulation corresponds to the European average 5.8 %. A significant proportion of cash in circulation points out to the shadow schemes in the financial market, absence of trust to the domestic banking system and the stock market in general, a high level of economy dollarization, inefficient monetary policy.

For example, according to data published on Stock portal "Take-profit.org.", the statistical structure of money supply in the UK is following: the share of monetary aggregate M0 in circulation does not exceed 3 %, while monetary aggregate M1 amounted to 60.5 % which is quite a high indicator and corresponds to the average value showing that the country possesses an effective functioning banking system and the stock market is highly developed. M2 money supply as of 2018 was 84% in the structure of money supply, which reflects an increase in mobility of the economy, and the potential flexibility of behavior of economic entities. In the countries of the European Union the structure of the money supply consists of three monetary units: M1, M2, M3. The dynamics of the money supply during 2008 – 2018

has a tendency to increase from 8.5 to 11.1 trillion Euro. The volume of money aggregate M0 does not exceed 10 % and is an average for the other countries of the world. The value of the monetary unit in the range of 10% has a positive effect on the volumes of investment resources, which are accumulated in the banking systems of EU countries. Monetary aggregates M1 and M2 constitute 65.2 % and 94.3 % respectively, which is high in performance, the majority of the money is used efficiently that is placed in various types of financial assets and used in carrying out cashless payments. The structure of the money supply in the American countries, in particular Canada, Colombia and Argentina is heterogeneous, namely, in Canada and Colombia indices of the monetary aggregates M0 correspond to the European average 4% and 12%, respectively, in Argentina, the figure is high and constitutes 39 %, pointing out to the crisis phenomena in the economy. The vast majority of the money supply is concentrated in the monetary aggregates M1 and M2.

Thus, the comparison of the domestic and global structure of the money supply enables to formulate the following conclusions: 1) in Ukraine, as in most post-Soviet countries, there is a significant proportion of the money aggregate M0 in the money supply. This indicates to the shadow schemes in the financial market, the distrust of the domestic banking system and the stock market, the high level of dollarization of the economy, the availability of inflation expectations, etc. 2) not high level of M1 at 45-48% in the structure of money supply, whereas in the Euro area monetary aggregate is 60 % - due to the crisis in the banking system.

However, there is a general criterion that combines the analyzed models, in particular domestic and foreign experience is that the value of the money supply depends on the condition and development of the economy, velocity of circulation of money etc. A significant difference of the structure of the money supply in the studied models is associated with different types of economy, standard of living of the population, development of the banking system, etc.

Using the official reporting data of the National Bank of Ukraine, the value of the monetary aggregates is stated in table 1.

Year	M0	M1	M2	M3	The growth rate of M0, %	Abs. deviation M0	Growth rate M3 %	Abs. deviation, M3
2010	182.99	289.89	596.84	597.87	*	*	*	*
2011	192.67	311.05	681.80	685.52	105.3	9.68	114.7	87.65
2012	203.25	323.23	771.13	773.20	105.5	10.58	112.8	87.68
2013	237.78	383.82	906.24	908.99	117.0	34.53	117.6	135.79
2014	282.95	435.47	955.35	956.73	119.0	45.17	105.3	47.74
2015	282.67	472.22	993.81	994.06	99.9	-0.28	103.9	37.33
2016	314.39	529.93	1102.39	1102.70	111.2	31.72	110.9	108.64
2017	332.55	601.63	1208.55	1208.85	105.8	18.16	109.6	106.15
2018	363.63	671.28	1273.77	1277.63	109.3	31.08	105.68	68.78

Table 1. *Monetary units of Ukraine in 2010 – 2018, UAH bln*

Source: compiled by the authors according to the official data of Monetary and financial statistics by National Bank of Ukraine, <http://www.bank.gov.ua>, National Bank of Ukraine annual reports, <http://www.bank.gov.ua/doccatalog/document?id=77106>, <http://www.bank.gov.ua/doccatalog/document?id=121938>, <http://www.bank.gov.ua/doccatalog/document?id=2150782>, <http://www.bank.gov.ua/doccatalog/document?id=8253030>, <http://www.bank.gov.ua/doccatalog/document?id=17568764>

In accordance with the data of table 1, there is a growth of the money supply in Ukraine for all types of monetary aggregates that corresponds to European trends.

The monetary aggregate M0 during 2010 – 2018 increased by 180,64 bln. UAH or 98,72 %. The highest growth rate of cash in circulation was observed in 2013-2014 and reached about 119 % - this is due to the socio-economic and political crisis in the country, inflation expectations in the economy resulting in population for ongoing purchases increased the amount of "pocket money" that affected the volume growth of cash outside banks.

The monetary aggregate M1 during the investigated period was systematically increasing and at the end of 2010 – 2018 rose by 381 billion UAH or 131,56 %. The highest rate of money aggregate M1 growth was observed in 2013/2012. by 60,6 billion. and 2016/2015. 57,7 bln. UAH.

M2 money supply is characterized by a high level of liquidity, includes urgent and savings deposits. In 2010 – 2018 money supply grew by 676,93 bln. UAH or 113,42 %. As of December 2018, the money supply was 1273,77 bln. UAH that is 99,7 % of the money supply.

M3 money supply has a low liquidity of all units, because it requires notice of a banking institution by the owners. Therefore, during the study period the unit grew by 679,76 bln. UAH or by 113,7 %. The highest growth rates are observed during the period of 2012 – 2013, 136 bln. UAH or 118 %. In 2011 – 2012, 2015 the growth rate of the money aggregate M0 was less than the growth rate of the monetary aggregate M3, which explains the moderate growth of cash in circulation in comparison with the significant increase of deposits.

It should be noted that the structure and dynamics of the money supply in the period under study is characterized by the relative stability. So, about 30% of the money supply consists of cash M0; 42-48 % of the money supply belongs to the monetary aggregate M1. Relative constancy is characterized by the share of monetary aggregate M2 and is almost 100 %. Experts note that the lower share in turnover of cash in total money supply, the more effective national monetary system. Given this statement, it is possible to conclude that the functioning of the domestic monetary system has certain disadvantages, since the proportion of cash during the study period (2010 – 2016) is in the range of 30 %, whereas in leading European countries, the value does not exceed 7-10 %.

A high proportion of cash in the total amount of money testifies to the increasing incomes of the population. In confirmation of this we have built a steam room, a linear model of the total incomes on average per month per household (x) money supply M0 (y) for the period 2002 – 2016, using correlation and regression analysis, Fig. 2.

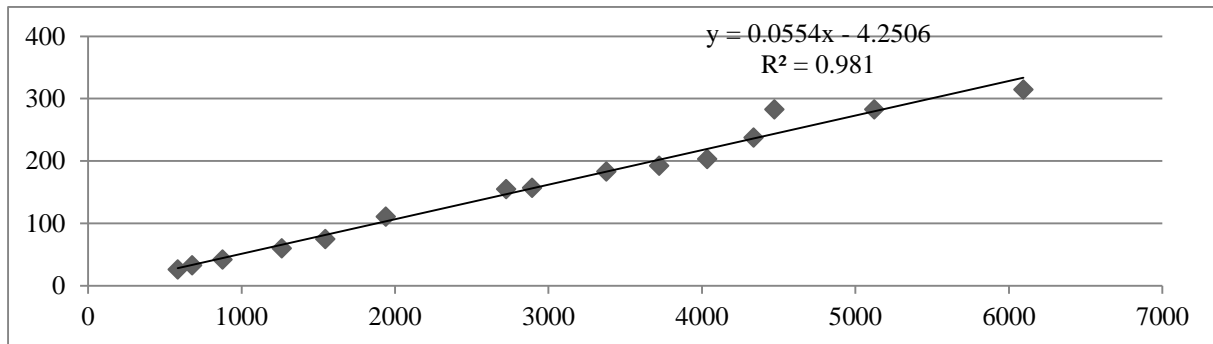


Figure 2. Correlation field when total incomes on average per month per household with monetary aggregate M0

Source: built by the authors

The model obtained showed that between the study factor and effective signs there is a strong direct relationship. The coefficient of elasticity showed that with the increase of the total incomes on average per month per household for 1% of the monetary aggregate M0 increases by 1.03%.

The money supply is closely connected with the main macroeconomic indicators, in particular gross domestic product, inflation etc. In this context, we have attempted to determine the influence of macroeconomic indicators in a country on the size of the money supply. Conducted research for the period of 2002 – 2016 allowed by using correlation and regression analysis to build a model of the relationship between gross domestic product (x_1), consumer price index (x_2) and monetary aggregate M3 (y). We specify the model:

$$y = a_0 + a_1x_1 + a_2x_2 \quad (1)$$

Using the method of least squares for multiple regression the unknown parameters of the equation will be found (1). Thus, the multiple regression equation has the form of:

$$y = -15,12 + 0,00054x_1 - 1,043x_2 \quad (2)$$

We will define the estimated values of y_t by the obtained model and plot the actual and calculated values of money aggregate M3, Fig. 3.

Verification of model adequacy was used to calculate certain characteristics (tab. 2), whose values we can conclude: 1) between the factors that were studied in the model and monetary aggregate M3 there is a quite strong correlation ($R_{xy}=0,979$); 2) the coefficient of determination shows that 95.9% of changes in the monetary aggregate M3 depend on the factors included in the model (2), and 4.1% is influenced by other factors that have not yet been

investigated. They involve investment and equity, household income, rates of commercial banks on term deposits and savings deposits etc; 3) pair wise correlation of coefficients indicates that the most direct connection ($r_{x1y}=0,978$) exists between GDP and monetary aggregate M3: the greater is the value of GDP, the more money supply, while inflation ($r_{x2y}=0,338$) weakly affects M3 money supply.

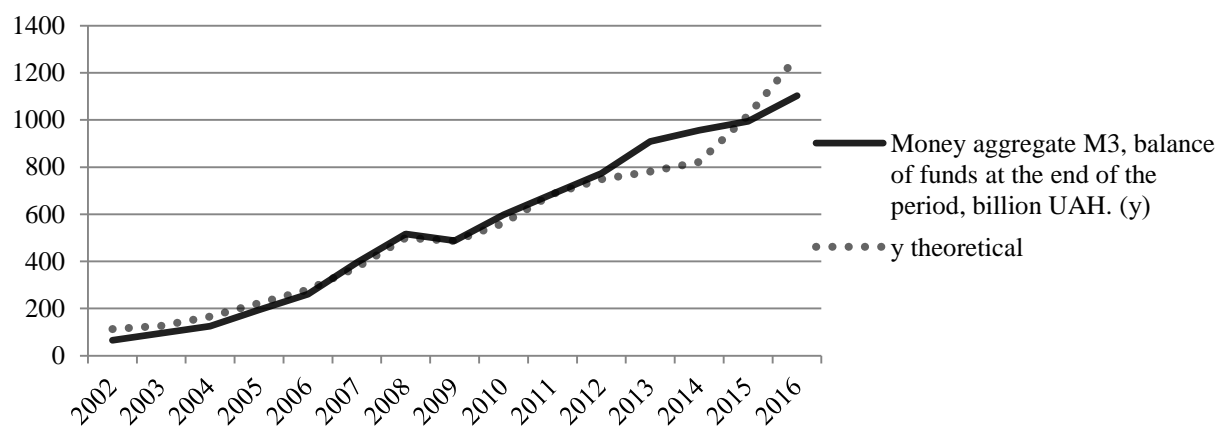


Figure 3. Graph of actual and calculated values of money aggregate M3

Source: built by the authors

Verification of the calculated coefficients for significance by the Fisher test confirmed the adequacy of model (2) statistics, and the average relative error estimates the approximation at the level of 14.95% – high accuracy of the model. It also illustrates Fig. 3, with a slight deviation of the actual and calculated values of money aggregate M3, and the calculated elasticities allow for an economic interpretation of the model, which are given in table. 2.

Characteristics of the model	The value	Characteristics of the model	The value
The coefficient of multiple correlation (R_{xy})	0.979	Paired correlation coefficients between x_1, x_2 and y : including	
The coefficient of determination (d)	0.959	1) GDP (r_{x1y})	0.978
F-criterion calculated (F_{pozp})	138.81	2) CPI (r_{x2y})	0.338
The coefficients of elasticity, %:incl.			
$E_1=$	1.05	The accuracy of the model, %	14.95
$E_2=$	-0.02		

Table 2. Characteristics of the model (2)

Source: calculated by the authors

The obtained results of economic and mathematical calculations show that under all other equal conditions, the GDP growth of 1% would increase the money aggregate M3 by 1.05%, and the growth of the consumer price index by 1% contributes to the decline in money M3 at 0.02%. The benchmarks of the money aggregate M3 by end of 2017 and end of 2018 are defined. The rating of the Government of Ukraine concerning the expected volume of GDP (at 2%) and inflation by the end of 2017 (at the level of 11.2%) and the forecast values of macroeconomic indicators, which are incorporated in the Budget for 2018 were used to make

the calculations, table. 3. Thus, according to the calculations, we receive a rate of money aggregate M3 in the end of 2017 at the level of 1295.562 bln. UAH that is 17.5% higher than in 2016, and at the end of 2018 – 1337,528 bln. UAH that is by 3.24% higher than the forecast for the end of 2017.

Year	The expected value		Forecast of money aggregate M3, bln.UAH	The deviation from the previous period	
	GDP, million UAH.	CPI, %		Absolute bln. +/-	Growth rate, %
2017	2433074	11.2	1295.562	192.8618	17.48996
2018	2506067	9	1337.528	41.96596	3.239209

Table 3. Prediction indicators of monetary unit M3 according to model (2)

Source: calculated by the authors

One of the factors of significant growth in the consumer price index was the reduction in the velocity of money from 4.51Rev/year in 2012 to 3.64 Rev/year in 2014. The influence of velocity of money on inflation in Ukraine for the period 2010 – 2016 is investigated. The relationship between the dynamics of the consumer price index (y), and the velocity of money (x) can be described by a model of linear regression of the pair:

$$y = 0,4052 + 0,5089 x. \quad (3)$$

The model on the Fisher criterion of adequate statistical data shows that between the velocity of money and consumer price index there is a relatively strong correlation ($r_{xy} = 0,994$), the coefficient of elasticity ($E = 0,97$) states that increase of the velocity of money by 1%, leads to the inflation rise by 0.97%, Fig. 4.

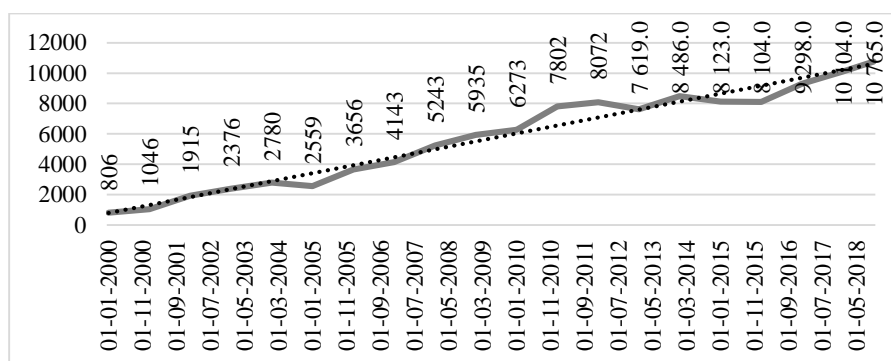


Figure 4. Correlation field of the dynamics of the consumer price index and the velocity of money

Source: calculated by the authors

Thus, there is a close relationship between the dynamics of the consumer price index and velocity of money. It was revealed that the money supply is unbalanced and does not meet the needs of the economy. The reason is a number of factors, in particular failure to comply with the main provisions of the monetary policy, the lack of concerted actions of Executive authorities of the Government and the National Bank of Ukraine, distrust in the banking system, the ignorance of society in investment opportunities in the securities market, tight fiscal policy. Given the foregoing, to achieve the optimal money supply it is necessary to determine strategic and tactical directions. The relationship of these strategic and tactical directions

ensuring their implementation, is presented in Fig. 5 (the direct link of the strategic and tactical areas is combined with a solid arrow, indirect with the broken arrow).

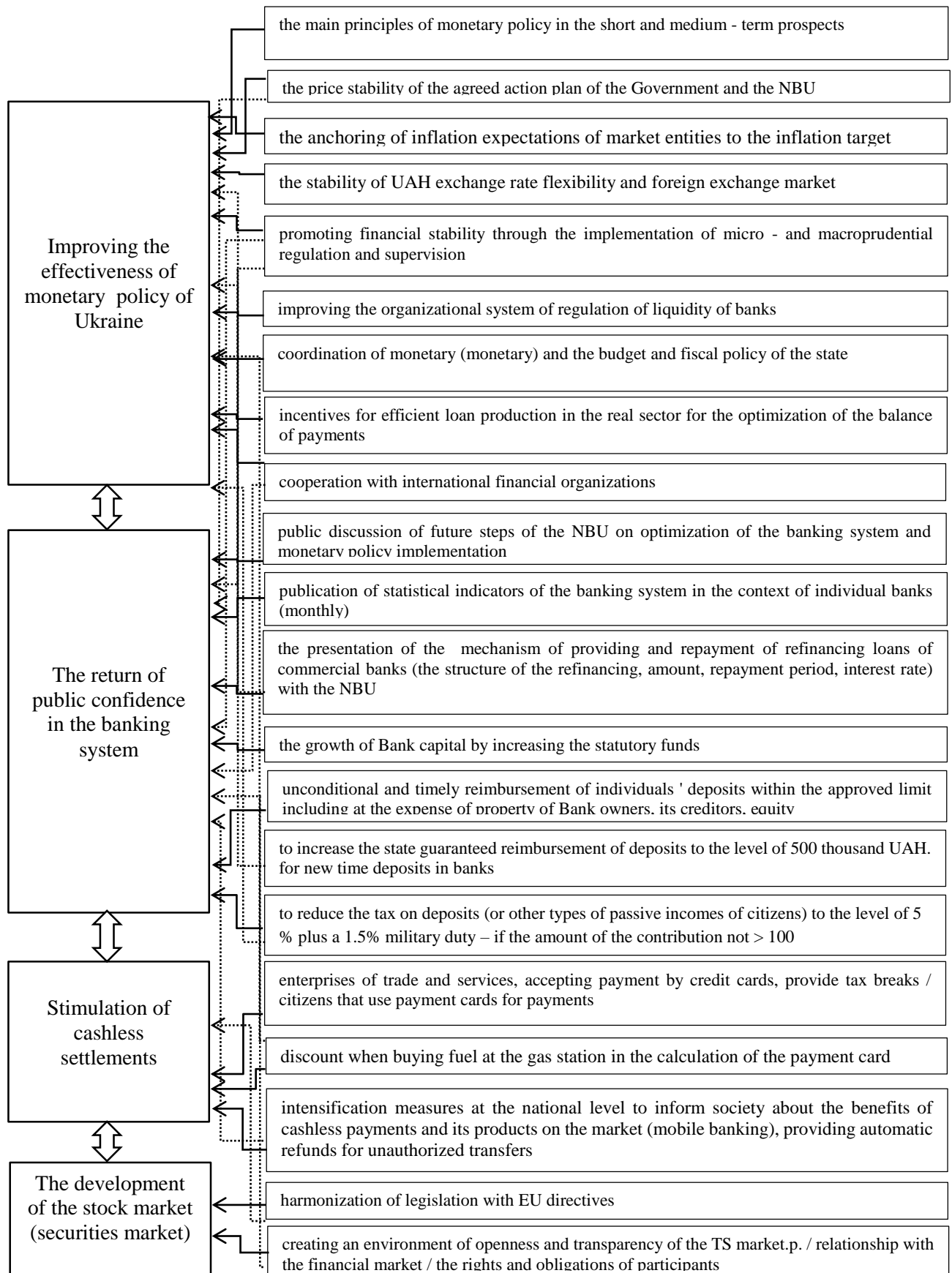


Figure 5. *Relationship between the strategic and tactical directions of the money supply optimization in Ukraine*
Source: created by the authors

The strategy is implemented through tactical activities, including a set of managerial, financial decisions regarding strategic objectives.

Strategic directions for achieving the optimality of money supply are: 1) improvement of the effectiveness of monetary (monetary) policy of Ukraine; 2) a return of public confidence in the banking system; 3) encouraging non-cash payments; 4) the development of the stock market (securities market).

Key tactical areas of the first strategic direction are: 1) to ensure price stability, coordination of monetary and budgetary-fiscal policies; 2) to increase the state guaranteed amount of compensation of deposits to the level of 500 thousand UAH for new time deposits; reducing the tax on deposits to 5% plus a 1.5% military duty – if the amount is less than 100 thousand UAH; 3) to provide tax incentives for the enterprises of trade and services, accepting payment by credit card; 4) to harmonize the national legislation with EU directives & formation of an open information environment, improving the investment climate.

Contrary to the similar developments, the proposed strategic and tactical directions take into account the European choice of Ukraine, providing for the improvement of the legal framework, improve public confidence in the banking system and stock market instruments.

Conclusions

Summing up theoretical and practical grounds of the nature and structure of the money supply, its relationship with the main macroeconomic indicators are summarized, promising areas for achieving its optimization are identified.

The main scientific results, that characterize the novelty of the performed studies, include the following: improved strategic and tactical directions to balance the money supply, which is developed with due regard for the linkages between these areas. Contrary to the similar developments, the proposed strategic and tactical directions involve the European choice of Ukraine, the improvement of the legal framework, improve public confidence in the banking system providing for stock market instruments. The using of strategic and tactical directions grounded in this paper allow to achieve the optimal money supply. The application of economic-mathematical modeling for determining the impact of macroeconomic indicators on the size of the money supply, as well as forecasting of indicators of monetary unit M3 developed in the paper. Therefore, the issue of optimality of money supply in modern conditions is relevant and it is advisable to continue research in this direction.

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FACTORS AFFECTING WOMEN ENTREPRENEURS IN OMAN: A CONCEPTUAL STUDY

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Abstract

The aim of this study is to develop a conceptual framework which forms the main challenges that limit Omani women participations in SMEs and providing suggestions and recommendations for decision and policy makers to provide proper support for entrepreneurial women. On the other hand, this paper is amongst the initial attempts to increase the understanding about the links between critical factors (i.e. society perception; financial resources; educational qualifications) and the success/failure of Omani women in doing business. The framework also recognizes the personal factors and includes entrepreneurial motivation as a mediating variable. In response, the researchers critically & thoroughly review the literature that helps in developing a sound conceptual model, exploring the most relevant methodological issues, and discovering the available theoretical underpinnings. The findings of this study will help in bridging the gaps between governmental, academic, and private sectors, clarifying issues related to the challenges facing women entrepreneurs, and providing valid suggestions for such alarming issue. Following the discussion of the framework, the potential values for researchers and those engaging in the field of entrepreneurship as well as the potential match with academic sector are described.

Keywords: Entrepreneurship, SMEs, Challenges, Omani Women, Women Entrepreneurs, Entrepreneurial Motivation

1. Introduction

Entrepreneurship is an essential support for economic growth in both developed and developing countries (Dickes, Crouch, & Walker, 2017; Hicks & Faulk, 2018; Lihn & Bjørnskov, 2017; Schneider, 2017; Yi & Duval-Couetil, 2018). In Oman, sustainable economic

growth is the primary concern on its developing plans which aims to reduce the reliance on oil and enhance economic diversification (Magd and McCoy, 2014; Yarahmadi and Magd, 2016). Many researchers confirmed that Small and Medium enterprise (SMEs) accelerate the economic growth and development which has a direct impact on economic improvement (Al-Maimani & Johari, 2015; Mathew, 2010; Mohammed, Uddin, & Ahmad, 2016; Tamim, Foisal, & Sagar, 2015).

In general, women are considered the wheel of progress and prosperity in all countries, in this regards, Oman government assured in the different occasion the vital role of women in influencing the country economy (Magd and McCoy, 2014; Naguib and Jamali, 2015). Thus, enhancing women role and participation in SMEs will influence the economic growth and development (Belwal & Belwal, 2014; Narayanasamy, Rasiah, & Jacobs, 2016; Yusoff, Qatan, & Alksthiri, 2018).

Generally, Omani women participation has increased in recent years due to government support (El-Hamidi, 2017; Taqi, 2016). The government have developed programs to enhance and encourage women engagement in SMEs as a step to maximizing returns, creating pool employment opportunities, and reflect the overall social development (AlMaimani and Johari, 2015; Yi and Duval-Couetil, 2018).

On the other words, lack of women participation in SMEs characterized by barriers to their entrants to the labor market (Lihn and Bjørnskov, 2017).

Researchers assure that women who intend to start their own business are facing challenges which lead to failure in their business (Hicks and Faulk, 2018; Yusoff et al., 2018). Among these challenges are culture and traditions which considered as the main constrains (Bade, 2018; Farhangmehr et al., 2016; Tarabar, 2018). In the same vain, most women have difficulty in accessing to financial resources, where they depend on their families and relatives in securing a source of capital to start up their business (Belwal, Belwal, & Saidi, 2014; Wille, Hoffer, & Miller, 2017). The lack of financial resource limits entrepreneur ability to start a new business (Dickes et al., 2017; El Hamidi, 2017; Taqi, 2016). Furthermore, educational qualification, skills, experience, and lack motivation are also essential characteristics that lead to the failure of entrepreneur (Belwal et al., 2014; Farhangmehr et al., 2016; Mthanti & Ojah, 2018; Schneider, 2018).

In a result, and like any other woman around the word, Omani woman is facing challenges that are driving them to failure to start a business. Thus, the objective of this paper is to develop a conceptual framework which forms the main challenges that limit Omani women participations

in SMEs and providing suggestion and recommendations for decision and policy makers to provide proper support for entrepreneurial women.

2. Construct Developments and Literature Review

2.1 Society Perception

Social perception is the interpretation and judgment of other people within community-based on society tradition, rules, culture, and norms (Kennedy and Hill, 2016; Molnár and Kapitány, 2013; Ojuokaiye, 2011). Ojuokaiye (2011) identify that Information and experience in society drive people behavior and determine their judgment about a specific situation. Perception defined as the process in which people formulate the impression of other's personalities, behavior, and attitude (Friedman, 2011; Mashood et al., 2007; Varghese, 2011). Friedman (2011) Surrounding environment in each community influence mental understanding of people to interpret a situation, or influencing their decision-making process. Family considers as an institution in society one of the most factors dominates people decisions and attitude within a community (Amzat, 2014; Friedman, 2011; Ojuokaiye, 2011; There, Premiums, The, & Market, 2015).

Women in Oman interact with several cultural, social, and traditional norms exhibit a barrier to their participation in the labor market (Al-Lamky, 2008; Belwal and Belwal, 2014). Gender discrimination is one of these barriers; extant researches indicate that men in Arab societies are given higher authority in the house as well as in the workplace, where men have the power to decide for women (Al-Lamky, 2008; Belwal and Belwal, 2014; Naguib and Jamali, 2015).

Families support and encouragement play an essential role in inducing women in entrepreneurship (Brush et al., 2009; Narayanasamy et al., 2016). However, families cultural values limit women orientation towards entrepreneurship (Al-Asfour et al., 2017; McLean, 1996; Njidda, Gadzama Haruna, 2016; Panda, 2018). Narayanasamy et al. (2016) identify that women are solely responsible for taking care of family and raising children in compliance with social perception.

Furthermore, social perception tends to be detrimental to women working outside the home to extend enterprise activities instead of managing the house (Minkus-Mckenna, 2009; Müller, 2006). Hu, Kapucu, & O'Byrne (2016) women face a challenge to balance personal-life and work-life pursued to the management of entrepreneurship.

Society believes that women are not capable of running a business with massive capital according to the believe their mindset that is get affected emotionally in the situation of making

a decision and taking actions (Anderson, 2015; Hu et al., 2016; Pistrui and Sreih, 2010; Taqi, 2016). Consequently, it has a direct impact on entrepreneurship-related activities (Tlaiss, 2015).

2.2 Access to Financial Resources

Access to the financial resource is the ability to secure money for a specific purpose by government, or private institutions (Dickes et al., 2017). Financial resources are divided into commercial and non-commercial which could be classified into a domestic or foreign source of finance (Wille et al., 2017). Hicks & Faulk, (2018) identify that funding institutions aim primarily to maintain economic growth through funding support programs that ensure higher level of entrepreneurs engaged in business activities as well as creating more employment opportunities (Christina, Neelufer, & Al-Amri, 2014; Dickes et al., 2017; Magd & McCoy, 2014). Financial institutions help new business to better deal with financial issues and start-up capital (Lihn and Bjørnskov, 2017; Naser et al., 2009a; Youngberg, 2017). Yusoff et al. (2018) one of the difficulties faced by entrepreneurs is insufficient financial support and the high-interest rate provided by financial institutions.

Omani women entrepreneurs influenced by obstacles of the difficulties associated with getting access to the financial source (Christina et al., 2014; Kumar, 2007). Kumar (2007); Profile (2019) Indicate that one of these difficulties is the limited available information about how to get access to a financial source.

Women entrepreneur in Oman lacking the knowledge of available financing institutions (Mthanti & Ojah, 2018; Yusoff et al., 2018) tend to depend on their families, friends, or their assets to secure a source of capital (Naser et al., 2009a; Wille et al., 2017). However, financing firms with clear information and regulation increase entrepreneurs desire to start a business (El Hamidi, 2017; Mthanti and Ojah, 2018; Profile, 2019).

SANAD program is one of the government funding institutions aim to develop and promote micro business by loans and other facilities for youths' entrepreneurs. Al Rafad and The Research Council are examples of government funding programs (Magd and McCoy, 2014; Yusoff et al., 2018). Furthermore, Intilaaqah program is private sector funding institution contribute to the establishment of the small and medium enterprise. Bank Muscat, Sohar Bank, and HSBC Bank are other private sector banks that support Omani entrepreneurs, also Meanwhile, Saud Bahwan, and Grofin are as examples of private funding programs (Christina et al., 2014; Report, 2014).

Nevertheless, extant researches state that women entrepreneurs are not satisfied with these insufficient sources of funds (Bade, 2018; El Hamidi, 2017; Youngberg, 2017) due to the high interest rate coupled with small and medium enterprise loans, which illustrate women entrepreneurs reliance on their families in their start-up capital (Bade, 2018; Hicks and Faulk, 2018; Payne and Mervar, 2017).

Moreover, the complexity of administrative procedures and regulation coupled with high fees can also restrict entrepreneur Omani women in transfer their home business to real competitive business (Wille et al., 2017; Youngberg, 2017).

2.3 Educational Qualification Mismatch with job requirement

Radwan (2014) Indicate that mismatching occurs when a job seeker is either overqualified or not qualified enough to meet a job requirement. Skills and knowledge mismatch are very costly for firm, worker, and society. Employers and policymakers face challenges to aligning qualification and skills of job seekers with job requirement which illustrate the gap between supply and demand in the labor market (Al-Ani, 2017; Al-Azri, 2016; Radwan, 2014). Matching qualification will generate new opportunities for job seekers through matching job needs with skills necessary to occupy these jobs (Al-Ani, 2017; Al-Azri, 2016; Al-Lamki, 2014; Ikram, 2015).

The mismatching between qualifications and job requirement has been defined as an obstacle faced women engagement in entrepreneurship (Das, Kailash Chandra, 2009).

The level of education, skills, and relevant expertise is a cornerstone in establishing a new business and succeed in entrepreneurship (Barba-Sánchez and Atienza-Sahuquillo, 2018; Huarng et al., 2012; Matriano and Suguku, 2015). Braunerhjelm (2010) a combination of education and entrepreneurship is the flagship to enhance the growth of an economy.

Schneider (2017); Zamberi Ahmad (2011) state that women study disciplines not related to business required knowledge; therefore education presents an obstacle in the face of women participation in entrepreneurship. Education possesses by women does not match entrepreneurship activities, while men have a higher level of skills enable them to establish a private business (Schneider, 2018). Many researchers indicate that men have a more significant opportunity to acquire technical and practical skills due to greater support from training institution as well as family support to be engaged in these institutions (Belwal, Al Balushi, & Belwal, 2015). Consequently, discrimination between men and women increased and

entrepreneurship success sought to be subject to men more than women (Buckley, Buckley, G., & Rynhart & Rynhart, 2011; Huarng et al., 2012; Zamberi Ahmad, 2011).

(Ali and Muthuraman, 2017) lack of education and experience in business disciplines held by women in Oman ranked their attitude against entrepreneurship; nevertheless, they struggle to foster self-confidence and prove their active role in society.

Moreover, uneducated women aspiration to establish a business is remain less than educated women (Huarng et al., 2012), where education form an embedded motivation for entrepreneurs awareness of the importance of entrepreneurship and lead to their success and create entrepreneurship culture (Ali and Muthuraman, 2017; Matriano and Suguku, 2015; Sousa and Almeida, 2014).

One of the indicators of entrepreneurship success is in aligning education programs in higher education institutions and training programmes that improve students skills, knowledge (AlMaimani & Johari, 2015; Matriano & Suguku, 2015; Schneider, 2018), an enable them to make the right decision in the right place when facing issues in work environment (Sousa and Almeida, 2014).

Many factors lead to women failure in entrepreneurship (Mohammed et al., 2016; Yarahmadi and Magd, 2016), Buckley, Buckley, & Rynhart & Rynhart (2011) identify that government does not provide sufficient training programs that qualified women to occupy the right skills and knowledge. Thus, they miss the competencies that facilitate entrepreneurship activities.

2.4 Entrepreneurial Motivation

Entrepreneurial motivation is the willingness of an individual or group to establish and develop business through achieving successful entrepreneurship goals (Mathew, 2010; Zeidan & Bahrami, 2011). Motivation has a significant role in enhancing the success of entrepreneurship, where is defined as the engine of passion in accomplishing the task well (Ismail et al., 2016). Motivation is necessary to achieve goals at a high level of performance (Farhangmehr et al., 2016; Rosa et al., 2008; Varghese and Hassan, 2012). From another perspective, researchers point out that a broader set of goals and creation of new product or service play as motive to achieve these goals (Read and Sarasvathy, 2009) in compliance with their striving to fulfill self-satisfaction and achievement (Al-Riyami et al., 2010; Barba-Sánchez and Atienza-Sahuquillo, 2012; Dahleez, 2009; Kickul et al., 2009).

Yi & Duval-Couetil (2018) lack of educational qualification combined with negative social perception and difficulties in accessing financial resources decreases women entrepreneurs motivation to establish a business.

Women motivation towards entrepreneurship is less regarding to more responsibilities associated with the management of business (Rosa et al., 2008; Yi and Duval-Couetil, 2018), in addition to their responsibilities to raise children and take care of the house (Al-Riyami et al., 2010; Almobaireek and Manolova, 2013; Naser et al., 2009b).

Lack of families appreciation and consideration of women useful role in entrepreneurship contribution (Al-Ghazali et al., 2013; Dahleez, 2009; Mathew, 2010) and socioeconomic development demotivate their orientation towards entrepreneurial activities (Almobaireek and Manolova, 2013).

Self-fulfillment is one of the motivation drivers that create a sense of satisfaction (Naser et al., 2009b). Kickul et al. (2009) Indicate that entrepreneurship provides the appropriate environment to achieve self-satisfaction through the management of the enterprise, the authority to take a decision, and the contribution to economic development.

On the other hand, women entrepreneurs are highly motivated to establish an enterprise in a situation that reflects the welfare of the local society (Barba-Sánchez and Atienza-Sahuquillo, 2012; Mathew, 2010; Yi and Duval-Couetil, 2018).

Researches suggest that most impoverished entrepreneurs in developing countries are motivated by their desire to survive in situation of limited employment opportunities (Rosa et al., 2008), while in developed countries entrepreneurs motivation is to exploit an opportunity, innovate, and develop a venture (Al-Ghazali et al., 2013; GITONGA, 2017; Özsungur, 2019; Sinkovics, 2016).

2.5 Omani Women Failure in Entrepreneurship

Entrepreneurship is the responsibility of taking the risk to implement the business strategy (Kargwell, 2012), and the process of creating, exploring, and discovering new venture of product or service (Newell et al., 2015). Entrepreneurship creates self-employment and entrepreneurs can develop new venture by government, financial institutions, education, and training institution support (Lihn and Bjørnskov, 2017; Tarabar, 2018). Individual, organization and business environment are forces required to introduce new product or services through the exploitation of opportunities, organizing, and marketing (Yakovlev and Davies, 2013). A woman entrepreneur could be defined as an individual, or a group of females starts a new private business (Anderson, 2015; DeGhetto et al., 2018; Kargwell, 2012).

Women failure in entrepreneurship subject to the poverty of the appropriate environment to enable women to establish a private business (Campbell, 2012; María, 2014). Society culture

confined women participation in entrepreneurship, and limited sources of finance restrict their entrance (Lihn and Bjørnskov, 2017; McElwee and Al-Riyami, 2003; Tamim et al., 2015). McElwee & Al-Riyami (2003) state that matching educational qualification plays a motivation role for women in entrepreneurship.

Entrepreneur women suffer from lack network of entrepreneurs women which restrict sharing knowledge and experience in the field of private business (DeGhetto et al., 2018; Kargwell, 2012). Tarabar (2018) exchange of knowledge and discussion on business issues is vital to entrepreneurs success.

From other perspective, Women entrepreneurs success attributed by business-related education, technological development (Campbell, 2012; Tarabar, 2018), and vocational training to enable women ability to compete men entrepreneurs (McElwee and Al-Riyami, 2003). However, the lack of flexible procedures facilitated by government institution, private sector, and financing institutions restrict Omani women engagement in entrepreneurship (Lihn and Bjørnskov, 2017; Yakovlev and Davies, 2013). Furthermore, free trade and low legal restriction could promote entrepreneurial activities and reduce the percentage of failure between Omani women entrepreneurs (Lihn and Bjørnskov, 2017).

(Tamim et al., 2015) society support and encouragement are essential to motivate women to take the responsibility of managing an enterprise and contribute positively in the development of the economy and community welfare in addition to taking care of the family (DeGhetto et al., 2018).

Kargwell (2012) one of the essential difficulties challenging Omani women is interacting with men in workplace, Lihn & Bjørnskov (2017) in compliance with social tradition that expect to separate women from men in the workplace.

2.6 Society Perception and Access to Financial Resources

Omani women entrepreneur challenging the ability to get access to financial resources (El Hamidi, 2017; Kumar, 2007), cultural restriction limit women participation in entrepreneurship (El Hamidi, 2017; Mthanti and Ojah, 2018; Naser et al., 2009a) pursued to lack social and finance provider confidence of women managing an enterprise with massive capital (Anderson, 2015; Hu et al., 2016; Pistrui and Sreih, 2010; Taqi, 2016). From other perspective, women depend on their families to secure a source of start-up capital (Bade, 2018; Hicks and Faulk, 2018; Payne and Mervar, 2017), due to limited available information on financial institutions (El Hamidi, 2017; Mthanti & Ojah, 2018). Thus, society play an essential role in encouraging

women to get access to financial sources and involved in entrepreneurship activities (Al-Lamky, 2008; Brush et al., 2009; Taqi, 2016).

2.7 Society Perception and Educational Qualification Mismatch with job requirement

Social development in both developed and developing countries is influenced by the improvement of education level (Anderson, 2015; Sousa and Almeida, 2014) which consequently reflect economic condition as a whole (AlMaimani and Johari, 2015; Braunerhjelm, 2010; Zamberi Ahmad, 2011). Gender differentiation emerged in Omani society (Al-Lamky, 2008; Anderson, 2015; Narayanasamy et al., 2016), where men witness a higher level of social support to be engaged in universities, colleges, or in training institutions (Belwal and Belwal, 2014; Taqi, 2016). However, women are seen as responsible in managing the house and raising the children (Al-Lamky, 2008; Brush et al., 2009). Thus, society negatively look to women work outside the house to study or extend entrepreneurship activities (Narayanasamy et al., 2016). Chavali (2016) Omani women role in entrepreneurship is restricted due to lack of social support and mismatch of educational qualifications.

2.8 Access to Financial Resources and Educational Qualification Mismatch with job requirement

Entrepreneurship management require array of characteristics possess by an entrepreneur (Barba-Sánchez & Atienza-Sahuquillo, 2018; Huarng, Mas-Tur, & Yu, 2012). Schneider (2017) identify that knowledge related to business specialization in universities and other educational institutions combined with the right skills acquired through vocational or training institution are major characteristics leads to entrepreneur success. Educational qualification matching entrepreneurship environment activities create a culture of entrepreneurship (Ali and Muthuraman, 2017; Matriano and Suguku, 2015; Sousa and Almeida, 2014) and higher level of awareness of related financial resources that facilitate their entrance to the labor market (Matriano and Suguku, 2015; Mohammed et al., 2016). However, Omani women lack the knowledge, skills, and awareness of entrepreneurship importance, also lack the knowledge of available financial institutions that provide a start-up capital for entrepreneurs (Barba-Sánchez & Atienza-Sahuquillo, 2018; Sousa & Almeida, 2014).

2.9 Society Perception, Access to Financial Resources, Educational Qualification Mismatch with job requirement, Entrepreneurial Motivation, and Omani Women Failure in Entrepreneurship

Omani women failure in entrepreneurship attributed by obstacles subject to their participation in the labor market (Campbell, 2012; María, 2014). Uneducated women or educated women with mismatch specialization lack the skills required to start-up a business (Ali and Muthuraman, 2017; Matriano and Suguku, 2015; Sousa and Almeida, 2014). Extant researches shows that women mismatch qualification with entrepreneurship requirement lack the knowledge of the appropriate way to finance their enterprise (Lihn and Bjørnskov, 2017; McElwee and Al-Riyami, 2003; Tamim et al., 2015). Furthermore, society demotivate Omani women to be engaged in entrepreneurship (Al-Ghazali et al., 2013; Dahleez, 2009; Mathew, 2010) as they expected to cope with social traditions (Lihn & Bjørnskov, 2017). Social welfare is one of the factors that form a motivation for women entrepreneurs (Barba-Sánchez and Atienza-Sahuquillo, 2012; Mathew, 2010; Yi and Duval-Couetil, 2018). Kickul et al. (2009) confirmed that women contribution to socioeconomic development and welfare increase women willingness to start a business.

2.10 Conceptual Framework

After critically reviewing the literatures, the researchers intend to discuss the most frequent and best matching the factors that facing Omani woman. The factors that facing omani omani can be summarized as society perception; access to financial resource and education qualification. In addition to entrepreneurial motivation which appear in the study conceptual paper as a mediating variable.

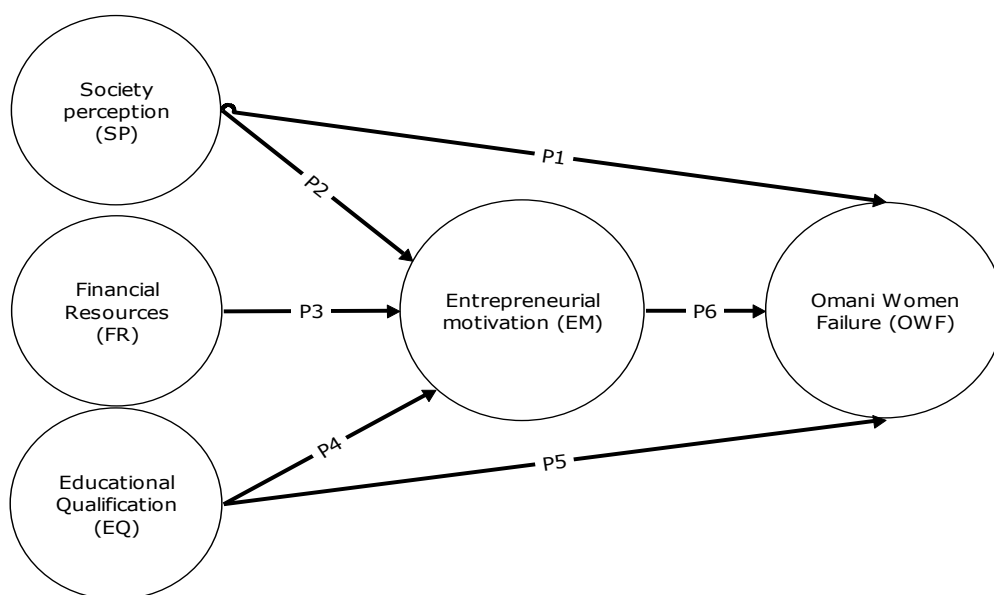


Figure (1): Conceptual Framework

****SP:** Society Perception; **FR:** Financial Resources; **EQ:** Education Qualification; **EM:** Entrepreneurial motivation; **OWF:** Omani Women Failure.

*****This conceptual framework was developed based on critically reviewed the related literature***

3 Research Propositions

- **P1:** There is a positive relationship between social perception and Omani women failure in entrepreneurship.
- **P2:** There is a positive relationship between access to financial resources and Omani women failure in entrepreneurship.
- **P3:** There is a positive relationship between educational qualifications mismatch with job requirement and Omani women failure in entrepreneurship.
- **P4:** There is a positive relationship between entrepreneurial motivation and Omani women failure in entrepreneurship.

4 Conclusion and Recommendations

Entrepreneurship in Oman play a supportive role in improving development plans to maintain sustainable economic growth. However, Omani women participation in entrepreneurship is confined by many challenges. Poor financial resources, lack of skills, and educational qualification mismatch challenging women contribution in the labor market. Furthermore, social encouragement motivates Omani women to contribute in small and medium enterprise effectively. Women entrepreneurs contribution to the social welfare create a self-satisfaction which motivate them to be engaged in entrepreneurship. This paper aim to lay the key challenges that impedes Omani women success in entrepreneurship and limit their entrance to the labor market. Public and private sector institutions must provide the appropriate environment for a woman to reduce obstacles faced by Omani women and enable them to succeed in their business. This paper provides a road map to policy makers to embark an appropriate administrative regulations and laws to facilitate Omani women involvement in entrepreneurship. In addition, higher education institutions cooperation in fostering business-related education will result in outcomes aware of entrepreneurship importance and qualified to enter entrepreneurship market.

5 Limitations and Suggestion for Future Research

This conceptual study paved the way for further researches to contribute effectively in enhancing women's role in entrepreneurship. Nevertheless, this paper has some limitations that formulate the foundation for further researches. Absence of methodology approach to collect data limits the ability to investigate the reliability of studied concepts. The study focuses on women entrepreneurs only and dismisses men entrepreneurs' challenges in the labor market.

In regard to study limitations, further research is recommended to be conducted to collect and analyze data that investigate challenges facing Omani women's participation in entrepreneurship and to include other variables in conceptual framework that affect women's failure in entrepreneurship. Also, it is interesting to conduct empirical further research aimed to study social perception of women's engagement in entrepreneurship. In future research, it is recommended to include women entrepreneurs in data collection to verify factors impeding women in starting-up their business.

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IDENTIFYING RESOURCES COMPETENCIES FOR A U.S BASED MNC RECRUITMENT PROCESS OUTSOURCING (RPO)

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Abstract

The Recruitment Process Outsourcing (RPO) market touched the US\$3.3 billion mark in annualized contract value in 2017. Industries such as retail, healthcare and pharmaceuticals, as well as small-sized buyers (less than 3,000 full time employees (FTEs) are entering the market in increasing numbers, leading to new avenues for service providers to tap

RPO handles part or all of the recruiting process for businesses that need or want help with their recruiting efforts. It is one of the fastest growing outsourcing segments today, with growth hovering above 15 percent consistently for the past three years.

An extensive secondary research on this was carried out. The purpose of this report was to give all the possible prospects that the North America based Consumer Product Goods (CPG) client would want to know and will be useful to implement in their strategic outsourcing process.

Key Suppliers in the Market, Benefits and Risks of an RPO

Outsourcing mostly done in the human resource field especially in the recruitment process is a common method nowadays to increase business performance (Cocuľová, J. 2015)

The worldwide recruitment process is much consolidated in nature with few noteworthy players adding to more than 80% of the aggregate market income. They are

ManpowerGroup Solutions

Alexander Mann Solutions

Hudson Global

Randstad Holding NV

Kenexa solutions

The outsourcing decision framework that looks at the various motivators, factors, risks and benefits that are useful in making the right strategic decision is shown in Figure 1 (Tibor Kremic et al, 2006)

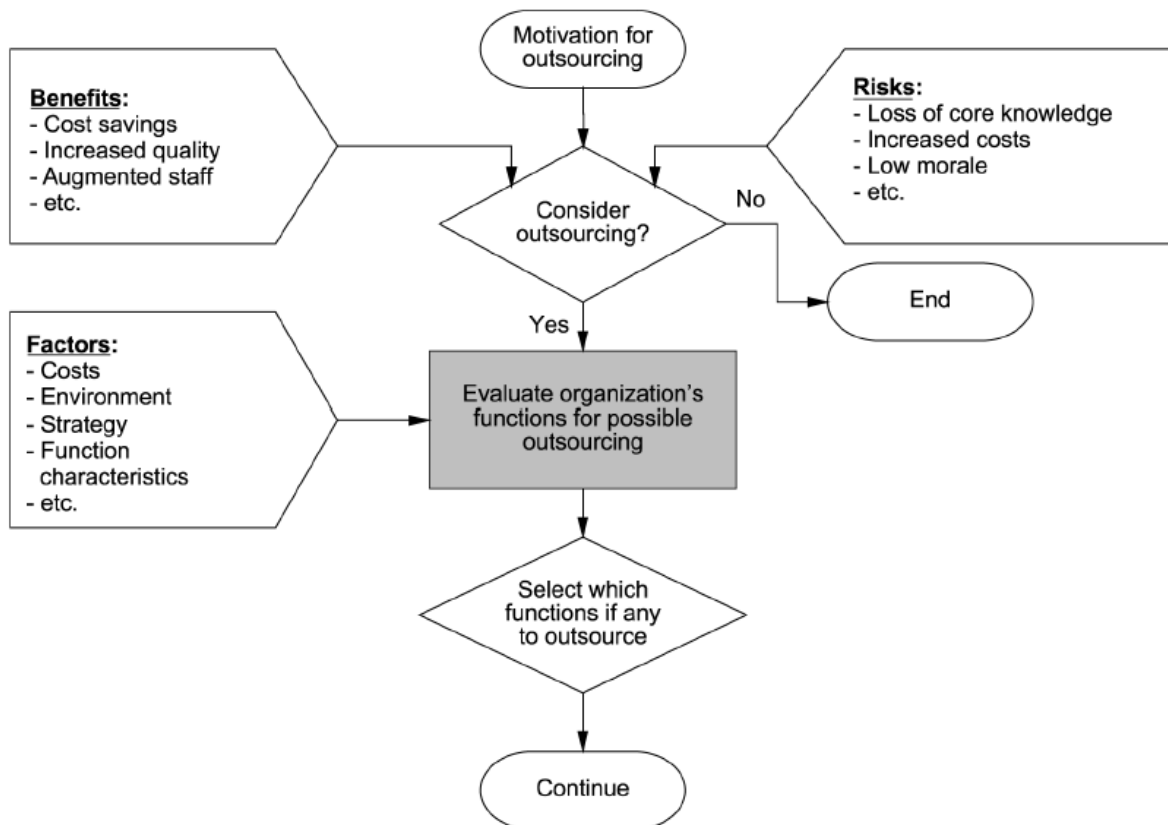


Figure 1 Outsource decision framework

There are three main motivators in outsourcing. Cost and strategy is driven by the private industry. The other is political that is driven by public organizations. (Kakabadse and Kakabadse A 2000). This needs to be looked at the protectionism policy of the government that views the private firms to be more efficient providing better service than their public counterparts.

Looking at the transaction costs and core competencies to meet the profit objectives are vital for cost drivers in outsourcing. (Arnold 2000). In order to achieve savings internationally there needs to strategically manage such costs by economies of scale and specialize like maintain high quality patient care in the healthcare industry (Roberts 2001). These are counter measures to manage outsourcing strategically. Many organizations save costs by having fewer employees, lesser infrastructure and support systems resulting in a slim and efficient

organization. Alternatively fixed costs can be shifted into variable costs resulting in potential savings. It is seen that some MNCs are less willing to pay for educating and developing their employees. (George and Amanda 2000) studies suggests that this is the result of outsourcing public services. These social costs that are difficult to quantify can however be significant in the international context.

Most organizations view core competence as a more important driver to outsourcing than cost considerations. (Sislian and Satir 2000). They need to look at scarce resources that are vital for the organization, flexible in terms of scale and scope of the product or service. Outsourcing wrong functions can hinder the organization from exploiting opportunities in the future.

Public organizations are more concerned with social issues compared to private ones that look at market or profits as seen in the hospital sector. (Avery 2000). Usually the political agenda is based on public opinion, international trends and political inclinations. These are different objectives than the private institutions in a country and this can be seen in the automobile, healthcare, IT & FMCG sectors in India. The core competence is the key strategic factor and usually debated in international business decisions. This is becoming more complex as organizations look at relationships that can provide total solutions in new / expanding international markets (Jenster and Pedersen 2002). Companies look focus their intellectual activities and ensure by constant innovation they add more value than their competitors. Simultaneously they eliminate inflexibilities of fixed overhead and tap on resources available both upstream and downstream to create world class knowledge capabilities and these are never outsourced. (Quinn 1999). In identifying the core competencies it is important to measure the key marketing metrics that create competitive advantage and evaluate them. The essence would be to own those activities that are responsible for value additions for the organization. (Milichovsky and Simberova 2015).

Critical knowledge is another key strategic factor. Some functions in the organization may not be 'core' however the unique value of the data or technology that they generate or the process is vital. A case in point is the human resource function especially in the public organizations that lack resources or where hiring and terminations are restricted they may not be termed critical, however these are strategic. There is a need to look at how to acquire/retain/relocate the workforce internally or by outsourcing both in the public and the private organizations. These issues need to be addressed by Government workforce planners for preparing for the future. This analysis needs to be looked at internationally based on jurisdiction, culture, economics and political risks for the organization/sector/nation. (Green 2000)

Outsourcing is dependent on the strategic intent and core capability development for the future of the company. (Pant. and Lado 2012). In order to ensure an effective transformation from the industrial to digital era requires the critical role of human capital management. This involves impact of technology (social and digital) throughout the employee life cycle, evolution of HR function in high tech and touch ways that adapt to changes in the progressing digital era. This is seen in the latest techniques in digital tech for talent acquisition, training through multimedia channels that can develop a complete and accurate skills data base. This is further enhanced by leveraging technology to increase the learning skills. High tech entails the integration of cloud, digital signatures, biometrics and communications. High touch entails speedy remote access of digital information to all stakeholders and it goes beyond administration to include education, health, and extra-curricular activities, retirement benefits etc. that are dynamic and meaningful. The changing era would look at organization structures in terms of positions, planning job responsibilities, job design. Increased proficiency in skill development with new performance metrics evaluation to blend with sophisticated transformation. (Shelton 2014)

Research methodology

At present there was an incumbent integrator 'B' was associated with the client for more than 8 years (all names have been kept confidential as this is an ongoing project). In 2019 January the contract was extended for a year till end of Dec 2019 with an intention to complete the RFP (Request for proposal) process and shortlist potential suppliers within the year. In order to see the new upcoming innovations in the market in the MRO (Maintenance Repair and Operations) industry and the what different services the other suppliers are able to offer, the client decided to float an RFP against which it received 5 bids from the suppliers including the incumbent. RFP scoring matrix was prepared taking into account the business requirements and their priorities. There were 8 sectional criteria. Weightage was assigned according to the importance of each criteria. All the individual weight percentage sums up to 100. Each section consists of another set of sub questions for which the sectional weightage was equal to 100%.

The RFP scoring matrix (Table 1) was prepared taking 3 perspectives into consideration.

1. Business
2. Global Procurement
3. Operations – Six site locations of North America

The calculation is based on Evaluated Score * Percentage weight

Sectional Criteria	Percentage allocation
Standardization and Inventory management	20%
Innovation and its case studies	10%
Quality	10%
Reporting	30%
Transition and Implementation Plans	5%
Business continuity/ disaster recovery plan	10%
Continuous improvement & Sustainability	5%
Project plan	10%

Table 1

RFP scoring matrix

The aggregated final scores evaluated by the Business and Operations Div are given in Fig 1

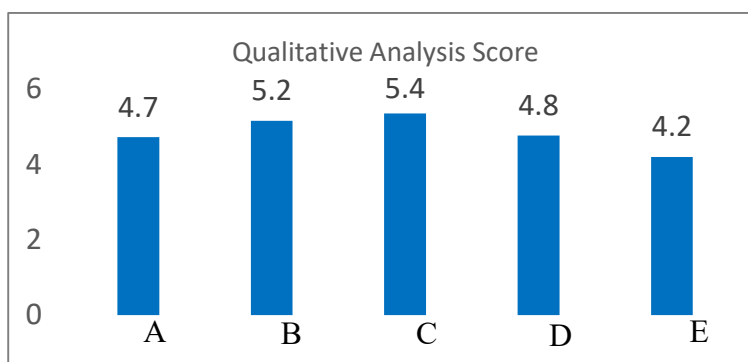


Figure 1

RFP scoring matrix – Aggregated scores

The constraint in the qualitative analysis for MRO category is demand forecasting for the requirement of spare parts in the upcoming years. The proposals received was then analyzed for using the market basket approach.

Market Basket Analysis states that if a person purchases a certain group of items, he is more (or less) likely to buy another group of items. It was calculated by taking a total of 3000 plus high spend line items of the past three years.

Baseline is defined as the total cost of ownership (TCO) for the goods and commodities as defined in the RFP scope. Baseline helps to understand the savings achieved from the Strategic Sourcing process. These are required to evaluate the project in terms of contribution margin that is very crucial so as to persuade the client group and other stake holders may be for other new untried domains. Baseline for the project was the 2018 paid invoice for the items procured by all the sites

There are several pricing models used by the suppliers. In this project there were two models

- A) Cost Plus models. This can be Cost + Mark up. (Cost = Direct material cost + Direct labour cost & overhead costs). **Price = Cost × (1 + Profit Margin Percentage)**

B) Cost + Margin: Here the profit margin is based on selling price, the price is calculated

$$\text{Price} = \text{Cost} / (1 - \text{Profit Margin Percentage})$$

Volume rebates are discounts given when good are purchased in bulk to a consumer. Two out of five suppliers had given volume rebates and one waived implementation fee as upfront rebate. **Signing bonus** is the amount paid at the start of the contract as an upfront rebate.

In an Integrator model, pricing comes in a package. Since the client wanted an integrator for its Procurement and Storeroom solutions, all the above terms are also quoted along with the prices of the product. The cost of Implementation, Management fees which includes the fees according to the number of Full Time Employees (FTE) appointed by them and the freight costs that includes the transportation fees for the procurement of the products during normal as well as emergency hours. The freight cost is included in the product prices and are charged by the supplier on monthly or quarterly basis mostly as a pass through.

Table 2 that has all the details of the proposals and the pricing provided by each of the supplier

Integrators	A	B	C	E	D
Volume rebate	No	Yes	Yes	No	Yes
% Rebate	-	1%	NA	-	NA
Implementation fees	No	No	Yes	Yes	No
Pricing Model	Cost	Discount	Markup	Margin	Discount
%Markup/discount/margin	-	17%,23%	11%	1. 13.5%, 7.5% 2. 0%	9%
Freight cost inclusive	Yes	No Quarterly	No Monthly	No Monthly	Yes

Table 2

RFP scoring matrix with pricing

Now we look at the bid coverage provided by each supplier. Bid coverage is the percentage of the number of items provided by the supplier out of the total items asked by the company.

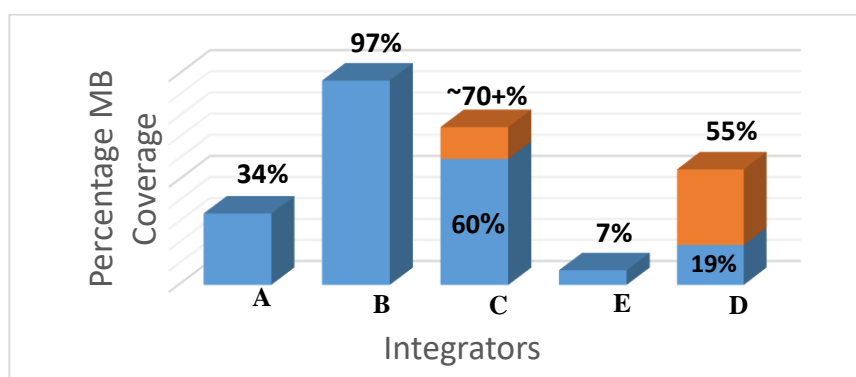


Figure 2

Bid coverage of all integrators

In Fig 2 the Blue bar shows the initial coverage and the brown bar are the revised coverage after the first negotiation round. Several iterations are done to arrive at the right decision.

An 80-20 analysis is conducted. Here 20% of the products consists of 80% of the total Spend and vice versa. In the analysis the rest 20% of the products were divided into 15% and 5% resulting into three parts: Part 1: 80 % of the high spend items;

Part 2: 15 % of the next spend items; and Part 3: 5 % of the remaining spend items

Observations - Table 3: It was found that almost all the suppliers had a least bid coverage in the 80% of the high spend items but had maximum savings. Whereas in the area where they had the maximum bid coverage had the least savings.

% Bid Coverage	80%	15%	5%
A	27%	30%	47%
B	97%	100%	100%
C	50%	55%	67%
D	49%	51%	63%

% Savings	80%	15%	5%
A	20%	18%	8%
B	15%	12%	14%
C	7%	10%	-12%
D	4%	-2%	-8%

Table 3

Bid coverage and savings of integrators – Outlier Data

Outlier analysis was conducted taking into consideration two scenarios.

Scenario 1: Comparison of the quoted item prices with the baseline

Scenario 2: Comparison of the quoted prices with the least item bid received

Outliers were ranging from 5% - 80%. It was prepared in such a way so that the company has the convenience to check the product pricing barring the outlier with the limit of their choice. Keeping 80% outlier the following results were observed. In Fig 3 the blue bar shows the actual bid coverage and the brown ones show the percentage of products lying in the outlier.

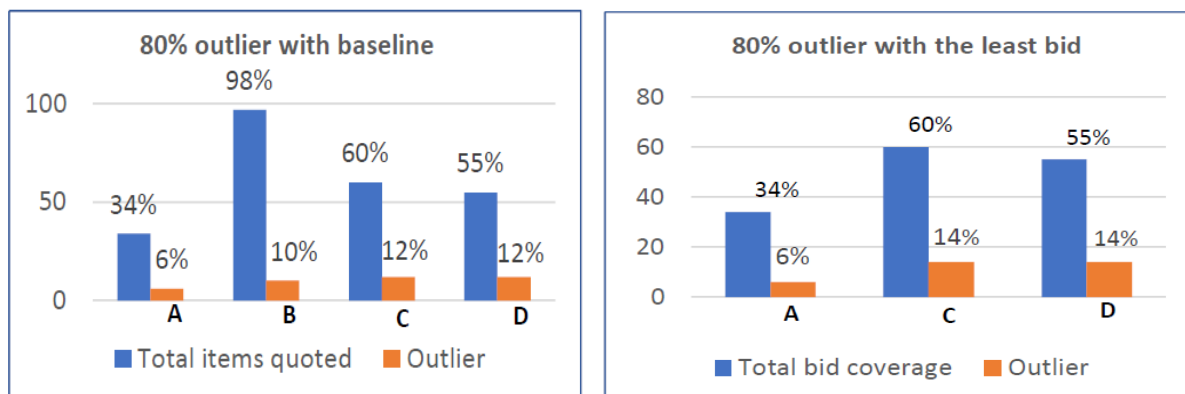


Figure 3

Bid coverage of all integrators with outliers analysis

Key Insights from Table 3 and Fig3:

The new items projection was 63%, Repeat items 21% and Cost-Plus items 16%

Considering the outlier, the supplier A is 17% lower than the baseline, Supplier B the incumbent is lower by 10%, Supplier C by 9% and Supplier D by 7%

Since the Supplier E was lowest on bid coverage and also the qualitative scoring, only Suppliers A, B, C and D were shortlisted in the initial supplier shortlisting.

Key Negotiation Levers

Based on the quantitative analysis the next step is the negotiation strategy formation.

There were six important key levers that was necessary for the negotiation round:

1. Price Transparency and Auditability:

List price/ Landed price auditability and the price fluctuation visibility was necessary

2. Price Savings and locking:

Price locking for an optimum period to avoid more money spend because of fluctuations and price savings after all the outliers were removed.

3. Management fee per FTE:

Full visibility on the breakdown of the total amount charged for Management fee was necessary

4. OEM and freight costs:

All the Original Equipment manufacturer and Freight cost amounts should be a mere pass through and not charge any sort of mark ups on it.

5. Pricing Model:

Trying to bring down the mark up as much as possible was the key criteria

Sr. No	Questions	A	B	C	D
1	Pricing Model	Cost	Cost- Discount	Cost+ Markup	Cost-Discount
2	% Discount/markup	-	Repeat Items- 19% New Items- 23%	10.6%	9%
3	Management fee as compared to baseline	1.4 times	0.92 times	0.7 times	0.64 times
4	Implementation fees	No	No	Yes	Yes
5	Volume rebate	No	Yes- 1% over incremental volume	No	No
6	Signing Bonus	No	No	No	Waived as Implementation fee
7	Price Locking	For specific suppliers	1 year	For specific suppliers	1 year
8	Number of FTE	20	26	26	25
9	Price auditability	Yes- Landed Cost	No	Yes- Landed Cost	Yes- List price
10	Freight & OEM	Pass through	Pass through	Pass through	According to its current model
11	Price Savings	9%	8%	11%	11%

Table 4

RFP scoring matrix – Negotiation Data

The Global Procurement team takes care of the business requirements, historical experience of the company with its incumbent and with the analysis carried out it has made the following quantitative scoring matrix for the same. – Table 5

Evaluating parameters	Percentage allocation
Implementation cost	10%
Management cost	20%
Price Locking	10%
Price Transparency	25%
OEM Material Cost	5%
Price Saving	30%

Table 5

Quantitative scoring matrix

Based on the scoring for each of the parameter and collating the responses from the Business and Operations end the final quantitative scoring was:

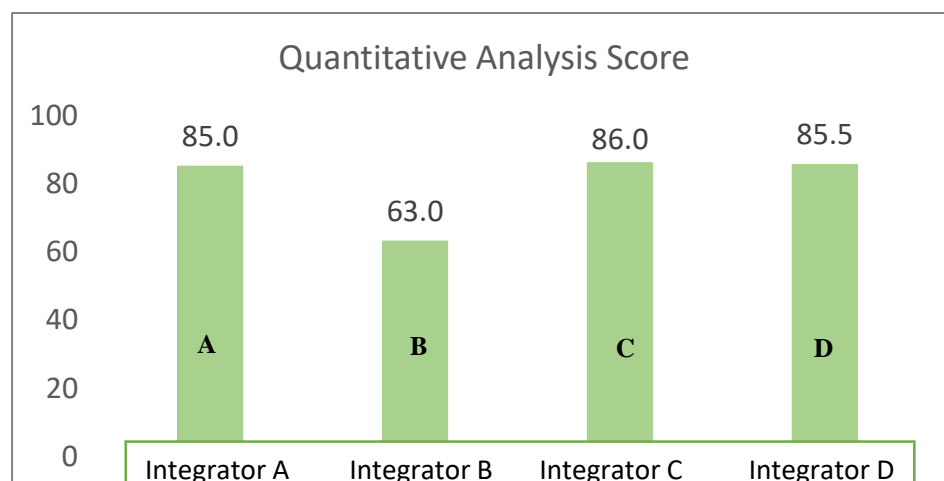


Figure 4

Quantitative analysis

Conclusion:

Finally, after the several rounds of negotiations, the four suppliers were shortlisted and were informed to proceed for the further supplier presentations. The supplier presentations will have all the delegates on the main site to put in front their proposals and revised quotations. They will answer all the questions put forth by the panel and based on that the final two suppliers (integrators) will be shortlisted.

Based on the literature review and the quantitative analysis the right outsourcing decisions can be taken. As a limitation we have not been able to give the detailed presentation that will be given however this has been narrowed down to case study success stories in the consumer

market group for the US market. Also the names of all stakeholders and actual pricing details are not disclosed due to confidentiality. Further the case study data has been detailed one involving ten different processes, challenges, outcomes and integrators involved could not be shown as this would be presented due to the voluminous amount of material involved however this would be a scope of further research for this project to narrow down to specific client needs.

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STRATEGIES BY INDIAN COMPANIES IN THE INDIAN E-LEARNING SECTOR

Abstract

In the global world, knowledge we need to be updated with latest situations. Technology helps to sustain competitiveness in e-learning; technology has a crucial role in the learning and teaching process. On line, education improves the employability that is relevant to the job market. The business model is in line with the needs of the customer that is the mix of C2C where the platform connects prospective teachers and students, and the other model is the B2B where the institutions offer degree/diploma courses through their platforms. Improved net penetration and adoption of digital payments have aided the growth of online education.

E-learning globally has been widely used for training and education purpose. Re-skilling and online certifications account for a large share of the online learning market. However, the primary and secondary supplemental education driven by the focus on quality and individual learning has made several educational institutes and organisations to make a considerable investment in e-learning. The development of new customer segments like K-12, tuitions, vocational training and virtual universities (engineering, medical and MBA) has provided new opportunities for both education seekers and providers. The India education sector is also expanding due to the rise in income levels as well as the growing requirement for quality education, especially with increased demand from tier 2 and 3 cities.

Keywords: *e-learning, online education growth, e-learning market, opportunities, investments by the private sector, online education strategies*

E-learning concepts, importance, drivers & challenges in India - Literature review

E-Learning in India is vital for economic upliftment. The need for investing in Information and Communications technology (ICT) helps e-learning in India. The study among Indians shows that there are limited prospects of e-learning models that excludes face-to-face learning. However, blended learning has excellent opportunities in the Indian context. (Bhattacharya, I., & Sharma, K. 2007). Various strategies lead to meaningful e-learning environment in India. It includes the proper designing and implementation of policy in different modules in the academic and corporate world. (Alexander, S. 2001) (Khan, B. H. 2005).

Studies in the UK has shown that the students' e-learning capabilities and experiences

considerably improved with curriculum flexibility that accommodates the students' mobile usage lifestyle. (Nie, M. et al. 2011). The use of mobile technologies is more prevalent. The pedagogy of e-learning had an overall positive impact on e-learning strategies (Fuegen, S. 2012). Smartphones with A-Z keypads, good internet speed and download capabilities with excellent colour and contrast facilities, helpful text entries, multimedia, creation of pictures, graphics and videos, cloud storage facilities, animations will greatly facilitate e-learning on mobile platforms. (Elias, T. 2011). Globally across sectors, the challenge of e-learning has resulted in positive customer experience by the use of enhanced mobile technologies. (Traxler, J. 2009).

E-learning can provide synchronous and asynchronous. Synchronous e-learning involves concurrent discussion among teachers and learners through technology like chat and video conferencing - this kind of teaching and learning in real-time.

Offline and online education helps Asynchronous e-learning. It allows immense flexibility to study the material online at the learner's own pace and convenience. In this type of e-learning, the trainer and the learner may not be interacting online at the same time. It involves the coursework delivered via the web, email etc. (Hrastinski, 2008).

The use of emerging technology tools such as blogs, and podcasts to foster student interaction in online learning, offering a vast range of opportunities for promoting collaboration in both synchronous and asynchronous learning environments. (Beldarrain 2006).

Preparing an active design assists in the development of high-quality materials in a cost-efficient way. (Brown, A.R., Voltz, B.D., 2005) A theory-based design framework for E-Learning emphasises the transformative interaction between pedagogical models, instructional strategies, and learning technologies. Situated or distributed cognition is a proper foundational knowledge perspective that offers a theory-into-practice framework that characterises the instructional implications of situated cognition and guides the design of E-Learning. (Dabbagh, N., 2005). E-Learning strategic perspective on corporate learning (Sanderson, P.E., 2002). Examining three critical interactions: instructor-student, student-student, and student-content helps determine active online learning. Student-content cooperation may include a wide variety of pedagogical tools (e.g., streaming media, PowerPoint, and hyperlinking).

The perceived online learning quality includes work-family flexibility, experience, gender, intimate learning environment, data software tools and ease of access across various geographies. (Schaffert, S., Hilzensauer, W., 2008) (Marks, R.B. et al. 2005).

New organisations, like virtual universities and other modes of teaching, are changing the way of teaching through this new delivery system that is increasing the effectiveness of learning at a distance.

E-learning provides ways to increase communication between the trainers and learners through chats, emails and discussion boards. The learner is motivated to ask questions, clear doubts as well post about his or her views on discussion boards or chats. These methods are a boon for anxious and shy students and also provide a sense of equality among all learners. Emails are used to send out any extra information related to the course, notifications, reminders for upcoming events and reports on any test or exam taken.

The effectiveness of e-learning is not only limited to the education sector. It can be used to train employees effectively. Employees can be trained and instructed across geographies. Thus, allowing an international learning platform. E-learning can be used by employees to enhance their knowledge for professional development, helping them to progress in their careers. For organisations, e-learning proves to be cost-effective as classroom training involves costs like instructor's fees, training rooms and relocation expenditure for training. There is no stringent time and location, thus enabling flexibility in the learning process.

There are several challenges in the e-learning market in India

The problems for online students is Content pricing and variety of content at affordable prices for increased adoption.

Test preparation modules include webinars, video, textual content to guide students in problem-solving test papers. The presence of active offline players with considerable regional presence is significant competition for online players. The Availability of free content impacts the transaction volumes for online players in this space, changing exam patterns, syllabus and difficulty levels that affect the creation of quality content

The main reason for not adopting online content is the lack of awareness about online platforms. Internet connectivity provides a critical role in growth in tier 2 and tier 3 cities.

The mature market of online re-skilling and certifications results in higher target adoption as compared to other categories. The short content shelf life requires regular updates. It comes at a high cost of updating content that remains a crucial challenge for players in this category

. Online higher education is at a nascent stage in India, thereby witnessing an emergence of several private universities offering online degrees. Private universities are at an early stage of development in India and has seen a rise of private universities offering online degrees. Currently, online channel has less of the practical components that affect the courses offered in fields such as medicine, civil and mechanical engineering. Policy framework formulation has resulted in limited players in this space in recent years.

E-learning in India – Role of technology

Technologies provide an enhancing experience to students, and there is scope for innovation in the online education space.

Artificial Intelligence enables content choice for students for course selection.

Big data: Digital footprints system captured helps to map the profiles of the learner.

Data analytics: Platforms map user profiles with relevant courses that are based on past usage or academic/professional background and drive purchase behaviour

Virtual labs assist students in performing experiments. It would allow platforms to enhance high practical component offerings.

Facial recognition: Facial cues captured provides better feedback during the course delivery.

Machine learning: The platform gives detailed feedback to the user with a high level of accuracy, time spent, historical performances etc.

Drones: Soft skills learning like leadership and team building can be taught online through innovative videos such as recordings of outdoor activities of a group undergoing training/workshops and using that as a demonstration to impart knowledge online

E-learning in India – Market in India

India has over 750 universities and 35,000 colleges with e-learning covering about 30 million students. Given below are the details in Table 1

	Schooling	Higher Education	Vocational Education & Skill Development	Ancillary Segments
Segments	Early Childhood Education (Pre-schools)	Graduation (General & Professional)	Vocational Education in Manufacturing	Test Preparation and Tutoring
	K-12 Schools	Post Graduation (General & Professional)	Vocational Education in Services	Content: Textbooks and e-Learning
		Research (PhD.)		Allied Services etc.
Market Opportunity	Market Size: \$52bn	Market Size: \$15bn	Market Size: \$5bn	Market Size: \$28bn
	CAGR: 14%	CAGR: 20%	CAGR: 20%	CAGR: 22%
Regulations	ECE: For Profit K-12: Not for Profit	Not for Profit	For Profit	For Profit

Table 1

E-learning in India – Strategies adopted by Indian companies

Jio Institute

Reliance Foundation's Jio Institute, an INR ten thousand crore project will operate under Reliance Foundation Institution of Education and Research (RFIER). Reliance Industries Ltd (RIL) during the 37th annual general meeting, disclosed their plan to build a "world-class, multi-disciplinary university" in Maharashtra that would figure in top 500 in the Times Higher Education and the QS World University Rankings. The phase one of the Jio Institute is expected to be completed in 3-4 years. By ten years, it should be able to qualify in international rankings.

Jio Institute has kept a massive amount of INR 9,500 crore for Jio Institute is expected across 800 acres in Karjat near Navi Mumbai. RIL also plans to add more land to the 800 acres.

Jio will offer 200 seats in humanities, 250 in engineering and computer science, 60 in media and journalism, 50 in performing arts, 300 in natural sciences, 50 in urban planning and architecture, 90 in law, 125 in management and entrepreneurship and 80 in sports sciences, as per the proposal.

Around INR 154 crore, is expected to be allocated in expenses, out of which Jio will spend Rs 93 crore on salaries with other benefits for the faculty and staff members. As mentioned in the report, there are plans to hire teachers from the top 500 global universities. Jio forecasts In the 15th year of operation, to have around 10,000 students, and the net revenue is expected to be Rs 1,502 crore.

RIL – Jio revenue/expense projections shown in Table 2

REVENUE FROM STUDENTS (15-YR PROJECTION)

	Year 1	Year 3	Year 5	Year 10	Year 15
Total No. of students	1,000	3,000	5,000	7,500	10,000
Tuition & hostel fee (A)	100	362	633	1,116	1,968
Scholarships (B)	(38)	(132)	(222)	(312)	(466)
Net revenue from students (A-B)	62	230	411	804	1,502

*Tuition fee, scholarship & net revenue figures in Rs cr

**Total net revenue from students in first 15 yrs is Rs 10,528 crore

*** In Yr 15, on average, each student is paying Rs 15.02 lakh

EXPENDITURE AND REVENUE

	Year 1	Year 3	Year 5	Year 10	Year 15
Operating Expenditure + Capital Expenditure*	406	639	895	1,495	2,239
Revenue*	75	290	536	1,135	2,164

*All figures in Rs cr

Table 2

Source: indianexpress.com

Merger and Acquisitions in Indian Education Sector

The Indian education sector observed over 18 merger and acquisition deals that were worth USD 49 million in the year 2017. The EdTech sector recorded 39 Merger and Acquisition deals in the period 2013-2018 aggregating USD 251 million.

Some Mergers and Acquisitions include:

AEON Learning Pvt. Ltd., a Bengaluru based EdTech firm, which owns education technology platform Avagmah, has acquired Acadgild in an all-stock deal worth USD 10 million. Acadgild provides skill-based courses in UI/UX design, big data, web development, deep learning etc.

Essel Group's Zee Learn to acquire 44.53% stake in MT Educare Ltd for INR 200 crore. This purpose for this acquisition was to align with Zee Learn's strategy to increase their footprint across all segments in education as well as consolidate their offerings through the digital route. Reliance Industries Limited announced to pick up 73% stake, through a phased strategic investment of up to USD 180 million in Embibe. Embibe is a Bengaluru based AI education platform that uses data analytics to bring personalised learning outcomes to its users. This deal

will help Embibe to get the required capital to deepen R&D on AI in education.

Gaja Capital, a private equity firm, invested USD 25 million (INR 171 crore) in Ahmedabad based ed-tech firm, Educational Initiatives Private Limited. Educational Initiatives develops and provides customizable learning products and services for K-12 students. Unacademy also acquired Wifistudy, which is an online exam preparation platform based in Jaipur, for USD 10 million. This acquisition will help Unacademy to go deep into the exam prep market.

EdTech startup, Quizizz, a platform that assists teachers to convert tests and homework into self-paced games, received USD 3 million investment of from investors led by Nexus Venture Partners and existing investor Prime Venture Partners. Quizizz incorporates game-design components with self-paced questions, along with instant feedback.

Edtech unicorn Byju's has acquired, a Bengaluru-based math learning startup, Math Adventures. This acquisition will help Byju's K-3 math development.

Edtech unicorn Byju's has acquired TutorVista and Edurite from UK based Pearson Plc. Byju looks on broadening its international reach. TutorVista the largest tutoring brands in the United States, catering to school and college students.

Byju's raised USD 540 million that is valued \$3.6 billion. Naspers, private equity giant General Atlantic and the Canada Pension Plan Investment Board also participated in the fundraising. Byju's, through this fundraising, has turned to become India's fourth-most valuable startup. Lately, the private equity firm General Atlantic and the world's fifth-largest internet company Tencent, put in an additional INR 75-80 crore.

Byju's has also lately acquired Osmo, a maker of educational games for USD 120 million. This partnership will help Byju's offer solutions to children aged 3-8.

Ebix, the US-based insurance software service provider, acquired a stake of 60 per cent in e-Smartclass Educational Services Private Ltd (Smartclass) with an outlay of USD 8 million. Smartclass is a leading Indian e-learning company committed the development of education products for K-12 schools.

HT Overseas Pte Limited, a wholly-owned subsidiary of HT Media Limited invested in betterU Education Comp, a global education marketplace for USD 8 million

Tata Industries Ltd, sold its e-learning solutions unit, Tata Interactive Systems, to publishing services company MPS Limited in Noida. The deal for sale was estimated to be USD 12.3 Million

Investments in EdTech and Education Sector

Private equity players have become compelling in the growing Indian education sector.

The Indian education sector observed until the end of 2016, about 42 private equity deals with a total outlay of USD 208 million.

The EdTech sector recorded 65 PE/VC investment deals during the period 2013-2018 with an investment of USD 1 billion.

Mid-market focused private equity (PE) firm Gaja Capital invested about USD 20 million in Kangaroo Kids Education Ltd, a chain of elite pre-schools and K-12 schools

MT Educare Ltd received an investment of USD 16.36 million in structured debt from Xander Finance Pvt. Ltd (NBFC).

The India Education Outcomes Fund was launched to get funds on a scale to the best education service providers, with a focus on improving learning while aligning to the government's agenda.

The EdTech sector drew interest from private equity and venture capital investments worth \$742 million last year. There has been a year-on-year rise of 733 per cent.

The EdTech sector reported 65 PE/VC investment deals in the period from 2013-2018 aggregating USD 1 billion. EdTech has seen. Comparatively, very few players with Byju's the most outstanding one which received 80% of all investments in this sector in the period 2013-2018. Most of the financing for Byju's was in the year 2018.

Investments from PE/VC firms are not only in the K-12 segment, but they also invest in open online courses, re-skilling/upskilling program generators, consumer and corporate-focused programs. EdTech companies have started to reduce the digital skill divide in India. The lifetime value of the student is high, once comfortable on a platform. The consumers are satisfied if there is quality content driven engagement as well as low cost. These requirements are crucial for EdTech firms to achieve success. India is an extremely potential market in the EdTech space and mature for investments. India has the largest school-going population and parents are willing to invest a lot in education requirements. There is an enormous gap for traditional educational institutions to meet all the needs of students. This gap provides considerable opportunities for EdTech companies to tap into this market. These EdTech startups are making a real difference through incorporating artificial intelligence, virtual reality and analytics, and thus providing better quality content. Technology adds value to the student and is not a way to replace classroom coaching. In the coming years, it has startups will offer more engaging educational content will see an increasing trend. Companies will have to focus on bringing down their cost of acquisitions, improve quality of the content as

well as improve engagement for retention and delivery with growing scale. In 2018, the most significant investment was to Byju's raising USD 540m from Naspers, CIPPIB and General Atlantic thus making it the first Indian unicorn in the EdTech industry. Competitors such as Thinkzone, Unacademy Vedantu, and Toppr raised approximately USD 100m.

Some key PE/VC deals in EdTech space are:

Learning platform, Unacademy also raised USD 21 million from several investors in a Series C funding from SAIF Partners, Sequoia India and Nexus Venture Partners at a reported valuation of more than USD 100 million. Unacademy allows educators to use the learning app to create quality lessons for users.

Toppr, one of India's leading after-school learning app for K12, has raised in a Series C funding round, USD 35 million, led by Eight Roads Ventures, SAIF Partners, Kaizen PE and Helion Ventures. The primary mission is to make learning personalised and use this capital to create brand awareness, increase their geographical footprint, accelerate user acquisition and invest in training and development

The Eruditus Group that consists of Eruditus Executive Education, as well as its online division Emeritus, raised an amount of USD 40 million in a Series C round deal which was led by Sequoia Capital and existing investor Bertelsmann India Investments. This investment would be used to expand its operations to China as well as increase its footprint in Latin America and introduce more courses in machine learning and artificial intelligence.

Bengaluru-based, online tutoring startup Vedantu Innovations Pvt. Ltd raised USD 11 million in a Series B funding round which was led by impact investment firm Omidyar Network and existing investor Accel Partner.

Corporate Partnerships

There have also been many corporate partnerships that have been gaining momentum in the education sector. The most recent trend is where corporate houses have signed into agreements with vocational training to update their existing employees with the needed skill sets. Through corporate partnerships, these professional training companies are coaching college pass outs with the required soft and hard skills that are initiated by the corporate houses.

An MoU was signed between Ministry of Micro, Small and Medium Enterprises and Samsung India, on June 2017 to enhance the Samsung's technical training schools to instruct technical skills to the unemployed youth to make them job-ready. Bangalore and Jamshedpur will be the specialised centres are to be built in over the coming three years.

Public-Private Partnership

Public-private partnership is an ingenious method to tap the resources of a private school to assist the government public run schools. Private or public company whose earnings is more than INR 10 crore or whose revenue is more than INR 25 crore can collaborate with top 50,000 existing municipal or government-funded schools. The funding can help to introduce an international curriculum. It can improve the public schools that want to provide a new learning approach that develops critical thinking, creativity and better communication skills.

In the education sector, the Public-Private Partnership and tax concessions have been promoted by the government to encourage foreign players in the country. The Indian Education sector is likely to see more private players expand in the education sector.

The government introduced some initiatives such as the Foreign Educational Public-Private Partnership Institutions Bill and the National Accreditation Regulatory Authority Bill for Higher Educational, to liberalise the sector.

The main aim is to set up under the PPP modal, formal educational institutes and boost the existing ones. Through Public-Private Partnership, the government is considering different models like the outsourcing model, basic infrastructure model, reverse outsourcing model and the equity/hybrid model.

In 2009, the Planning Commission of India approximated the resource gap in the sector to be about USD 48.8 billion and thus adopted a public-private partnership model to bridge this gap. The Planning Commission prepared an agenda of setting up 6,000 model schools, out of which 3,500 were to be set up in backward areas. As a part of the 12th Five-Year Plan, the government declared allotment of a budget of USD 48.8 billion for public-private partnership. The government also announced a plan to set up around 2,500 model schools under PPP, in 2016. In the 12th Five-Year Plan, The government expects completion of Ninety-five per cent of the work.

Through the PPP model, private participation has increased in the vocational courses. The PPP model in India opened Two hundred fifty thousand vocational schools. Many individual players are venturing into his sector like the Pearson-Educomp joint venture, IndiaCan. It runs various government programmes like vocational training centres in Gujarat, Punjab, Rajasthan and Uttar Pradesh.

Everonn Education entered into a partnership with National Skill Development Corporation to administer vocational training to students across India. There are many companies like Tata, Educomp, Wipro, Larsen & Toubro etc. who are interested in investing in the central government's initiative of 1,000 industrial training institutes (ITIs).

The municipal and district level has achieved PPP initiatives. Brihanmumbai Municipal Corporation (BMC) along with McKinsey & Company and UNICEF, McKinsey & Company as well as a range of for-profit and not-for-profit organisations are contributing funds, skills, resources and infrastructure to improve the quality and standard of learning and teaching in over 1,400 schools in Mumbai.

Potential Strategies

India's Education sector in 2030 would have, according to IBEF, estimated that:

Adopted innovative and transformative methods in education.

Achieved a Gross Enrolment Ratio (GER) of approximately 50 per cent

Emerged as a single largest provider of global talent, where one out of four graduates in the world has studied with the Indian higher education system.

In the field of research in the world with an annual R&D expense of USD 140 billion.

More than 20 universities amongst the global top 200

The Education sector is expected to be USD 2 billion markets in the coming years.

The impact that e-learning has had on education is apparent as many traditional offline education players are continually working on adding online as an essential part of their offline content. Thus, making these players more omnichannel. There is compelling potential across all education segments, including primary/secondary higher education, re-skilling courses, test preparation and interest-based casual learning programs. The E-learning space, going forward, will witness new advancements in methods of learning.

In the coming years, some potential strategies/emerging trends that we will see:

Incorporation of emerging technologies like Artificial Intelligence, Machine Learning, Augmented Reality, Virtual Reality, Chatbots etc. to implement a more engaging and quality learning experience

Artificial Intelligence Bots can behave as Study Assistants. These bots will guide the students along their learning journey. It will understand their strengths and weakness and will also propose what they should read to maximise their learning outcomes

Introduction of gamification to drive higher engagement as well as making the learning process is more fulfilling and interactive

The Strategy Analytics report has positioned India to be the 3rd largest globally for the 4G LTE market in 2016 and will surpass the US to be the second-largest smartphone market globally. With a very high youth population, there is expected to be a high adoption of technology with an estimated 370 million mobile internet users. Given below are the details in Table 3

Tier and Age wise Target Population

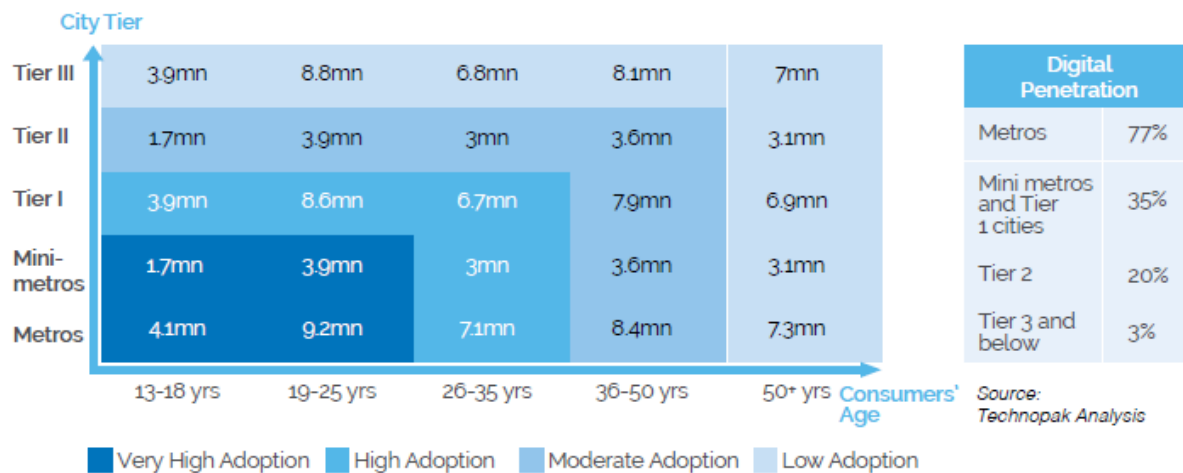


Table 3

Usage of game theory for designing content and delivery mechanism

Curating of local language content to augment the base

Availing exclusive courses across various categories to boost students to broaden the material they learn

Customising e-learning to meet the needs of diverse disciplines and regions

Usage of Apps to increase knowledge like learning foreign languages as well as proving solutions for different problems.

Involve the concept of continuous learning through entrepreneurship, social education and employability.

Introducing methods where students will be able to set achievable goals, measure their improvements and progress and check on their results and achievements

Live online communication between the teacher and students that will enable teachers to personalise learning that will help students who study in congested schools as well as remote areas.

Include value-added services like internship opportunities, short term assignments and live projects.

Government support has seen a boost, with substantial reforms and increased financial outlays. With this assistance, improve the quality and delivery of education.

There are several prevalent business models like MOOCs - Massive Open Online Courses followed by MIT, Harvard and Stanford. It requires proper scaling like the CCKo8 - Connectivism and Connective Knowledge followed by Athabasca University and National Research Council. The use of Artificial Intelligence by Stanford in their xMOOCs model has

been dominant format supported by most e-learning strategies. COOCs - Corporate Open Online Course are used by corporates for large scale training.

Indian Policymakers are positive to make adoption of e-learning with the launch of Swayam and Indian MOOCs platform. AICTE - All India Council for Technical Education has announced that it may permit up to 15 per cent credits of a degree through this platform.

Increase the presence of FDI in the education sector.

While there are many opportunities, the education sector organisations will continue to focus on bringing down their cost of acquisitions, enhance the quality of content and delivery and improve engagement which increases retention.

Analysis - Discussions

We discussed with several of the top officials of Indian companies in the field of e-Learning like Embibe, Reliance Education, Digital Gurukul and the current market leader Byjus.

E-learning is the need of the hour providing several Indian students with the opportunities. Indian schools and colleges have poor infrastructure that lacks good quality faculty paid on an average US\$ 375 per month. The overall ability of teachers to impart good quality education has enabled the e-learning sector to do well in India. On the other hand, the parents want their children to excel in their academics so that they can uplift their economic status.

India has seen an exponential growth in the e-learning sector that has been enhanced by the meagre cost of mobile data services. With the introduction of 5G in India, the industry will see an increasing trend in growth. The introduction of high-quality mobile devices in the last five years has enhanced E-learning content at a pan India level. Increased internet penetration in rural India and global e-learning programs being available along with a sound and secure banking system for payment of fees will further enhance this sector in India.

The future implications of this would be considered knowledge enhancement and increased job opportunities for Indians. The GDP growth rate will considerably rise in India, making it a potential supplier of valuable resources globally.

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ORGANISATIONAL CAPACITY FOR CHANGE (OCC) – A LITERATURE REVIEW OF RESEARCH IN LAST DECADE

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Track No.: 33 – Organization theories

Abstract

Organisational change capacity (OCC) is a newfound capacity to be built for any organisation. However, the numerous modification and revision that OCC as a construct has undergone need to be put into reference before finding any promise in it. A literature review of the concept around its chronological evolution in terms of definition, dimensions, relationships with other constructs, and contexts OCC has been used was expected to provide a clear picture to analyse the current position and predicts its future direction. The review conducted reveals that there are primarily three different streams of authors who have dominated the research in the area of OCC. They propose separate but similar definitions but different dimensions in their respective OCC models. Moreover, the communication between them has been scarce to witness. Similarly, the existing literature also lacks the development of OCC scales that represent each of these models. Lastly, the review also found that OCC positively relates with various other change related concepts and accordingly guides future researchers to duplicate studies on other change related constructs with OCC and find empirical evidence to establish the promiscuity of OCC.

Keywords: *Organizational capacity for change, manageable OCC, non-manageable OCC, OCC Dimensions, OCC Measures*

INTRODUCTION

When challenged, organisations were expected to adapt/intervene to restore the balance. Organisations today, to better adapt, had moved from episodic change – clear cut and distinct process, to continuous and ongoing movements of change. Enabling a continuous change process ensures both the continuity of daily routinised activities and keeping the need for episodic change at bay. Brown and Eisenhardt stated that almost all organisations experience

relatively long periods of continuous change punctuated with episodic revolutionary change (as cited in Rockey, 2016). Organisational capacity for change (OCC) is one such capacity that provides an organization with capacity that helps an organization to remain cognizance of the need for continuous change and when need arise the ability to implement the same (Heckmann, Steger and Dowling, 2016). Thus, organisations are expected to develop their OCC resulting in improved ability to respond and proactively initiate a change not once or twice, instead of on an ongoing basis.

OCC is more than a decade old construct. However, it is still claimed to be in its infancy (Heckmann, Steger and Dowling, 2016). Making such claims a decade later raises few specific and pertinent questions. Does the research in the area of OCC headed in the right direction? Do researchers in the area of change management have so far not been able to recognise the potential of OCC? Due to these differing questions, it becomes imperative to assess the direction and progress in the literature of OCC. An investigation of OCC literature at this juncture to understand how far OCC as a construct meets its promises in terms of providing an encouraging framework to deal with change management will be crucial in guiding and elevating OCC research.

The current paper aims to attempt a chronological literature review of OCC in the last decade, i.e., since the seminal paper on OCC by Judge and Elenkov in 2005 got published. Thus, EBSCO database with the keywords ‘organisational capacity for change’, ‘organisational change capacity’ and ‘OCC’ was searched and then were screened after reading the title and abstract to arrive at 22 peer-reviewed articles found relevant to be included in the study.

DEFINING OCC

OCC is a new and relatively comprehensive organisational construct emerging from the resource-based perspective. As a construct, it is derived from dynamic capabilities and organisational change literature (Judge, Naoumova, & Douglas, 2009). However, OCC as a construct is still in its evolution phases, and so is its definition. The last decade has witnessed the same authors most often adding, modifying, and substituting their proposed initial definitions. It is also an indication of existing disagreements among various propagators of the term. Despite these differences some of the shared essence that not so varying definitions suggest includes;

- OCC advocates for developing the dynamic capability to change on an ongoing basis. It suggests that given the kind of ongoing change an organisation goes through, necessary change capacity also required changes and that organisations will have to

identify and build such dynamic capabilities continuously to gain a competitive advantage over their rivals in the business.

- OCC is also representative of all types, sizes and kinds of organisational changes.
- OCC as a construct is attempted to be projected as a single substitute for all other change constructs like 'readiness to change', 'organisational learning', 'adaptive capacities', and so forth. Thus, OCC represents an integrative approach to change (Heckmann, Steger and Dowling, 2016).
- To summarise, OCC advocates for integrating key dimensions of polarised capabilities, for example, capabilities to successfully manage
 - short and long term changes (Meyer & Stensaker, 2006),
 - single and parallel/sequentially run multiple change activities (Klarner et al., 2008),
 - episodic and continuous changes (Rockey, 2016),
 - small and large scale changes (Heckmann et al., 2016),
 - adjusting for both exploiting and exploratory changes (Judge & Blocker, 2008),
 - managing change activities without affecting the essential but routinised activities of the firm (Klarner et al., 2007), and
 - applies equally to small and large organisations

CONTRASTING OCC WITH OTHER CHANGE CONSTRUCTS

Literature often attributes the success of organisational change and its implementation to various change related constructs such as readiness to change, organisational adaptive capacity, organisational absorptive capacity, organisational learning, and so forth. Most of these constructs fulfil only particular facets of the overall change process and implementation. Unlike change readiness, which emphasises individual level preparedness for change, OCC takes a more holistic perspective of change in terms of intervention required at an organisational level. Therefore, employee readiness for change and organisational change capacity (OCC) are substantially different constructs (Judge and Douglas, 2009). Next, where adaptability advocates for reactive adaptation to the internal and external changes, OCC refers not only to adapting well but at the same time ask the organisation to remain flexible and continuously innovate for successful change proactively. Similarly, where absorptive capacity argues for building new knowledge externally, OCC attempts to learn internally and externally before assimilating them for commercialisation. Lastly, when compared with organisational learning,

which is related to OCC (Judge & Douglas, 2009), the former applies to organisations in general, and the latter is more specific to change management. Thus, while all other change constructs discuss a particular aspect of successful change, OCC attempts to bundle all these abilities and give a more holistic answer to overall successful change implementation on an ongoing basis. Thus, OCC is best understood as a “meta-capability” that enables an organisation to stay competitive in volatile and unpredictable business environments (Judge et al., 2009).

OCC DIMENSIONS, CONCEPTUAL MODELS AND MEASURES DEVELOPED

OCC Dimensions and Conceptual Models: Change capacity at a broader level was seen at two levels by Rockey (2016) – individual change capacity and organisational change capacity. Individual change capacity is defined as the willingness and ability to change (Bobiak et al., 2009). This paper will confine to presenting dimensions of organisational change capacity. Eight dimensions concerning issues of human capabilities, informal organisational culture and formal organisational systems/processes found to be associated with OCC (Judge & Elenkov, 2005; Judge & Douglas, 2009) are trustworthy leadership, trusting followers, capable champions, involved mid-management, innovative culture, accountable culture, effective communication, and system thinking. Meyer and Stensaker (2006) proposed three elements of change capacity stating that organisations should not have only the *capability to implement single change*, instead of a *capability to implement subsequent changes* while upholding the *capability to maintain daily operations*. They gave five prescriptions to maintain these three elements of organisational capacity change, viz.; framing, participation, pacing and sequencing, routinizing, and recruiting.

Klarner et al. (2007) criticised Judge and Elenkov (2005) for presenting OCC only through the contextualised lens and previewed two types of change – manageable and non-manageable, and argued that these are complementary rather than an opposing concept. Through their empirical case study, they analysed for these two dimensions – change process christened as a driving dimension (manageable) and organisational context christened as a contextual dimension (complex – non-manageable). Qualitative analysis of the interview data gathered in the study raised a third dimension called learning christened as structuring dimension. Buono & Kerber (2008; 2009) proposed an interventionist approach to conceptualise organisational change capacity and have modified and refined their version more often substantially (Refer to Table 1).

Buono & Kerber, 2009		Buono & Kerber, 2010		Buono & Subbiah, 2014	
Level	Focus	Focus	Objectives	Core Factors	Indicator
Micro	Developing an understanding and acceptance of different approaches to change	Organisational Members	Developing an understanding and acceptance of different approaches to change	People	Knowledgeable about different change approaches
	Enhancing willingness and ability to change		Enhancing willingness and ability to change		Contingency factors that lead to selection and deployment
Meso	Building a change-supportive infrastructure	Structure	Building a change-supportive infrastructure	Structure	Able and willing to embrace and manage change
	Providing appropriate resources		Providing appropriate resources		Sufficient support-infrastructure
Macro	Creating a change-facilitative culture	Culture	Creating a change-facilitative culture	Culture	Sufficient Resources
	Ensuring on-going strategizing		Ensuring on-going strategizing		Open-mindedness
					Pluralistic viewpoint
					Commitment to learning and experimentation
					Shared purpose

Table 1: OCC Dimensions by Buono & Kerber (2009; 2010) and Buono & Subbiah (2014)

Measures: The model as proposed by Judge and Elenkov (2005) got transformed into scale. Spaulding et al. (2017) also developed a measure of OCC but more specific to the health care sector. These two measures are presented in Table 2.

Dimensions	Measures	References
<ol style="list-style-type: none"> 1) Trustworthy leadership 2) Trusting followers 3) Capable champions 4) Involved mid-management 5) Innovative culture 6) Accountable culture 7) Effective communication 8) System thinking 	32 item survey instrument (4 items per dimension) to be responded on Likert's five-point scale. Cronbach α for each dimension was found to be well above 0.70.	Judge and Douglas (2009); Judge (2011)
People Perception of organisations' <ol style="list-style-type: none"> 1) Leadership 2) Culture 3) Technology 	Developed specifically to measure OCC in Health Care Settings. Exploratory and confirmatory factor analyses were conducted to validate the tool.	Spaulding, Kash, Johnson & Gamm, 2017

Table 2: Dimensions and Measures of OCC

RELATIONSHIPS OF OCC WITH OTHER CONSTRUCT

Judge and Elenkov (2005) in their seminal paper found that OCC and environmental performance of the organisations are positively related. Judge and Blocker later in 2008 established OCC as a primary antecedent of strategic ambidexterity - ability to simultaneously pursue exploitation and exploratory strategies. Judge & Blocker (2008) proposed that the relationship between OCC and strategic ambidexterity is strengthened during the periods of high environmental uncertainty and in the event of high levels of organisational slack - the

ability to adapt to dramatic shifts in the environment (Bourgeois, 1981). OCC was also found to be positively attributed to firm performance especially in a highly uncertain environment, and this was found significant across organisations of all sizes (Judge et al., 2009). OCC was also highly positively related to organisational performance (Ramezan et al., 2013). Similarly, systemic in-house consulting as an expression of increasing change needs was found to have the potential to stimulate OCC (Schumacher and Scherzinger, 2016). Lastly, OCC as the dependent variable was found to be affected by technological turbulence and perceived positive previous change experiences of the organisation and OCC as independent variable affects the performance of its change projects (Heckmann, Steger and Dowling, 2016)

While initial researches around OCC concentrated on overall organisational landscape, few of the later studies focused on the people dimension. Smith & Torppa (2010) found participation in planning process help personnel across all levels to well-received current changes and build capacity for future change. Shipton, Budhwar, and Carwshaw (2012) conceptualized that human resource management induced OCC moderated through internal (HR power and HR competence) and external environmental factors leads to better financial and ecological level organizational performance. Similarly, it was found that diagnosis of the ability to change regarding OCC, along with the process of change and employee behaviour requires consideration of the learning processes in an organisation (Czop, 2013). Buono & Subbiah (2014) established that there exist a significant role and responsibilities of Internal Consultants (ICs) in building OCC (Buono & Subbiah, 2014). More recently it was found that leadership plays a vital role in OCC. Specifically, a significant positive relationship exists between transformational and transactional leadership with OCC (Yasir *et al.*, 2016). Though, laissez-faire leadership style was negatively associated with OCC. Subsequently, it was also established that employees' trust mediates the relationship between leadership styles (transformational and laissez-faire) and OCC. However, employees' trust did not mediate the relationship between transactional leadership and OCC (Yasir *et al.*, 2016).

FUTURE RESEARCH DIRECTIONS AND CONCLUSION

There seems to exist three dominant but different streams of OCC. One dominated by W. Q. Judge; second by P. Klarner and G. Probst; and the third by A. F. Buono and K. W. Kerber. While the former relies on understanding OCC empirically, the latter has focused more on building OCC conceptually. There had been seldom any communication between these three different streams of the researcher to streamline the concept of OCC further. Comparing and contrasting these three different models to improvise the OCC framework further is one

promising research direction to be pursued further. Future researches in the area will also require the development of alternative scales but also clarity on how various dimensions of OCC interact. Additionally, as OCC as a construct is an attempt to compensate for fragmented literature on organisational change and development literature; it becomes prudent to repeat previous studies in the change literature by replacing other alternative change constructs with OCC. Alternate conceptual model as proposed by A. F. Buono and K. W. Kerber are running parallel to the empirical model of OCC proposed by W. Q. Judge which also needs to be further explored and empirically tested. Furthermore, researches in the area had so far investigated only a selected sample from Bulgaria (Judge & Elenkov, 2005), Russia (Judge, Naoumova & Douglas, 2009) and US (Judge & Douglas, 2009). Hence, future research will also have to look at more multi-national and multi-cultural perspectives. Since it is a relatively new, and nascent area of research there exist the whole gamut of research options that OCC offers.

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FOREIGN DIRECT INVESTMENT IN BANKING SECTOR– A THEORETICAL PERSPECTIVE

Abstract

The rapid entry of foreign banks and bank internationalization has attracted many academicians to study its determinants both empirically and theoretically. There are two modes of foreign direct investment into host nations, namely brownfield and greenfield FDI. . Both types of FDI, brownfield and greenfield yield profits in the banking sector. However, the study answers why FDI in terms of foreign banks' offices gets established in host countries. The main objective of the study is to put forth a comprehensive theoretical perspective for foreign banks entry in terms of greenfield investment. The study discusses various theories on FDI inflows and derives two accepted theories in the literature, i.e., Internalization and eclectic paradigm in the case of banking sector. The study reviews various theories and empirical studies to analyse the determining factors of foreign banks' entry into India. The study finds various locational factors such as *following client hypothesis*, *profit making opportunity* and *lack of banking competition* in India as the major determinants of foreign banks' entry into India.

Key-words: *FDI, Internalization, Eclectic Paradigm, OLI, Foreign banks.*

1. Introduction

Foreign Direct Investment (FDI) is considered as major source of funds for enhancing living standard of people especially for a developing country. There are a lot of discussion on the benefits and shortcomings of FDI for any economy. However, the direction of the debate has changed in the developing countries and now the focus is on how to attract FDI and where to attract FDI. There is a stiff competition among the countries to attract more FDI in their respective territories. The developed countries were attracting more FDI till 2012 and now its turn for developing countries (IMF, 2013). There are two types of FDI that an economy receives, namely, brownfield and greenfield FDI. When a country receives FDI as a part of their capital investment in the existing company, it is considered as the brownfield FDI inflow. However, if the FDI is received in terms of opening a branch, subsidiary, or office, by a foreign company it is named as greenfield investment. Both the types of investments are made to earn high returns on them. However, the question answered is why do countries receive FDI in terms of greenfield investment.

The theories on FDI postulate the reasons for foreign bank entering in the host nations. There are micro and macro level theories suggesting the reasons for investment. Researchers have shown that there is no concrete theory on foreign banks' entry into the host nation. However, some of the prior studies have applied the theories of manufacturing FDI in the banking sector (Kim, 2010). Many theories related to manufacturing industry explaining the inflow of FDI are the product lifecycle hypothesis, Hymer's theory, internalization theory, eclectic theory, the gravity model etc. Units are established by manufacturing multinational firms with cheap and skilled labor to reduce production costs. However, banking is a service industry, that is, non-tangible which has production as well as consumption function at the same place. Being considered as customer oriented industry, banks expand their businesses in a profitable and large market (Focarelli and Pozzolo, 2001). Factors affecting global FDI can also be determinants of banking FDI and vice versa. Thus, it is possible to apply the determinants of overall FDI to that of banking sector FDI. However, researchers have found only two theories i.e. internalization theory and eclectic theory that are appropriate to explain why banks invest in foreign countries (Kim, 2010).

2. Initial theories

The development of theories on FDI is based on the international trade theories. The international trade theories of Smith (1776) and then Ricardo (1817) considered labor a factor of production and explained that an economy would produce and export the product which has a cost advantage and import the product which has least cost advantage. Later, Heckscher and Ohlin (1933) explained this concept by using two factors of production, labor, and capital. FDI from capital endowment country would enter into the country with labor as endowment factor to produce more and reduce imports or increase export. Vernon (1966) assimilated the theory of trade with the theories of FDI that is referred to as the product life cycle theory. He proclaimed that as the product matures competition increases, thus, the chance of losing market share arises in the domestic market. Hence, the firm would enter into a foreign market to introduce its product for which the firm has a cost advantage. In the same line, the firm has many advantages than the domestic firms in the host markets. This theory had set the ground for the competitive advantage theory.

Theories on FDI inflow initially started with the country-specific endowments. It was argued that foreign investment happens in capital endowment, natural resource endowment or labor endowment countries (Esperanca and Gulamhussen, 2002). Thus, it was believed that the

country must have a high per capita GDP or otherwise with abundant resources can attract FDI. Thus, the country-specific endowment conferred locational advantage theory.

3. The Gravity model

The Gravity model was first proposed in international economics by Tinbergen (1962). The empirical equation of this study postulates that the flow of trade and investment between the countries rises with their economic size and falls with the increase in distance and transportation costs. The model also suggests that the nearer border, common language, past colonial links, similar time-zone etc. and geographical reasons also play an important role in deciding the entry of multinationals in a host country. Moreover, it is similar to the Dunning (1987) efficiency-seeking FDI.

4. Hymer's imperfect market theory

Hymer's imperfect market theory (1960, 1978) stated that a firm chooses to go abroad instead of exporting or licensing due to its monopolistic advantage. The advantage of the firm could be patented technology, managerial skills, marketing skills, and brand name. Hymer (1978) proclaimed that the market for the monopolistic advantages and knowledge of the firm tend to be imperfect. Thus, a firm can exploit its advantages by investing abroad physically. This theory sets the platform for Internalization theory (Buckley and Casson, 1991).

5. Internalization theory

Internalization theory was developed by Williamson (1975) and Buckley and Casson (1976). The roots of the theory were in the work of Ronald Coase (1937) that was rejected then. The study had basically claimed that the technological difference among the countries had been an endowment factor. Williamson (1975) added operational integration for the reason of vertical integration and Buckley and Casson (1976) considered knowledge integration along with the operational integration which explained the growth of the multinational firm. Hence, the theory of internalization was developed. Thus, the internalization of the firm transfers technological know-how and managerial skills when it establishes abroad.

Internalization theory claims that a firm fails to get an efficient external market to benefit from its competitive advantages and resources in its home country. This could be because of the saturation of the market through competition. Thus, it creates an internal market by investing abroad in geographically diversified areas to seek business opportunities. Hence, a bank would invest elsewhere when its market gets saturated, and it does not have more opportunity in its

home country. Thus, a bank moves abroad by investing in other markets. Internal market denotes the investing abroad. When a firm cannot get benefit from its competitive advantage in its own country that is referred as external market, then it creates internal market establishing its branch abroad. Hence, the name of the theory is Internalization. Furthermore, Internalization leads to Internationalization.

6. Eclectic paradigm

Dunning's theory (1973, 1977, 1980, and 1993) of eclectic paradigm combines three theories to explain the same concept and considers the conditions for internalization. The eclectic approach is also called the OLI paradigm that represents three types of advantages: Ownership, Locational, and Internalization.

Ownership advantage – an advantage of a firm over its competitors in the host market. A foreign bank should have some advantage over the domestic banks so it can perform better than its competitor in the host nation. The firm has to differentiate its products, that happens only when it has better superior marketing skills and research & development (R&D), accumulated commercial knowledge and international experience.

A foreign bank may have advanced technology, managerial skills, brand name, marketing skills, easy access to international financial markets, experience in the multinational operations, efficient networks, established credit worthiness etc. (Cho, 1986).

Locational advantage – an advantage in the host country for the business. There should be some advantage of moving into a host location. These advantages should be gained by the firm from the business operations of the host nation. Thus, location-specific endowments play an important role in attracting a foreign firm. However, this should not be the only reason for a firm to internationalize. There should be combined locational advantages that are considered by the home firm. These advantages could be in terms of differences between home and host nation such as national regulations, interest rate differences, foreign exchange regulations, effective tax system or advantages specific to host location such as home county clients, a huge market to serve in terms of population, high savings, cheap labor, skilled labor etc.

A foreign bank may seek the advantage of the presence of their home clients due to imperfection in the factor markets, the banks have unique knowledge about their clients and they cannot sell this unique knowledge. Thus, they choose to serve them in terms of physical presence by following them in the host nation.

Internalization – a firm decides to go abroad to gain more profit instead of selling its license to another company. The firm can gain from its monopolistic advantages after establishing in the host nation. These factors could be related to the cost of funds transfers, proficient customer contacts in the host nation, network of market information (Cho, 1986).

Banking is a service Industry that needs face-to-face contacts with customers. Thus, Internalization can help to serve the potential customers easily. A foreign bank can explain its advantages over the domestic banks and establish its customer base. This can help in market penetration and gain market share in the host nation.

Dunning (1987) has extended eclectic theory and categorized the FDI into four types. i) market-seeking FDI, ii) resource seeking FDI, iii) efficiency-seeking FDI, iv) strategically motivated FDI. When a firm sees the abundant market size in the form of potential clients, an untapped market that can increase the profitability of the firm in the host country, it is considered as market-seeking FDI; When a firm sees abundant natural resources and cheap labor for the production, it is considered as a resource seeking FDI; When a firm sees the economy of scale, less transaction and communication costs that can enhance profit of the firm with the usage of natural resources of host nation then, it is considered as efficiency-seeking FDI. Moreover, efficiency-seeking FDI also considers the distance between home and host countries, similar cultures, language and currency of the host nation. When a firm follows the market leader or grabs the first mover advantage then, it is called as strategically motivated FDI.

Thus, Dunning's theory takes into consideration all the aspects of a service industry and answers why a foreign bank would go abroad.

7. Determinants of bank FDI in India- Discussion and Findings

Many developing countries have attracted foreign banks due to their locational advantages like high economic growth, less competitive market, huge population, untapped market, cheap and skilled labor, less risky and liberal regulatory requirements, etc. (Grubel 1977; Cho 1986).

Follow your client: A large trend of literature tested the *follow your home client* hypothesis (Goldberg and Johnson, 1990; Grosse and Goldberg, 1991, Brealey and Kaplanis, 1996; Nolle and Seth, 1996; Yamori, 1998; Moshirian, 2001; Mutinelli and Piscitello, 2001; Wezel, 2004; Focarelli and Pozzolo, 2005; Van Horen, 2007; Mariscal et al., 2012; Molyneux et al., 2013; Mulder and Westerhuis, 2015) and most of the studies found it relevant for multinational banks. The *follow your home client* pronounces that bank FDI enters after General FDI in an economy or in different terminology, foreign banks enter after the entry of its client from home-county

into the host nation. The hypothesis is the result of the locational advantage of the eclectic paradigm (Yeoman and Morello 2004).

The theoretical justification of a bank *follows home client* was provided by Grubel (1977) and first empirically tested by Gray and Gray (1981). Grubel (1977) answered as foreign banks follow their home clients abroad, of the raised question, what are the advantages multinational banks have that drive them to the alien country and successfully compete with the domestic banks there? Williamson (1997) explained that foreign banks incur costs on the learning about the requirements of domestic corporates that incur a heavy cost for them. Thus, following client can help them in the reduction of transaction costs (Ursacki and Vertinsky 1992), as they have complete knowledge about their home clients (Night et al 1986). Furthermore, their brand name and already established relationship with home clients allow further reduction in costs in the host market. The studies on India also found that the entry of foreign banks and bank FDI inflow is to follow and to serve their home county's clients in India (Kim, 2010 and Massand and Gopalakrishna, 2017).

Bilateral Trade: According to Rivoli and Salorio (1996), the ownership-location-internalization (OLI) advantages such as trade openness, can create a rationale for foreign investment in the host nation relatively for the long period. The literature argues that there is more chance that foreign banks established in the countries where bilateral trade or openness is already existing. Moreover, the theories of International trade (Buckley and Casson 2009) also suggested that capital endowment countries can invest in the countries to promote export by using labor and other natural resources. Thus, bilateral trade in terms of import, export, or total trade may be the reasons for foreign banks' entry. Bilateral trade relationship is not the determinants of foreign banks' entry in India (Kim, 2010 and Massand, 2019).

Market Size: The banking sector is a consumer based industry hence, if there are more potential consumers, the market size is considered as big. Foreign banks need the big potential market to gain high profits (Massand and Gopalakrishna 2017). Savings is the backbone of Investment. Higher the savings higher the Investment (Joshi 2007). Domestic savings reduce the risk and enhance demand for sophisticated products. Domestic deposit is considered as an influencing factor for US banks expansion abroad (Goldberg and Johnson 1990) however, it was not negatively influencing. Sabi (1988) found loan volume as an influencing factor for market size. Moreover, the profit giving market size was not found as the influencing factor in the study of Nigh et al. (1986) for US banks. The financial market development also represents

growth in the economy. Brealey and Kaplanis (1996) and Focarelli and Pozzolo (2003) have emphasized that foreign banks attracted towards the developed financial markets. The studies use stock market capitalization (Wezel 2005) and credit availability to private sectors (Fontagne 2007) was used to indicate the financial development of the country. However, the growing Indian financial markets and domestic savings are not the determinants of foreign banks' entry (Kim, 2010 and Massand, 2019).

Profit Opportunity: There are studies that used the micro-level indicator to represent profit opportunities such as net interest margin (NIM) (Grosse and Goldberg 1991; Molyneux et al. 1998; Claessens et al. 2001)¹ and interest rate differential (Magri et al. 2004; Voinea and Mihaescu 2006; Molyneux et al. 2013). This actually represents financial profit for the foreign banks. Moreover, the average NIM for the developed countries is below 2 percent (Das 2013), but, in the case of India, it is as high as 2.9 percent (Mohan et al. 2005). The high NIM represents less competition and foreign banks prefer such locations to enter (Claessens et al. 2001). In the case of Magri et al. (2004) interest rate differential was found as a statistically significant variable, however, Voinea and Mihaescu (2006) did not find interest rate differential as statistically significant. The results of the study by Massand (2019) have found that foreign banks' entry into India apart from huge FDI from the home country is due to locational advantages of India, such as high interest-rate differentials and low net interest margins.

8. Conclusion

The study found that Internalization and Eclectic Paradigm are the theories comprehending foreign banks entry into India that has their roots in theories of trade and manufacturing FDI. Based on these theories, the empirical studies found various determinants of foreign banks entry in India such as follow your client and profit opportunities.

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¹ These studies provided indirect evidence of profitability for the entry of foreign banks.

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IMPACT OF CROSS-CULTURAL TRAINING ON EXPATRIATES' PRODUCTIVITY

Literature Review

Expatriates are the employees of Multinational companies who are being assigned for an international assignment for a particular period and being sent from one country (home country) to the other (host country) for completion of that assignment (Littrell et al., 2006). Expatriates are primarily deployed in order to transfer technical knowledge and inculcate corporate culture in the newly established firms in the host country. In view of this fact, the expatriate adjustment phenomenon is confronted by the multinational organizations. Supporting activities such as coaching and mentoring, training in practical skills, work related law and management etc. are very important for expatriates' adjustment (Sunayana and Aslam, 2019). Adjustment of expatriates to the host country culture revolves round the host culture, individual factors, work related factors and organizational related factors (Aryee and Stone, 1996). In order to impart adjustment, the information technology (IT) companies use expatriates who possess a set of competencies to encounter changing situations in the host country (Adler and Bartholomew, 1992; Ronen, 1989).

Objectives of the study

1. To study the effect of cross-cultural training on expatriates' productivity in IT industry.

Research Methodology

The data is collected from a sample of 115. Purposive or Judgement Sampling- a Non-probability sampling method is used for the study. In this study, the researchers select the expatriate employees of IT companies based on their judgement who meet the necessary research criteria. To be eligible for our study, expatriates had to meet two conditions. First, they had to have completed an employer- sponsored international assignment that required them to move to a foreign country. Second, the expatriates should have undergone cross cultural training in the beginning of their international assignment to mitigate the risks of their failure. A 5-point (5 = Strongly Agree, 1 = Strongly Disagree) Likert's Scale is used to indicate subject's responses to the questionnaire. Secondary data collection was from previous research reports, magazines, articles, websites, journals and related books. The collected data is analysed using the statistical software MS-EXCEL and SPSS.

Results and discussion Using the empirical findings from questionnaire survey this study explored several potential antecedents of expatriate training. The demographic data of 115 respondents of this study are shown in the given Table.

Variables	Description	Frequency	Percent
Gender	Female	36	31.3
	Male	79	68.7
Age (Years)	20 - 30	55	47.8
	30 - 40	37	32.2
	40 - 50	15	13
	Above 50	8	7
Work Experience	Less than 5 Years	13	11.3
	5 - 10 Years	50	43.5
	10 - 15 Years	32	27.8
	15 - 20 Years	16	13.9
	Above 20 Years	4	3.8
Area of Work	H/W	44	38.3
	S/W	52	45.5
	Other	19	16.2

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INDIA IN THE REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP: A SERVICES INDUSTRY PERSPECTIVE

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Abstract

Regional Comprehensive Economic Partnership (RCEP) negotiations were launched by 16 countries including 10 ASEAN members, Australia, China, India, Japan, Republic of Korea and New Zealand on November 20, 2012. The objective is to move beyond ASEAN+ FTA's and create the world's largest trading bloc covering nearly half of the global economy and around 40% of world 's trade. Services contribute more than 50% to the national GDP of all the RCEP countries. The diversity of interest and level of ambitions of each participating country has make the services negotiations in RCEP a challenging one.

Study aims to analyze and understand the services trade patterns and comparative advantage among RCEP countries, highlight India's experiences in the past services agreement and comments on key concerns for India in RCEP. RCA index shows that RCEP will open the market for highly competitive services economies like China, Philippines, Singapore which are far more competitive in both infrastructure/manufacturing, knowledge and skill-based services such as logistics, transportation, construction, financial, IT services. Services may emerge as a competitive front for India in RCEP, depending on the relative extent to which RCEP countries undertake commitments on liberalization in trade in services. RCEP is a highly diversified region, especially when it comes to Services; the risk of entering the FTA is big. An open and transparent approach in the services sector, clearly laying out in public domain the expected gains in market access, the MRAs and other regulatory facilitating mechanisms for services exports being negotiated and demands of RCEP partners for services access into the Indian market is very important.

Keywords: Regional Comprehensive Economic Partnership, RCEP, Trade in Services, Revealed Comparative Advantage in Services, Movement of Natural Person, ASEAN, MRA's.

Introduction

Regional Comprehensive Economic Partnership (RCEP) negotiations were launched by 16 countries, including 10 ASEAN members, Australia, China, India, Japan, Republic of Korea and New Zealand on November 20, 2012. The objective is to move beyond ASEAN+ FTA's and create the world's largest trading bloc covering nearly half of the global economy and around 40% of the world's trade.

The worrying trade deficit in goods with RCEP members and especially with China has increased the expectations from the services sector to balance the deficit. Around 65% of India's Trade deficit in goods alone stands with the RCEP nations. China, the elephant in the room, alone accounts for half of India's total trade deficit nearly \$63 billion in the FY 2018-19. This has put a lot of pressure and expectations on the Indian services industry.

Presently, Services is at the core interest in the ongoing Regional Comprehensive Economic Partnership [RCEP] negotiations for India. The diversity of interest and level of ambitions of each participating country has made the services negotiations in RCEP a challenging one.

Services may emerge as a competitive front for India in RCEP, depending on the relative extent to which RCEP countries undertake commitments on liberalization in trade in services (Chandran 2018). Study aims to analyze and understand the services trade patterns and comparative advantage among RCEP countries, highlight India's experiences in the past services agreement and comments on key concerns for India in RCEP.

An overview of Services Trade in RCEP

Services is the most important sector for India. It alone contributes more than 50% to GDP, around 33% to employment and nearly 60% in Foreign Investments in India. India's trade surplus in services trade reached 74 billion USD in 2018. In fact, the services are the interest of almost all RCEP members, since services contribute more than 50% to the national GDP of all the RCEP countries. Table 1 shows the Services Trade Openness of RCEP economies. Services Trade openness is calculated as imports and exports as a percentage of GDP. The larger the percentage, the more the country is exposed to international trade. Singapore is the highest among RCEP members in trade openness followed by New Zealand, Australia and Thailand.

Table 1: Services Trade Openness (2017)

Country	Services Trade Openness	Country	Services Trade Openness
Australia	16.43	Myanmar	5.85
Brunei Darussalam	4.38	Malaysia	11.68
China	14.86	New Zealand	18.90
Indonesia	2.43	Philippines	11.35
India	7.14	Korea	5.72
Japan	14.14	Singapore	50.84
Cambodia	21.22	Thailand	16.62
Lao PDR	5.26	Vietnam	5.87

Source: World Development Indicators, World Bank

Table 2 shows that RCEP members account for around 21.36% of world exports of services in 2018 and an even higher 27.01% of world imports. China have highest trade deficit followed by Korea, Japan and Indonesia. India and Thailand have the highest trade surplus followed by Philippines, New Zealand, Cambodia and Myanmar. The credit for India's favourable services balance mainly goes to Telecommunications, computer, and information services and other business services. Thailand mainly exports travel and business services, Philippines - Business services, New Zealand - Financial and Travel services. In terms of share in world services exports- China, India, Japan and Singapore are leading in RCEP. China's heavily imports transport, intellectual property and insurance related services & its imports has already surpassed the exports however its huge contribution in construction, transport, other business services and travel services exports makes it the largest services exporter in the RCEP.

Table 2: Comparison of Services trade balance scenario of RCEP countries (Value in USD Billion)

Country	Exports (2018)	Imports (2018)	Net	Share in world services exports (%)	Share in world services import (%)
Australia	69.17	71.85	-2.68	1.19	1.30
Brunei Darussalam	0.58	1.57	-0.99	0.01	0.03
China	266.84	525.03	-258.19	4.57	9.53
Indonesia	27.93	35.03	-7.1	0.48	0.64
India	205.10	176.58	28.52	3.51	3.21
Japan	192.01	200.04	-8.03	3.29	3.63
Cambodia	5.45	3.01	2.44	0.09	0.05
Lao PDR	0.92	1.15	-0.23	0.02	0.02
Myanmar	5.37	3.98	1.39	0.09	0.07
Malaysia	39.64	44.54	-4.9	0.68	0.81
New Zealand	16.89	13.73	3.16	0.29	0.25
Philippines	37.46	26.97	10.49	0.64	0.49
Korea	96.60	124.26	-27.66	1.65	2.26
Singapore	184.01	186.95	-2.94	3.15	3.39
Thailand	84.09	55.27	28.82	1.44	1.00
Vietnam	15.10	18.39	-3.29	0.26	0.33
RCEP Total	1247.16	1488.35	-241.19	21.36%	27.01%

Source: Compiled by Authors from ITC Trade Map

Table 3: India's bilateral services trade with RCEP members

Country	Export	Import	Trade Balance	Year
Australia	1661	3382	-1721	2017
China	537	940	-403	2016
Japan	1812	2444	-632	2017
Malaysia	844	502	342	2017
New Zealand	188	801	-613	2017
Singapore	3826	3680	146	2017

Source: WTO data (<https://data.wto.org/>)

While disaggregated country wise trade data are not available for all RCEP countries, India has a deficit in trade in services with Australia, China, Japan and New Zealand (countries which have good export share in RCEP). As per the data available from WTO, Education related travel (Australia and New Zealand), Other business services and transport related services (Japan), Transport and travel services (China) are mainly contributing to India's services imbalance with these countries. Evidently, India's strength in the areas of Computer and Information services and other business services (even after good contribution in exports) has not helped to balance the services trade in any of the above major RCEP economies.

Revealed Comparative Advantage (RCA) for RCEP countries indicate India's strong position in services like travel, other business services, telecommunication and computer related services. RCA index reveals that except for telecommunication and computer services, India has strong competitors in RCEP. Even for the telecommunication and software exports, China and the Philippines are emerging as strong competitors in the region. Australia, Indonesia, Malaysia and Thailand are key destinations for travel and tourism related services in RCEP. Other Business Services which mainly comprises of professional services like architectural, consultancy, legal, accounting, medical professionals and nurses, etc. which are the 2nd largest services exports from India, have strong competitors like China, Indonesia, Japan, Philippines and Singapore in RCEP. China, Japan and Korea are at comparatively stronger position in the construction services sector and similarly competitive in Transport sector along with

Singapore. Singapore is also the most attractive financial services centre in the RCEP region. Overall, RCA scores do not indicate a very positive picture for India except for IT & Ites Services and tourism sector.

Average RCA (2014-2017) based on **Balassa index**, introduced by Béla Balassa and Mark Noland (1965) on the Ricardian Comparative Advantage theory introduced by David Ricardo has been calculated to find the relative advantage of member countries in a certain services as evidenced by trade flows. Scores above 1 indicates strong position of a country in services.

Table 4: RCA Analysis for RCEP members (2014-2018)

Country	Travel	Other business services	Transport	Financial	Telecommunications, computer, and information services	Construction	Insurance
Australia	2.8	0.65	0.61	0.68	0.35	0.2	0.27
China	0.76	1.28	0.94	0.17	1.31	4.33	0.79
Indonesia	1.93	1.01	0.81	0.19	0.44	0.86	0.1
India	2.81	1.26	0.54	0.36	3.34	0.64	0.52
Japan	0.69	1.01	1.09	0.67	0.23	3.03	0.45
Malaysia	2.07	0.75	0.67	0.14	0.74	1.12	0.37
New Zealand	2.49	0.4	0.73	0.38	0.4	0.64	0.34
Philippines	0.8	2.41	0.4	0.11	1.61	0.11	0.13
Korea	0.66	0.97	1.72	0.24	0.41	6.66	0.32
Singapore	0.47	1.18	1.64	1.63	0.68	0.29	1.48
Thailand	3	0.68	0.52	0.11	0.08	0.36	0.05

Source: Compiled by Authors from ITC Trade Map

India's existing trade agreements in services with RCEP members

India already have existing FTA's covering services with RCEP countries like ASEAN, Japan, Korea and in-talks with Australia and New Zealand for Comprehensive Economic Cooperation Agreement covering services. ASEAN-India agreement on Trade in Services signed on November 13, 2014, came into effect on July 1, 2015 covering GATS plus commitments with fair sectoral coverage of services and different modes of supply. Among 10 member countries, Indonesia and Cambodia has not yet ratified the agreement. Indonesia believes that Indian professionals will flood their markets if they sign the agreement (Basu 2018). Separate schedules for Philippines and Indonesia in the current services agreement remain a contentious issue for Mode 4 (Nataraj and Sinha 2013). India's services trade with ASEAN has grown from US\$ 30 billion in 2010 to US\$ 45 billion in 2016. India might have surplus in trade in services with ASEAN but the scope is highly unrealized due to lack of progress on market access issues within ASEAN (Prabir, De 2018). India is a net exporter of most of the services of which ASEAN is net importers indicating trade potential for India (Nataraj & Sinha 2013)

Joint Study Group (JSG) Report preceded Comprehensive Economic Partnership between India and the Republic of Korea states that the actual trade exchanges have shown very limited progress especially in the IT/ITeS services, MoNP where India has expected the most (Seshadri, V. S. 2015). Absence of any commitment by Korea in the health sector including hospital, medical, dental, nursing and physiotherapist services and the condition on local presence under Mode 1 for a whole range of services like architectural, engineering and advertising services is a strong limitation. Japan has offered good concessions under the India-Japan CEPA, most of them are without restrictions and substantive under Mode 1 and Mode 4, still the trade impact has not come out in favour of India (Das, Ram Upendra 2014). India has unfavorable trade balance in services with Japan, nearly around 600USD million in 2017 (OECD Stats).

Liberalisation of Services in RCEP: The Cautious Note

Around 65% of India's total Trade Deficit i.e \$105 bn out of \$164 bn in goods during 2017-2018 stands with the RCEP nations, mainly with China (50%) followed by ASEAN (12.6%), Korea, Australia, Japan and New Zealand. Huge trade deficit in goods has increased expectations from the Services sector. India has exported \$38 bln and imported \$29 bln worth of services from the grouping during 2017-18 (Trade in Value Added Database, OECD) (Suneja 2019). Total services trade of \$67 bln does not reflect a considerable number with such

a big region. In fact, the overall anticipated gains from the existing FTA in services with the RCEP countries has not been as positive as expected. Due to lack of disaggregated & country specific data for trade in services, the actual impact can't be quoted.

Since, RCEP guiding principles emphasized for more comprehensive and high-quality negotiations for trade in services, it projects an opportunity to the participating countries to consolidate the ever proliferating and overlapping sets of FTAs between themselves (Anuradha, R.V. 2013).

Due to high potential in skilled & professional services, India has been trying hard, especially in the mode-4 (Movement of natural persons) and Mode -1 (Cross Border Supply) for maximum market access. India has proposed for more business-friendly visa regime through a visa-fee waiver on a common reciprocal basis, and an RCEP Business Travel Card aimed at facilitating liberal movement of professionals and tourists in the region which was not accepted by most of the RCEP members (Suneja 2019). India's focus on movement of natural persons, even if acceded may not benefit as expected without strong Mutual Recognised Agreements (MRA) with RCEP partners. Going with the earlier experiences, India's FTA with Singapore, Japan and Korea has the provision for MRAs in professional services such as architects, doctors, accountants, auditors, dentists and nurses, however till date the only MRA signed is Nursing services MRA with Singapore.

Referring to the RCA analysis, Indian IT/Telecom and business sector enjoys competitive advantage but still the sector has strong competitors like Philippines and China, Australia and Thailand/Malaysia in Travel services especially education related and personal travel respectively. There are other services also like Intellectual Property and manufacturing related services in which RCEP countries have high potential. Japan has high potential in IP related services whereas Malaysia stands for highest in manufacturing related services and these services when open-up may be a tough competition for India. RCEP will open the market for highly competitive services economies like China, Philippines, Singapore which are far more competitive than India in both infrastructure/manufacturing, knowledge and skill-based services such as logistics, transportation, construction, financial, IT services.

In the view of top three premier think tanks in India, the gains in services in RCEP would be to the tune of US\$ 20 billion even as a best case scenario which is a miniscule gain and will

not be able to compensate for the higher amount of goods imports, especially from China (Kukreja 2019). RCEP is a highly diversified region, especially when it comes to Services; the risk of entering the FTA is big. An open and transparent approach in the services sector, clearly laying out in public domain the expected gains in market access, the MRAs and other regulatory facilitating mechanisms for services exports being negotiated and demands of RCEP partners for services access into the Indian market is very important. The diverse economic region with varying degrees of interests is the main challenge in RCEP.

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EXPLORING DIMENSIONS OF ETHICAL WORKPLACE CLIMATE IN NONPROFIT ORGANIZATIONS

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Abstract

Ethical climate has been an important area of research in the domain of organizational behavior. The research focuses on the ethical workplace climate in nonprofit organizations. It develops a deeper understanding by focusing on the organizational internal environment characteristics. The study adopted the critical incident technique (CIT) as an appropriate qualitative methodology for building a conceptual and theoretical understanding of ethical workplace climate in nonprofit organizations. The qualitative inquiry conducts 74 semi-structured interviews of people working in 30 different nonprofit organizations. The data in the transcript were coded based on recurring themes. It was done through iterative processes. Common or dominant themes were identified and responses were summarized accordingly. The findings advances the ethical climate literature by discovering new dimensions of ethical workplace climate in the nonprofit organization.

Keywords: *ethical climate, ethical workplace climate, nonprofit, NGOs, critical incident technique, qualitative methodology*

1. Introduction

Organizational climate is a widely researched topic in the area of organizational behavior and industrial psychology. It plays a very important role in influencing various individual and organizational level outcomes. . The term organizational climate refers to the shared perception or the cognitive makeup of individuals about various aspects of life in the organization. The experience of what is being expected, supported, acknowledged, or rewarded in an organization builds the perception of individuals working in the organization. Organizational climate is defined as, “the meanings people attach to interrelated bundles of experiences they have at work.” (Ehrhart, Schneider and Macey, 2013). The prevailing trend of the situation, in a

continuum, and the meaning attached to the situational settings craft shared perceptions about various aspects of life in the organization.

Ethical behavior and practices are studied as a special form of organizational climate. This special form of organizational climate called the ethical work climate was first introduced by Victor and Cullen in 1988. The theory embodies normative values and beliefs shared by actors in a social setting. Ethical climate is important in identifying the normative systems that guide organizational decision making and the systemic responses to ethical dilemmas (Victor and Cullen, 1988). However, the theoretical lens, despite being ubiquitous popular and predominantly applied in various forms of organizations, face reliability and validity issues for research on nonprofit organizations.

2. Literature Review

The theoretical development of the ethical work climate

The early conceptualization of the ethical work climate presented a 3 by 3 metrics along two dimensions, wherein nine possible themes of the ethical climate were crafted in organizational contexts (*Figure 1: found in italic font in lower case letter*). The theoretical basis of the two dimensions drew on philosophical (ethics) and sociological perspectives.

The first dimension of the framework (i.e. ethical criteria) - used for organizational ethical decision making – is categorized under three major classes (i.e. egoism, benevolence, and principle or deontology) of ethical theory. Each of the ethical criteria respectively differs in terms of their moral reasoning (i.e. maximizing self-interest, or joint interest, or adherence to principle).

Locus of Analysis			
Ethical Criterion	Individual	Local	Cosmopolitan
	<i>Self-Interest*</i>	<i>Company Profit</i>	<i>Efficiency</i>
	INSTRUMENTAL		
	<i>Friendship</i>	<i>Team Interest</i>	<i>Social Responsibility</i>
	CARING		
	<i>Personal Morality</i>	<i>Company Rules and Procedure</i>	<i>Laws and Professional Codes</i>
	INDEPENDENCE	RULE	LAW & CODE

The second dimension of the framework (i.e. locus of analysis) is drawn from the roles and reference groups. This dimension was classified into individual, local, and cosmopolitan. The ‘cosmopolitan’ loci of analysis are referred to as a social system wherein sources of role definition are external to the system in which the actor is embedded. Likewise, the ‘local’ loci of analysis were referred to wherein sources of role definitions are enclosed within the social system. Furthermore, the ‘individual’ loci of analysis refer to ethical reasoning located within an individual that is idiographic based and may contain ethical orientation of hedonistic or existentialistic nature.

Ethical work climate in the context of the nonprofit organizations

The review found that the ethical work climate theory has been less investigated in the nonprofit context. There are no significant climate perceptions based on the ‘local’ dimension of locus of analysis (individual and cosmopolitan loci of analysis are polarized), (Agarwal and Malloy, 1999). Factors that have been employed traditionally by for-profit management, such as length of service, codes of ethics, size of the organization and peer pressure, do not effectively influence ethical perception in the nonprofit context, (Malloy and Agarwal, 2003). Various research studies (Malloy and Agarwal, 2010; Laratta, 2010; Laratta, 2009; Rasmussen, Malloy, and Agarwal, 2003; Malloy and Agarwal, 2001; Brower and Shrader, 2000; Deshpande 1996a; Deshpande, 1996b) raised issues at the level of conceptualization of the theory and suggested for major revisions.

3. Methodology

The research employed critical incident technique (CIT), introduced by Flanagan (1954), as the qualitative methodology. CIT is essentially a classification technique employed to do a qualitative analysis of incidents, stories, or observations to capture and examine the life world as experienced by the participants in respect to the ethical workplace climate nonprofit organizations. In this study, an easy and uniform conception of ethical workplace climate is an essential aspect of drawing from the perception of individuals working in the context being studied.

Problem identification

The study aims to develop conceptual understanding of the ethical workplace climate, recognize the dominant ethical criteria, and reveal the underlying dimensions (i.e., frame of reference). The following three overarching research questions guide the research.

1. What constitutes the perception of an ethical workplace climate?
2. What frame of reference(s) contribute(s) in constructing the perception of ethical workplace climate?
3. What influence (negative or positive) the perception of ethical workplace climate has on an individual level and at the organization level?

3.1. Participants

There were two simultaneous approaches undertaken in order to reach out to the prospective respondents for their voluntary participation in the study. Prospective respondents were reached out with the help of organizations in one approach and the approach included the respondents who were contacted directly through convenience and a snowball method. The study conducted semi-structured interviews. The study conducted 74 semi-structured interviews of people working in nonprofit organizations. The participants were associated with 30 different organizations working in 16 different states of India. Interviews were carried out in two modes i.e. telephonic and face-to-face. The study carried out a total of 74 interviews in which 63 interviews were telephonically conducted and 11 interviews were done face-to-face. The average time of the interviews was 64 minutes. The shortest interview was of 25 minutes and the longest was of 118 minutes. The sample demography is presented in table 1 below.

		Sample = 74	
		Frequency	Percentage (%)
Organization Type	Non-government Organization (NGOs)	59	79.7
	Government Promoted Organization	1	1.4
	Non-profit company (Section-8)	6	8.1
	Others	8	10.8
Gender	Male	43	58.1
	Female	31	41.9
Age	Up to 30 Years	15	20.3
	31 to 45 Years	33	44.6
	46 to 60 Years	25	33.8
	Above 60 Years	1	1.4

Sample = 74			
		Frequency	Percentage (%)
Work	1 to 3 Years	9	12.2
Experience	3+ to 5 Years	5	6.8
	5+ to 10 Years	19	25.7
	10+ to 15 Years	9	12.2
	15+ to 20 Years	9	12.2
	20+ to 30 Years	16	21.6
	Above 30 Years	7	9.5
Source: Interview data			

Table 1: Sample Demography

4. Data interpretation and findings

The content analysis of the transcripts found two prime categories in the data. The first category pertains to the events or incidents, occurred in a workplace setting, recalled by the participants. These descriptions associate certain information about the events such as when and where it occurred and who (with anonymity) were involved in it. Many of the descriptions also elicited the repercussions of the incident and the position, perception, or value judgment (right or wrong) of the respondents. The second category relates to all those reflective statements that do not qualify as events. The reflections produced certain experiences, beliefs, or judgments of the participants. It included different forms of reflective statements such as worldviews of the respondents, assertion followed or preceded by a normative statement, etc.

Majorly, there were 121 events and 409 reflective statements found in the transcripts of the 74 interviews. The varying nature of the events and reflective statements, different kinds, and levels, were appropriately coded (i.e., open, axial, and selective) for purporting qualitative analysis. The study, however, incorporated elaborative coding to classify the incidents based on the three major ethical criteria (i.e., egoism, benevolence, and principle), considered theoretically and empirically relevant and also predominant in this domain of research. These ethical criteria, after ascertaining their convergence to the themes discovered in the axial coding, are taken at the level of the selective coding scheme. Similarly, the coding schemes (i.e., open, axial, and selective) are adopted to discover the prominent frame of references (or levels) in the descriptions (i.e., incidents or reflective statements. Likewise, the coding schemes were also applied to identify the effects variables.

The findings of the qualitative inquiry identify two broad levels of the frame of reference. The first relates to the individual level and the second pertains to the group (or social) level. Further, it identifies three important constituents (i) colleague, (ii) leader, and (iii) organization of the group-level factors. The ethical criteria and frame of references were together used to identify the themes and sub-themes in the data. The juxtaposing of the two broad dimensions (i.e., ethical criteria and frame of references) discovered a total of four major themes and twelve sub-themes to add to the design of the conceptual framework of the ethical workplace. At the individual level, the sub-themes were identified as self-interests, self-respect, and self-regulated. At the colleague level, the sub-themes were identified as cooperation, mutual respect, and confrontation. At the leader level, the sub-themes were identified as nurturing, benevolent leader, and integrity. Similarly, sub-themes such as learning organization, employee care, and values of the organization were identified at the organizational level.

These sub-themes were clubbed into major themes, the sub-themes at the individual level are clubbed as Individual self-interest, the sub-themes at the colleague level is considered as collegiality. Likewise, the sub-themes of the leader level are clubbed as stewardship, and the sub-themes at the organization level are clubbed as organizational internal legitimacy. Figure 1 presents the conceptual framework emerged from the major themes discovered in the selective coding scheme. The constructs or themes are defined as follows.

The shared perception of individual's self-interest refers to acts or behavior exhibited in order to maximize one's interests, in a public sphere. Collegiality refers to cooperative interaction among colleagues, respect for colleagues' commitment, and working together for a common purpose in a workplace. Supporting colleagues professionally and possibly personally despite having competing goals in a workplaces is the basic ethos of collegiality. Leaser stewardship strives for minimizing the disparity, in all forms, between employees working at any level (lower or high) in the organization. Organization internal legitimacy: It is another cross-cutting idea important from the ethics point of view. It is about the organization's internal affairs and refers to how the organization's actions, decisions, and behavior are accepted or supported by the people in the organization. Ethical workplace climate: is a shared perception based on a set of direct or indirect experience to the happenings in a workplace and their judgments on certain ethical criteria. The term "ethical" represents having to do with right and wrong notions.

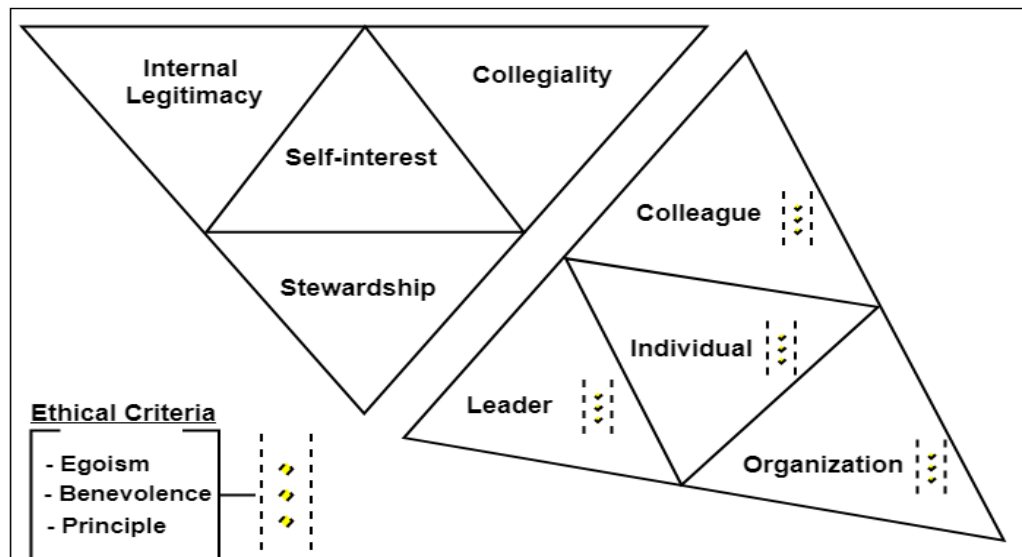


Figure 1: Conceptual model of Ethical Workplace Climate in nonprofit organizations

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THE IMPACT OF MARKET DYNAMISM ON INTRAPRENEURSHIP: EVIDENCE FROM INDIAN SERVICE SECTOR

Introduction

The interminable changing face of businesses all around the world due to globalization and advancement has led the organizations to be more competitive and innovative than ever. For the service sector, the advancement is even brisk owing to breakthrough technology and digitalization. So, in this utopian business world, the organizations must redefine and reinvent their resources and vision. Intrapreneurship is believed to be useful in revitalizing and improving the performance of the businesses. In simple words, it can be defined as entrepreneurship within the organization (Menzel *et al.*, 2006). Intrapreneurship is defined through (a) new product, service and technology development (Innovativeness); (b) ability of the firm to take the initiatives, rather than follow, and adopt bold posture (Proactiveness); (c) going for high-risk projects with the expectations of high return, and experimenting (Risk-taking); (d) redefining the strategy and going for structural change in the organization (Self-renewal); and (e) entering new businesses and exploiting opportunities related to existing products and services (New business venturing). On the other hand, market dynamism is simply defined by Rumelt (1984) as the market that portrays a high rate of entry and exit. It is a market condition characterized by high instability and continuous changes. Identifying competitors and technological trends in the market is also rewarding for small businesses like travel agencies (Sunayana and Parveen, 2019a). The dynamism seemed to be favourable to the firm in adopting intrapreneurship because it tends to create opportunities for them. Moreover, a firm's performance can be defined by the changes in technology, government regulations and the challenges that it faces in the industry within which it operates.

Objective and Methodology

This led to formulating the objective of this paper to find out the effect of market dynamism on intrapreneurship of the organization, particularly the Indian service sector. The sample of the study consists of the companies listed in *Great Place to Work* For list of "Indian's top companies to work for" [1]. The questionnaire was mailed to 140 employees working at the managerial level as well as the subordinate level in their organization. 35 people have responded to the survey making a response rate of 25%. The respondents belong to the various sector including information technology, utilities, financial services, etc.

The responses were recorded using a five-point Likert scale through the questionnaire. To measure the market dynamism, items used by Zahra (1991) and refined by Antoncic and Hisrich (2001) were adopted, consisting of three items. The intrapreneurship items were adopted from Zahra (1993), Amo (2006), and Wang *et al.* (2013), which have 16 items to measure 5 dimensions. The overall reliability of items shows a Cronbach's alpha of .846, which indicates a good acceptable value.

Analysis and Interpretation

Simple linear regression was used to assess the impact of market dynamism on intrapreneurship. The results of correlation analysis (Table.1) showed that the independent variable, dynamism is significantly correlated with each dimension of the dependent variable except for new business venturing. Although the relationship exists but is not significant.

Table.1 Descriptive statistics and correlation matrix

Variables	Mean	SD	1	2	3	4	5	6
1.Dynamism	3.72	0.927	1.00					
2.Innovativeness	3.20	1.037	0.528**	1.00				
3.Proactiveness	3.28	1.121	0.676**	0.503**	1.00			
4.Risk-taking	3.06	1.046	0.290*	0.567**	0.666**	1.00		
5.Self-renewal	3.95	0.751	0.328*	0.621**	0.310*	0.480**	1.00	
6.New business venturing	3.82	0.768	0.238	0.420**	0.346*	0.525**	0.786**	1.00

The R^2 value presented in Table. 2 indicates that 30.1% of the variance in intrapreneurship is explained by market dynamism. The p-value of 0.01 (<0.05) in Table. 3 signifies that the model is a good fit for data, i.e. intrapreneurship significantly changes with the change in market dynamism.

Table.2 Model Summary^b

Model	R	R^2	Adjusted R^2	Std. Error of Estimate
1	.548 ^a	.301	.280	.63098

a. Predictors: (Constant), Dynamism

b. Dependent Variable: Intrapreneurship

Table. 3 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		

1	(Constant)	1.823	.448		4.074	0.000
	Dynamism	.440	.117	.548	3.768	0.001

a. Dependent Variable: Intrapreneurship

Conclusion

The dynamic nature of the environment in which a firm operates, demands a very adaptive and flexible decision-making process from the managerial point of view (Sunayana and Parveen, 2019b). The empirical results here indicated a positive association between market dynamism and intrapreneurship. It means the instability in the business environment will lead to more entrepreneurial initiatives by the organization to cope up with that change. This result is in accordance with the one by Antoncic and Hisrich (2001) who defined intrapreneurship by the enabling factors of organization and environment, including market dynamism. The companies in the sample are already known for its workplace culture and environment. This study further examined them through a different perspective and tries to find out the intrapreneurial activities in those organizations. The results of this study will help those companies who are constantly faced by an uncertain and unpredicted environment but strive to be innovative and competitive.

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RESEARCH ON THE WORKING ENTHUSIASM OF CHINESE VENTURE ENTERPRISE PARTNERS UNDER THE FINANCIAL ENVIRONMENT OF MOBILE INTERNET

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Abstract

In china, a small proportion of entrepreneurial partnerships are now using mobile Internet finance. Partners can read profits and losses on their mobile phones at any time, understand specific accounting entries, and directly check the original voucher photos under the accounting entries. In this case, what changes will there be in the enthusiasm of partners to work? This paper makes an empirical analysis of this problem by collecting the samples of partnership enterprises in the entrepreneurship park and the samples of enterprises outside the entrepreneurship park. As far as our sample is concerned, we find that the enthusiasm of partners has significantly improved the enthusiasm of partners in the Internet financial environment.

Introduction

In the process of starting a small and micro enterprise, Partners are a critical and complex issue. In the partnership team, there are leading partners and following partners. A considerable part of the partnership teams, some following partners, the work enthusiasm is very positive from the beginning of the partnership, then slowly become negative, and finally left the partnership team. One of the main reasons is that these following partners complain that they are not financially clear, that they do not know the real costs, profits, and how much they will eventually get in return..With the development of the mobile Internet, it is now easy to see monthly financial statements, monthly accounting entries and monthly direct accounting original vouchers on mobile phones. As a partner, to know the financial situation, first of all, he/she should want to know the last month's earnings and losses. Now we can read the profit statement from mobile,as follows:

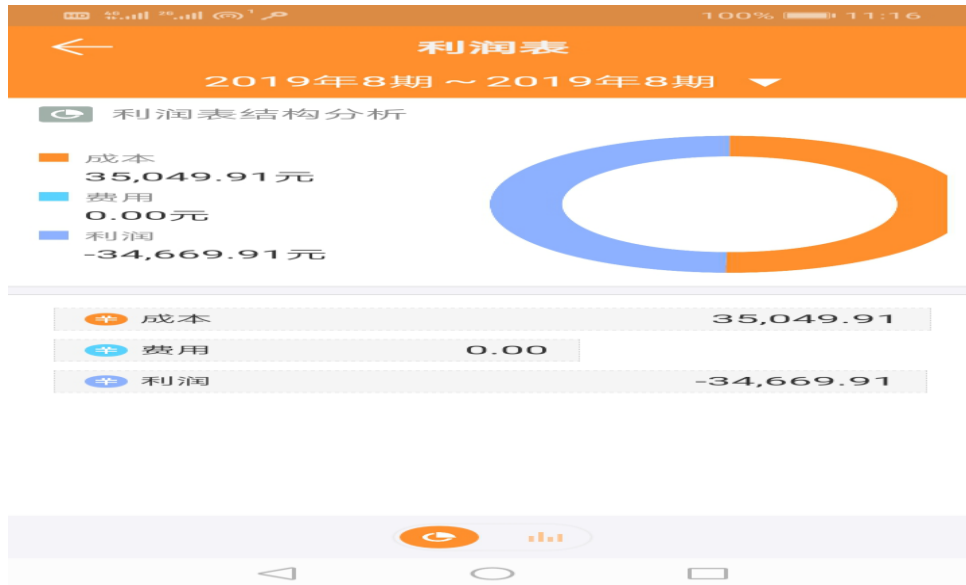


Figure 1 profit statement in august 2019

When the partner read the profit statement, then he/she want read the detailed accounting entry.

In our case, the accounting entry is as figure 2:

When the partner read the accounting entries, maybe he/she is wandered about a accounting entry, he/she want check the original accounting voucher, then he/she can tap the accounting entry, and the photograph of the original accounting voucher willbe displayed as follows figure 3.

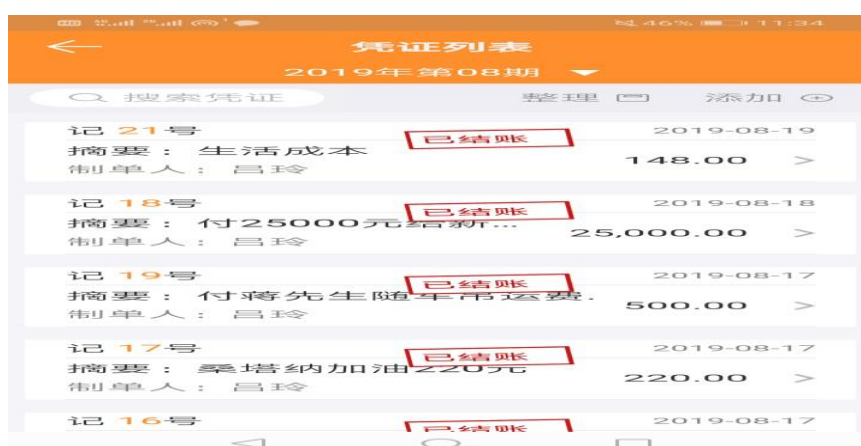


Figure 2 part of accounting entries in august 2019

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贷：101201_其他货币资金_零钱	25,000.00

制单人：吕玲

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Statement (Check Book Withdrawal Slip Return)	Other Transaction Card Retained
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Accepted Rejected	Please Contact Bank
日期及时间 Date and Time	终端机编号 Terminal Reference
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1. 存款通知本打复核后才存入账户。未存入支票。由本行以代收方式处理。请款项待交款后方能使用。
Deposit will be credited to your account after verification by the Bank. Cash will be collected for collection only after verification by the Bank.

2. 本行不办理24小时办理资金转账。
The Bank will not do so.

3. 客户服务热线：95599
Call Center: 95599

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Figure 3 the dubious accounting entry and its attached original voucher

If this mobile internet financial environment will affect the behavior of the following partners, such as the working enthusiasm of following partners, this is the main topic of this paper.

Literature review

Huang Shizhong (2015) argue that the mobile Internet environment has brought about a lot of business model innovation, how to confirm the assets, such as the flow of assets recognition, these are not before, at the same time, the mobile Internet field of practice innovation is far ahead of the theoretical innovation, the theory has lagged far behind the practice.

Samples

The research sample mainly comes from an entrepreneurial park in Kunming City, Yunnan Province, China, while the other part of the sample enterprise does not enter the Entrepreneurship Park. These samples have the following two characteristics: many of the partners in the sample enterprises are familiar with the author himself and are business owners who have met and communicated with each other, and some of the samples are entrusted by these business owners again, that is to say, all the samples have only two entrustment relationships at most; The second feature is the sample of most of the enterprises in the entrepreneurial park, these partners generally understand the financial situation of the entrepreneurial enterprise, or even very clear the details of each voucher, and most of the enterprises outside the entrepreneurial park, their partners will have a much worse understanding of the financial situation. now we only get 14 samples, theSample collection is continuing

The questionnaire

There are 18 questions about the questionnaire on the enthusiasm of the partners in this paper, 1-10. Taking charge (Morrison & Phelps, 1999, other-rated),11-14. Uncertainty of partner trustworthiness (Adapted from Colquitt et al. 2011, self-rated),15-18. Trust with partner (adapted from Mayer & Davis, 1999, self-rated)See appendix I for details.

Methodology

we will use system equations and the structural equation model to analyze the sample data, and the compare the results through two methods. this paper use system equations.

Analysis

The summary of the sample is as follows:

Variable	Obs	Mean	Std. Dev.	Min	Max
financialu~g	14	1.857143	.8644378	1	3
workingent~m	14	3.75	.9445553	1	5
gender	14	.7857143	.4258153	0	1
age	12	38.5	6.721742	28	46
teamrole	14	2.142857	.5345225	1	3
degreeofed~n	14	3.642857	.6333237	3	5

Chart1 summary of the samples

For this system, we obtain two equations by means of forward selection and backward selection.

$$\begin{cases} \text{workenthusiasm} = \beta_{10} + \beta_{11}\text{financialunderstanding} + \beta_{12}\text{age} + \varepsilon_1 & (1) \\ \text{workenthusiasm} = \beta_{20} + \beta_{21}\text{educationdegree} + \varepsilon_2 & (2) \end{cases}$$

To check the model specification, we test multicollinearity, heteroskedasticity, Ramsey test omitted variables, we get this system equations for this system.

To resolve this system equation, we use three stage ols estimation, the result is as follows:

. reg3 (workingenthusiasm = financialunderstanding age) (workingenthusiasm = degreeofeducation)

Three-stage least-squares regression

Equation	Obs	Parms	RMSE	"R-sq"	chi2	P
workingent~m	12	2	.5192889	0.6922	23.06	0.0000
2workingen~m	12	1	.6313288	0.5450	11.40	0.0007

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
workingent~m						
financialu~g	.6020669	.1716477	3.51	0.000	.2656436	.9384901
age	.0653837	.0198366	3.30	0.001	.0265047	.1042627
_cons	.0096002	.8451288	0.01	0.991	-1.646822	1.666022
2workingen~m						
degreeofed~n	-.9377202	.2776983	-3.38	0.001	-1.481999	-.3934415
_cons	7.197284	1.056324	6.81	0.000	5.126928	9.26764

Endogenous variables: workingenthusiasm
Exogenous variables: financialunderstanding age degreeofeducation

Chart 2 the result of three stages OLS estimation

From the estimation result, we can see even under significance level of 1%, the level of financial understanding has significant positive effect on work enthusiasm.

Conclusion

In China, the proportion of startups that fail because of partner problems is very high. The problem of partners is a key and complex problem for startups. In some partner teams, following partner starts with a more enthusiastic job, but then slowly becomes negative and ends up quitting the team. A considerable number of following partners complaining that they are not aware of their financial situation, so they are not motivated to work hard, and finally, slowly lead to the disintegration of the entrepreneurial partner team. With the development of mobile Internet finance, very few entrepreneurial partnerships began to adopt mobile Internet finance. Partners can read profits and losses on their mobile phones at any time, understand specific accounting entries, and directly check the original voucher photos under the accounting entries. In this case, what changes will there be in the enthusiasm of partners to work? This paper makes an empirical analysis of this problem by collecting the samples of partnership enterprises in the entrepreneurship park and the samples of enterprises outside the entrepreneurship park. As far as our sample is concerned, we find that the enthusiasm of partners has significantly improved the enthusiasm of partners in the Internet financial environment.

appendix

Strong disagree
disagree
Difficult to say
agree
Strong agree

Please fill in his or her recent daily work performance for the partner you selected. Please circle the figures that are most in line with the actual situation according to the following criteria.

This partner.....

1-10. Taking charge (Morrison & Phelps, 1999, other-rated)

11-14. Uncertainty of partner trustworthiness (Adapted from Colquitt et al. 2011, self-rated)

15-18. Trust with partner (adapted from Mayer & Davis, 1999, self-rated)

1	Try to improve the workflow and try to change the way it works	1	2	3	4	5
2	try to improve the way the team works	1	2	3	4	5
3	尝试改善团队的工作方式try to develop new ways to make the team more efficient,	1	2	3	4	5
4	尝试制订能使团队更具效率的新方法try to develop new ways to make the team more efficient,	1	2	3	4	5
5	尝试改变无生产力的制度或规定try to change unproductive systems or regulations,	1	2	3	4	5
6	提出具建设性的建议，以改善团队的内部运作make constructive recommendations, Try to improve the internal operation of the team,	1	2	3	4	5

- 7 尝试改正不理想的工作步骤或模式try to correct undesirable
work steps or patterns, 1 2 3 4 5
- 8 尝试废除多余或不必要的工作步骤try to abolish redundant or
unnecessary work steps, 1 2 3 4 5
- 9 尝试解决团队内亟待解决的问题try to solve problems that
need to be solved urgently within the team, 1 2 3 4 5
- 10 尝试引入新思维、技术或方法，提高工作效率try to
introduce new thinking, technology, or methods, improve work 1 2 3 4 5
efficiency,
-
- 11 我的合伙人是否值得信任有许多不确定whether my partner is
trustworthy, there are a lot of uncertainties 1 2 3 4 5
- 12 对于我的合伙人是否值得信任，我现在还定不下来about
whether my partner is trustworthy I can't decide yet. 1 2 3 4 5
- 13 我一想到是否应该信任我的合伙人，就觉得很强的不确定
性When I think about whether I should trust my partner, I feel 1 2 3 4 5
very uncertain.
- 14 我说不清我将来是否会信任我的合伙人I don't know if I will
trust my partner 1 2 3 4 5
-
- 15 在一些对我重要的事情上，我愿意接受我合伙人的影响in
something important to me in the future.I'm willing to accept the 1 2 3 4 5
influence of my partner.
- 16 我愿意把自己在这家公司的前途交托在我合伙人的手上I'm
willing to entrust my future in the hands of my partner. 1 2 3 4 5
- 17 我认为没必要监查我合伙人的举动I don't think it's necessary
to monitor my partner's actions. 1 2 3 4 5

我可以安心把一件对我很重要的工作或问题交托在我合伙

人的手上，即使我无法监察他/她的行动I can trust my partner
18 with a job or problem that is important to me even if I can't
monitor his / her actions.

appendix

Strong disagree
disagree
Difficult to say
agree
Strong agree

Please fill in his or her recent daily work performance for the partner
you selected. Please circle the figures that are most in line with the
actual situation according to the following criteria.

This partner.....

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11-14. Uncertainty of partner trustworthiness (Adapted from Colquitt et al. 2011, self-rated)

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20 try to improve the way the team works 1 2 3 4 5

21 尝试改善团队的工作方式try to develop new ways to make the
team more efficient, 1 2 3 4 5

22 尝试制订能使团队更具效率的新方法try to develop new ways
to make the team more efficient, 1 2 3 4 5

23 尝试改变无生产力的制度或规定try to change unproductive 1 2 3 4 5

systems or regulations,

提出具建设性的建议，以改善团队的内部运作make

24 constructive recommendations, Try to improve the internal 1 2 3 4 5
operation of the team,

25 尝试改正不理想的工作步骤或模式try to correct undesirable 1 2 3 4 5
work steps or patterns,

26 尝试废除多余或不必要的工作步骤try to abolish redundant or 1 2 3 4 5
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27 尝试解决团队内亟待解决的问题try to solve problems that 1 2 3 4 5
need to be solved urgently within the team,

28 尝试引入新思维、技术或方法，提高工作效率try to 1 2 3 4 5
introduce new thinking, technology, or methods, improve work efficiency,

29 我的合伙人是否值得信任有许多不确定whether my partner is 1 2 3 4 5
trustworthy, there are a lot of uncertainties

30 对于我的合伙人是否值得信任，我现在还定不下来about 1 2 3 4 5
whether my partner is trustworthy I can't decide yet.

31 我一想到是否应该信任我的合伙人，就觉得很强的不确定 1 2 3 4 5
性When I think about whether I should trust my partner, I feel very uncertain.

32 我说不清我将来是否会信任我的合伙人I don't know if I will 1 2 3 4 5
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something important to me in the future.I'm willing to accept the influence of my partner.

34 我愿意把在这家公司的前途交托在我合伙人的手上 I'm
1 2 3 4 5
willing to entrust my future in the hands of my partner.

35 我认为没必要监查我合伙人的举动 I don't think it's necessary
1 2 3 4 5
to monitor my partner's actions.

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36
with a job or problem that is important to me even if I can't
monitor his / her actions.

appendix

Strong disagree
disagree
Difficult to say
agree
Strong agree

Please fill in his or her recent daily work performance for the partner you selected. Please circle the figures that are most in line with the actual situation according to the following criteria.

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53 我认为没必要监查我合伙人的举动I don't think it's necessary
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我可以安心把一件对我很重要的工作或问题交托在我合伙

人的手上，即使我无法监察他/她的行动I can trust my partner
54 with a job or problem that is important to me even if I can't
monitor his / her actions.

WHAT COMPRISES WELL-BEING AT WORKPLACE?

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Keywords: *well-being; positive psychology; happiness; productivity; employee well-being.*

Introduction

The concept of well-being has evolved over the past several decades. From a narrow focus on objective measures of well-being such as individual's health and demographic characteristics, social indicators have expanded to include subjective measures such as overall meaning of life and life satisfaction. This all-encompassing nature of measures has the capability to present a holistic picture of an individual's well-being. There are two conceptions of well-being: *hedonic well-being* i.e. pleasurable life with minimum pain and *eudaimonic well-being* i.e. joyful, meaningful and fulfilling life. Japanese concept of *ikigai* signifies well-being as the reason for being and making life worthwhile with a larger sense of purpose (García and Miralles, 2017).

Need for the study

Workplace well-being forms an integral part of an individual's overall well-being (Warr, 2007). Emerging scientific research has found a significant positive relationship between a happy workforce and enhanced business performance. Lyubomirsky et al. (2005) in their meta-analysis of well-being studies demonstrated that happy employees outperformed unhappy ones in several organizational outcomes such as sales by 37% and productivity by 31%. While it is imperative for organizations to consider employee's well-being of paramount importance, there is lack of integration of the existing literature on well-being and its importance in the organizational context. With mounting research in positive psychology and high levels of reported employee disengagement as a backdrop, we initiated a systematic enquiry into a key question: *what factors contribute to well-being of employees?*

Review of literature

Well-being is defined as a person's cognitive and affective evaluation of life (Diener, 1985). Personality traits such as extraversion and neuroticism are considered to be the best predictors

of individual's well-being (Deneve and Copper 1998; Diener et al., 2003). In the work context, there are several factors affecting well-being such as self-reflexivity, character, emotional intelligence, internal locus of control, suitable fit between the individual and job/organization, engagement, meaningfulness, purpose, work-family conflict, and enriched jobs with high degree of variety and autonomy (de Jonge et al., 2001; Park et al., 2011; Spector et al., 2002; Wood and de Menezes, 2011). Diversity, organizational culture with fair practices, and positive leader behaviours such as support, trust and respect, were found to increase followers' well-being (Jaiswal and Dyaram, *in-press*; Kelloway et al., 2013).

Method

We used keywords such as well-being, wellbeing, workplace well-being, employee well-being, work-related well-being, well-being at workplace, well-being in organizations, to draw conceptual and empirical studies from peer-reviewed journals. We conducted a computerized search to identify relevant articles on two electronic databases, EBSCO and ProQuest, and Google Scholar, a search engine of scholarly literature. The computerized search yielded 134 potential articles that were reviewed in their entirety. Finally, 33 articles which examined the factors impacting workplace well-being were used in this work.

Discussion

After reviewing the extant literature on workplace well-being, we were struck by some of the emerging patterns. Some factors affecting well-being were person-specific such as internal locus of control and emotional intelligence, other factors were specific to the task such as autonomy and demand, whereas another set of factors were representative of the overall environment at workplace such as leadership and social support. Thus, we synthesized the existing factors into three groups: Individual characteristics, job-related characteristics, and work environment characteristics (Figure 1). We thus define well-being at workplace as *an individual's evaluation of that dimension of life which is influenced by their individual characteristics, job-related characteristics, and work environment*.



Figure 1: Synthesized view of factors impacting well-being at workplace

Implications

Managers play a pivotal role in enhancing the well-being of their employees. Work-directed interventions that restructure the tasks will be effective in reducing work-related exhaustion experienced by organizational members. Further, sustainable happiness can be achieved through individualistic interventions such as resilience training, enhancing emotional competence and internal locus of control. Finally, organizational culture and positive leadership behaviors act as levers for the overall smooth functioning and healthiness of the workplace. Thus, the study urges organizational think tanks to reconfigure their approach towards employees by focusing on basic human values, needs, and relations in order to enhance individual and organizational well-being.

Conclusion

Our review suggests that there are interventions at individual, task, and organizational levels that can enhance employee's happiness a workplace. However, before deploying any well-being interventions, organizations must first ascertain the problem that needs to be addressed and, subsequently, identify which intervention may be most effective. We hope this review will provide a road map to future researchers to consider the interplay between factors and interventions at organizational, managerial, and employee levels, to create an enriching and thriving work environment.

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THE ROLE OF HUMAN CAPITAL IN THE UAE: A CASE OF SUSTAINABLE GROWTH?

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Abstract:

The purpose of this paper is to provide evidence on the role of human capital in the Middle East. The existing research evidence for this region with regards human capital is limited, despite the fact that the region attracts and caters to a significant number of employees (i.e. expatriates) from across the globe. In the absence of robust evidence on human capital development and strategy for the UAE, the nature and intensity of forces determining the approaches adopted by firms managing human resources is not clear. These crucial factors create significant research avenues for further theory development and deriving context specific best HRM practices, leading to better suited human capital development. Accordingly, the objectives of this paper are to highlight the current state and role of human capital in the sustainable growth of the UAE, and second, to set an agenda for future research in the context of human capital and HRM for the UAE.

1. Introduction

The strengths of human capital through greater productivity, efficiency and overall development has been recognized as one of the most critical factor in the growth of a nation. Many resource-poor countries have experienced exponential growth during periods of sustained investment in developing and training higher quality human capital which has led such countries transform themselves from underdeveloped to emerging markets. The economies of South Korea, Taiwan and Singapore are notable examples. On the other hand there has also been many resource-rich countries like Nigeria and Venezuela who are still largely struggling economies, partly due to a lack of developing their high potential and quality human capital. Thus, it is well known that a nation's human capital is a crucial ingredient and factor for its economic and social transformation.

The World Economic Forum (2013) emphasizes that a “nation’s human capital endowment – the skills and capacities that reside in its people – can be a more important determinant of its long-term economic success than virtually any other resource.” (World Economic Forum, 2013). Given the above rationale, for developing nations, the most substantial agenda and priority should be the development of human capital. However, developing more advanced and wide-ranging human capital for the attainment of sustainable national growth, requires innovative approaches towards education and training to fulfil the gaps in the skill set of the workers. To develop training programs and to establish a competitive curricula, an in-depth investigation is required to identify the gaps and to plan relevant strategies that are timebound, achievable and practical when it comes to the development of competitive human capital. The purpose of this conceptual paper is to provide evidence on the role of human capital in the Middle East. The existing research evidence for this region with regards human capital is limited, despite the fact that the region attracts and caters to a significant number of employees (i.e. expatriates) from across the globe.

From an academic point of view and also from a business and managerial perspective there are a variety of scholarly and practical reasons which support the topical need for the analysis and evidence provided by this paper. An overarching one is the strong scarcity of reliable literature and its systematic contextual analysis on the topic of human capital and HRM, while at the same time observing a growing interest of both researchers and practitioners in the region of the Middle East (see e.g. Afiouni, Ruël, & Schuler, 2014; Budhwar & Mellahi, 2016; Budhwar, Pereira, Mellahi and Singh, 2018). Moreover, the Middle Eastern context is a unique and interesting ground for studying and researching issues in relation to human capital and HRM because of the unique nature of the workforce in this region, who are predominantly expatriates from different parts of the world.

The organizational composition in the UAE includes employing a mixed workforce, consisting of individuals from varied nationalities seeking work opportunities (Suliman & Al-Junaibi 2010; Budhwar, Pereira, Mellahi and Singh, 2018). However, one of the challenges in promoting long-term growth and global competitiveness in the UAE is employee engagement and happiness in the organisations, which is seen to be gain significance in the recent years. A survey by Tower Perrins in 2007 indicates that over 95 per cent of the workers believes that they would be more productive if they were happier and engaged at the workplace (see also arguments by Khoury & Tozer, 2013).

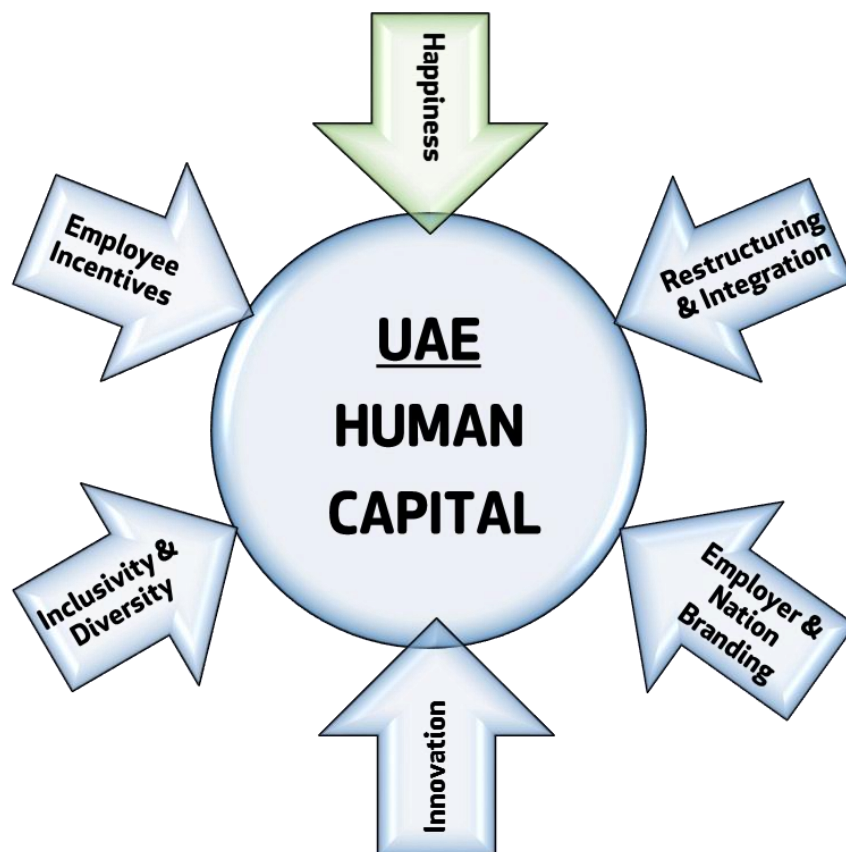
More generally, the UAE is the most diversified economy in the GCC region. Currently, the UAE has been ranked 35th (out of 127 countries) on the global innovation index. However, in 2015 the UAE government announced their vision to become among top ten innovative countries in the world by 2021. This raises the question: What global best practices are of importance that UAE companies can draw on to overcome their weaknesses in innovation and productivity in order to achieve the UAE's vision of 2021? The growing interest of businesses, researchers and policy makers in the region is increasing as it continues to economically grow amidst socio-political and security-related developments, some of which are still unfolding. In this regard, there are regular calls for such analysis that focusses on under-researched parts of the world (Gao, Zuzul, Jones, & Khanna, 2017). The influence of the unique socio-cultural and the rapidly changing institutional set-up of the Middle East, for example, in terms of the nationalization programs being pursued dealing with recruitment and development of citizens to increase their employability, thereby reducing the country's dependence on an expatriate workforce, is not yet adequately researched and understood.

In the absence of robust evidence on human capital development and strategy for the UAE, the nature and intensity of forces determining the approaches adopted by firms managing human resources is not clear. The same is true in failing to highlight the context-specific nature of human capital through the HRM function and the prevalence of dominant indigenous HRM approaches for the region (Afiouni et al., 2014; Budhwar & Mellahi, 2016; Budhwar, Pereira, Mellahi and Singh, 2018). These crucial factors create significant research avenues for further theory development and deriving context specific best HRM practices, leading to better suited human capital development. Accordingly, the objective of this paper are twofold: first, to highlight the current state and role of human capital in the sustainable growth of the UAE, and second, to set an agenda for future research in the context of human capital and HRM for the UAE.

2. Research Design

This paper not only explores the limitations and gaps from different industries like the hospitality, e-commerce, marketing, real state and healthcare sectors, but will also look into the factors that affects the quality and retention of employees in UAE market- such as long working hours, total reward system, cross cultural training, employee engagemnet and turnover. We endeavour to provide practical implications that HR managers are able to use from global best practices as well as indigenous HR policies and processes. The paper will also provide insights about the inclusion of a neurodiverse workforce in the UAE as well as throw

light on the impact of a merger between two large UAE banks on its employees. Furthermore, as is evident from the following model, we argue that the role of human capital is influenced by six themes, the evidence of which is included in the research findings below. The six themes, as depicted in the following model are happiness; restructuring and integration; employer and nation branding; innovation; inclusivity and diversity; and employee incentives.



3. Research Findings

3.1 Happiness and Human Capital in the UAE

The enthusiasm and keenness of the UAE Government for building happy human capital is evident from the fact that in 2016, the post of Minister of State for Happiness was established. Her Excellency Ohood bint Khalfan Al Roumi is the appointed Minister of State for Happiness and Wellbeing. The purpose of this ministry is to create happy and productive work environment at federal government offices, local government entities and private sector. (<https://government.ae/en/about-the-uae/the-uae-government/government-of-future/happiness>). UN World Happiness Report 2018 declared that the UAE is the top happiest country in the Arab world, a ranking maintained for the fourth consecutive year. Global ranking

was 20th among 156 countries (<http://worldhappiness.report/ed/2018/>). The Government of UAE is well informed of the critical fact that the employee's happiness and engagement at workplace is directly reflected in the quality and volume of services (Amhalhal et. al, 2015; Di Paolo, 2016; Prajogo and Cooper, 2017). Happiness and wellbeing is the part of the UAE national agenda and the government uses composite indicator, 'Happiness Index', to measure and analyze the levels of individual happiness. By year 2021, the ambitious UAE government is aiming to be among top five happiest countries of the world (<https://www.happy.ae/home>). The evidence based research of Walsh, Boehm & Lyubomirsky (2018) proved that workplace happiness correlates with the career success and leads to improved outcomes of the employees.

3.2 The impact of cross-cultural training on employee performance in the UAE hospitality industry

Globalisation has led to increased cultural diversity in many industries, of which the hospitality industry stands out the most. The hospitality industry not only has a culturally diverse customer base to serve but also a very culturally diverse workforce to manage compared to other industries. This paper aims to investigate to what extent developing cross cultural competencies in the hospitality industry through cultural training of their employees will lead to improved ability and motivation in providing good customer service and consequently competitive advantage for the hotel. Although, the previous literature shows evidence for this relationship, it is far from clear to what extent this is evident in the UAE hospitality sector. The qualitative research design is based on secondary data collected from online sources. Data was collected primarily for two international hotel chains which operate in UAE namely, Accor and Ritz Carlton. In addition, hotel industry analyst reports were used as these provided rich data on trends in human resource practices in the UAE hospitality industry. Data was thematically analysed. The findings of this research indicate that cross cultural training does have a positive and noticeable impact on the ability and motivation of individuals, especially on the ability of individuals. Hospitality industry firms recognize this link and have developed their cultural training programs to develop cross cultural competencies of their employees. Increased interaction between employees especially with senior employees with valuable cross country experience is one of the preferred strategies in this regard. The findings also show that the UAE hospitality industry also faces a number of challenges such as language issues, lack of understanding on when and what kind of training to provide. Such challenges must be

overcome by adopting, if necessary, novel approach towards cross cultural training as its benefits outweighs the costs.

3.3 Low employee engagement in the UAE: causes and solutions to the issue

The objective of this paper is to explore the common causes of low employee engagement at the workplace in the UAE and recommends solutions in order to minimize this issue. The UAE is one of the countries which have low employee engagement issue and can use the findings of this paper to minimize this issue. We use both secondary quantitative and qualitative data from various sources to uncover UAE specific factors that lead to low employee engagement which we relate to the vast literature on this topic. Our findings show that employee engagement is linked with other issues such as job satisfaction and turnover. In addition, common causes of low engagement are low salary, lack of career opportunities, low work life balance, lack of training and development and lack challenging tasks. The recommended solutions include revising the compensation plan, flexible working environment, employee recognition, training and development, supportive leaders and performance system. These findings are the contribution of this paper. However, this paper is limited to the secondary data. Therefore, future research can use this thematic framework to build on the findings and validate using primary data. The results of the secondary data are used to develop a thematic framework which can be used by Human Resource managers in UAE organizations. The previous findings and the new findings of this paper are placed in a framework in order to show the contribution of this paper.

3.4 The impact of high employee turnover in the UAE hospitality industry

This paper investigates the factors that lead to the exceptionally high turnover levels for employee in the hospitality industry in the UAE. Discussions on the increased turnover rates have for a long time been on the top of the agenda for Human Resources (HR) departments and professionals. In an industry where consistency in service is key, the majority of industry players spend substantial sums of money in training and development of systems but are still affected by high turnover levels. The training that is specific to organization methodology and services approaches impact heavily on cost and time while the turnover levels have been on the increase. The result has seen more and more organization going through the rigorous recruitment process so as to replace the employees that have left. These aspects are time

consuming which limits the organization's ability to focus on the core activity of their businesses. Our analysis reveals a three main factors as the major cause of higher employee turnover in the UAE hospital industry. These are the low state of employee motivation followed by poor wage benefits to the workers and finally the balance between work and life. These factors can be addressed within reasonable HR approaches so as to limit employee retention rate in the UAE hospitality industry. We offer several recommendations that HR professionals should consider for future policy development as well as future avenue for research.

3.5 The effects of employee engagement on employee engagement on employee turnover: A case study from the UAE

The increasing employee turnover in the UAE has led HR experts to reconsider the role of employee engagement. This paper will investigate whether employee engagement has an influence on the turnover of employees in the UAE. We use a qualitative research design to analyse the relationship between employee engagement and three variables, namely culture, job tenure, and the type of industry. To better understand the proposed framework, the ability, motivation and opportunity (AMO) model is used to explain the various relationships. It is important to note that although previous literature explains the relationships, there is a lack of literature aimed at industries in the UAE. Therefore, this research will help contribute to the existing literature where all variables are studied together and in the UAE context. In terms of data analysis, secondary qualitative data is gathered from two online-based discussion forums, for four firms in the UAE - Apparel, DHL, Petrofac, and Siemens - for a period of five months starting from 1 September 2017 till 31 January 2018. The comments have been analyzed through two techniques – content and thematic analysis. Our findings show that employee engagement, indeed, affects the level of employee turnover for a firm. Furthermore, workplace culture can have an impact on the level of engagement displayed by employees. As a result, engaged employees tend to have longer job tenure with the firm. The type of industry, in which they are employed in, also seems to affect both engagement and turnover. The findings also correspond to the theory used in the research. Based on the findings, certain strategies are recommended for the management to help them create a supportive work culture in their respective industries, enhance empowerment, and reduce turnover. Nevertheless, owing to the nature of the research, there are some limitations faced, for which certain directions for future research have been specified.

3.6 Long working hours and its impact on employee productivity in the UAE service sector

Over the years, researchers have tried to understand how the productivity of individual employees and the company performance are affected by different factors. One of these factors has been the length of working hours, a factor known to cause both positive and negative effects on an individual and the company in general. Despite extensive research in this area, we have limited evidence for emerging countries, such as the UAE with a large labour-force in lower-skilled service sector jobs. The commonly held view is that a reduction in working hours leads to an increase in productivity. This study finds that a reduction in working hours in combination with adequate break and rest periods yields benefits in three main areas: psychological, motivational and organizational. However, this correlation was found to be positive if weekly hours are dropped beyond a specific number of hours. To examine our findings in relation to the existing literature lower-end jobs in the service sector, we compare data from four different countries developed and developing economies. The data relates to the service sector productivity ratio has (output) and weekly working hours (input) and found the results to be congruent with the literature. In addition to the working hours, the study identified is set of other variables that impact productivity and analyzed these variables and established interlinkages between them. As a result a model that is employable for studying productivity was developed.

3.7 Employee Incentives in the UAE

Motivated and happy employees are the asset of an organization. Pervious and current researches have proved that the rewards and motivation have a positive relationship with job satisfaction (Jehanzeb, Rasheed, & Rasheed, 2012; Arokiasamy, Tat & Abdullah, 2013; Gabriel et al ,2016; Victor, & Hoole, 2017; Pang & Lu ,2018; Karadas & Karatepe, 2019). According to Herzberg, increasing rewards can result in temporary motivation; whereas, the intrinsic factors like ‘achievement, recognition, responsibility and growth opportunity or career advancement’ can increase motivation for longer period of time (Herzberg, 1968). UAE has diverse workforce and poses the challenge of managing rewards and incentives for both local and expatriate population.

The expatriate work force outweighs the Emirati nationals, especially in the private sector (Younies et al, 2017). According to the results of empirical analysis by Fadillah & Ismail (2018), the employees of public organizations of UAE are not satisfied with the current bonus

system but believes that incentive system of the government is fair. However, the employees believe that the reward system in the Incentive Act of UAE needs further improvement because they rarely receive a reward for outstanding performance. In addition, the research revealed that most of the employees expressed the lack of information on the mechanism of the current incentive system.

In January 2019, the Federal Authority for Government Human Resources (FAHR) announced a unique conference,” The First Workers Incentives and End of Service Benefits Conference & Exhibition “to be held on 26th Feb,2019 at Dubai. H.E. Dr. Abdulrahman Abdul Mannan Al Awar, Director General of the Federal Authority for Government Human Resources said: “We wish to improve the work environment for Employee Benefits and the rights of employees in the UAE. It is a vital topic for all stakeholders in the UAE and the world. UAE is a regional pioneer in following the best global practices in supporting and providing a strong foundation for a productive and fair business environment. Our goal is to increase productivity to the benefit of employers and employees, and the national economy in general” (www.fahr.gov.ae).

3.8 How does a total reward system influence employee motivation among executive management? An analysis of the UAE real estate industry

The aim of this paper is to review the impact of a total reward system on employee's motivation among executive management in the real estate industry in the UAE. The research is conducted on the basis of a quantitative research design using a survey questionnaire that has been used to gather the opinions of employees. The survey is conducted from a sample of 250 Executive level employees who are working in real estate firms. The measurable responses are analysed on the basis of a 5-point Likert scale. Our regression results show that monetary rewards have a positive relationship with the motivation level of the executive employees. Moreover, non-monetary rewards also have a positive relationship with the motivation of executive level employees working in real estate firms. On the basis of our findings, we offer several recommendations, which include having a appropriate mixture of monetary and non- monetary reward system in order for organisations to enhance the motivation level of their executive employees.

3.9 Restructuring and Integration of Employees in the UAE

Many organizations operating in the UAE have been witnessing organizational change in the context of merger and acquisition. Some of these examples include (but are not limited to) the merger of two big oil companies, Zakum Development Co. (ZADCO) and Abu Dhabi Marine Operating Co. (ADMA-OPCO); the consolidation of three firms Abu Dhabi Petroleum Ports Operating Company (IRSHAD), Petroleum Services Company (ESNAAD) and the Abu Dhabi National Tanker Company (ADNATCO); the US\$135 billion merger of Petroleum Investment Company (Ipic); Mubadala Development Company and International; the merger between Emirates Bank International (EBI) and National Bank of Dubai (NBD) (Salim 2013) and the merger of National Bank of Abu Dhabi (NBAD) and First Gulf Bank (FGB) (NBAD, 2017). The concept of merger and acquisitions (M&A) mainly originated from the western context, as it explored cases of change occurring to organizations from different sectors in the market (Yousef, 2017). Bebenroth and Ismail (2014) argues that according to statistical data, most M&A fail and urges that this failure is attributed to cultural conflict that arises during the integration process. Similarly, Lok & Crawford (2004) and Al-Ali et al. (2017) agrees that after merger, cultural differences between merged organizations lead to consistent downfall in employees' performance. Thus, the consolidated firms begin to blame one another for the deteriorating performance, as reflected on proven evidence from the merger of Daimler-Chrysler case (Ager, 2011; Siegel & Simons, 2010). According to Erwin & Garman (2010); Dorling & Dorling (2017) and; Senior et al. (2017) merger initiatives fail because organizations put too much focus on the potential benefits while neglecting the important factor of culture in the process. On the other hand, many authors have argued that other factors such as conflict of interest among employees, lack of shared trust and poor leadership and management practices, cultural incompatibility and cultural clash contributes to the failure of M&A (Bönigk & Steffgen, 2013; Islam et al. 2014; Lawrence, et al. 2014 and; Ndaba & Anthony, 2015). Senior et al., 2017 argues that organizational restructuring occurs due to mergers and acquisitions. This theme of the paper would present and analyze three distinctive elements: organizational culture, employees' psychological perception and the influence of organizational restructuring post-merger on employees and will explain the link between the role of organizational culture and its influence on determining the success or failure of the aspired change initiative.

3.10 Consequences of merger and acquisitions on employees: A case study from the banking industry in the UAE

Managing organisational changes in the face of an ever dynamic external business environment has been a important topic in the management and strategy literature. However, managing change and its associated impacts on various psychological human traits, such as emotions and cognition have been less researched. Thus, this paper takes into consideration the effects of radical changes in the context of mergers and acquisitions in the UAE's banking industry and relates the findings with the existing literature. More specifically, we focus our analysis on employees' psychology after the merger and their attachment to the organizations' culture and their work productivity. The paper draws on the merger of the UAE's largest two banks, National Bank of Abu Dhabi (NBAD) and First Gulf Bank (FGB) and we highlight the issues faced post-merger by designing three models. Moreover, we also offer recommendations to reduce employees' negative psychological emotions, cognition and behavioral outcomes experienced post-merger.

3.11 Inclusivity and Diversity in the UAE

In the last decade, Neurodiversity has been advocated as a significant but neglected variable that may foster innovation, creativity, and increase productivity in organizations (Austin & Pisano, 2017). Neurodiversity refers to the normal variation in brain function and behavioral traits of individuals (CIPD, 2018). In UAE, the People with disabilities are known as 'People of Determination' (Ashaab Al Hamum). In 2006, Under the Federal Law No. (29) was approved by His Highness President Sheikh Khalifa bin Zayed Al Nahyan as the UAE's first law to protect the rights of people of determination, states that, "all barriers to equal opportunities for them were removed, and their right to a decent life and comprehensive care in education, training, health and rehabilitation, was guaranteed" (www.abudhabi.ae). Dubai Municipality is eager to find jobs for willing people who can even communicate in sign language (www.dm.gov.ae). The Care and Rehabilitation for People of Determination Center, under MOCD, actively take part in providing employment opportunities to the people of determination in federal governmental, local and private institutions (www.mocd.gov.ae). The incidence of autism in the United States is now 1 in 42 among boys and 1 in 189 among girls, according to the Centers for Disease Control and Prevention (www.cdc.org). The Dubai autism

center reported in 2017 that there has been a steady rise in autism in UAE, estimated to affects 1 in 146 births (0.68%) (Alabbady, Hessian, Alaam , 2017).

3.12 An investigation into the workplace inclusion strategies for neuro-diverse professional in the UAE through talent management

Neurodiversity has been championed as a significant but neglected variable that may foster innovation, creativity, and increase productivity in organizations. Neurodiversity refers to the normal variation in brain function and behavioral traits of individuals. The purpose of this paper is to analyse the talent management strategies, benefits, and challenges of integrating neurodiverse professionals into the workforce of the UAE. A thorough literature review was conducted to understand the views of the experts in the field and to ensure the research findings are accurate and relevant. Followed by analysing Human resource theoretical frameworks like resource-based view, Knowledge-based view, AMO model, ASA framework, and Human capital theory to form a sound basis to portray the research findings. The paper concludes with the expected outcome, recommendations and limitations of the proposed research and future research. In UAE, people with disabilities are known as ‘People of Determination’ (in arabic: Ashaab Al Hamum). In 2006, Under the Federal Law No. (29) was approved by His Highness President Sheikh Khalifa bin Zayed Al Nahyan as the UAE's first law to protect the rights of people of determination states that “all barriers to equal opportunities for them were removed, and their right to a decent life and comprehensive care in education, training, health and rehabilitation, was guaranteed” (www.abudhabi.ae). In addition to other community and support services, The Care and Rehabilitation for People of Determination Center (Disabled) - Vocational Rehabilitation and Recruitment Department, under MOCD, offers employment and hiring services to both; people of determination who are seeking employment, and federal governmental, local and private bodies which desire to employ people of determination. Our findings illustrate that employment is integral to the welfare of individuals including the neurodiverse professionals . They have extraordinary skills, and there are many advantages of hiring neuro-diverse talent. Not all Neurodiverse people can work, but, with understanding from their employer and colleagues, and reasonable adjustments to the HR process and workplace, many can be a real asset to businesses . Firms embrace neurodiversity as a business need, competitive advantage and social responsibility and employee branding.

3.13 Employer and Nation Branding in the UAE

Nation branding has factual and positive outcomes. Despite the debate around the existence of nation branding, many researchers agree on the fact that ‘nation branding’ is not a myth and that each nation has a brand and an image (Anholt, 2007; Dinnie, 2008; Fan, 2010; Zeineddine, 2017; Andrei, 2017). A well-planned progressive strategy for nation branding can enhance the country’s ability to attract tourists, investors and talented workforce alike (Zeineddine & Nicolescu, 2018). Although, UAE has taken initiatives to do branding of the nation and has achieved some success in the middle-eastern region, yet the need to investigate the global best practices to strengthen its nation branding, in order to be ranked among the Top 10 Most Valuable Nation Branding, still exists (Brand Finance, 2017). UAE is a multicultural work destination, reflecting many races, cultures, ethnicities, and origins. It is estimated that more than 80% of the UAE labor workforce made up of expatriate workers, a compound of more than 100 nationalities (Ababneh & Hackett, 2019). According to 2018 report, the share of employed UAE nationals out of the total workforce, both expatriates and nationals, across all sectors was 7.19% only (UAEVision2021, 2018). Thus, UAE depends heavily on expatriate skilled labor. In coming years, UAE is expected to face a shortage of highly skilled worker. The labor gap will widen by 2030 and is worth \$50 billion (www.arabianbusiness.com; www.khaleejtimes.com). Due to mobility of the talent and unfavorable immigration policies, attracting talented workforce remains as an arduous challenge for UAE. Contemporary nation branding strategy can play an effective and dexterous role in captivating the capable and expert labor pool (Silvanto, Ryan & McNulty, 2015).

3.14 E-commerce acceptance and implementation amongst consumers in the UAE: An opportunity to build human capital for future jobs in technology and marketing

With the steady rise in information technology & social media, E-commerce, over the past few years has shaped the way multinationals manage and conduct international business. Having contributed to the growth of many organizations, online retailing has been adopted and implemented by sellers and buyers all over the world as a thriving trend. It can be observed that until 2015-2016, researchers & industry experts strongly presumed that there would be no scope for cross border ecommerce and online retailing in Dubai. However, as of 2017, there has been a gradual but steady rise in cross border B2C online shopping amongst the consumers in Dubai. This paper thus, seeks to investigate the factors that have led to the gradual acceptance and implementation of B2C cross border ecommerce in the region. It also examines ecommerce

adoption as a technological innovation by using the adoption model of theory and finally draws a comparison between the performance of online retailing in Dubai with that of Saudi Arabia, by using consumer demographics and buying patterns as inferences. Also, the possibilities and opportunities of future jobs in the e-commerce sector will also be discussed. Based on the current trends of e-commerce, it is recommended that how the UAE can develop future human capital.

3.15 Key elements of national branding: The important of development of local human capital in the UAE

Over the past decades, globalization has led nations to brand themselves and create a competitive advantage in order to develop a positive country image. The purpose of this paper is to determine main elements influencing nation branding and explore potential opportunities for the UAE to strengthen its nation branding. Although the existing literature regarding nation branding has analysed many developed and emerging countries, there is surprisingly limited work on the UAE as a brand. Hence, this paper investigates the global practices the UAE need to follow in order to be ranked in the Top 10 Most Valuable Nation Branding. This study uses an exploratory qualitative research design applied to the UAE and aims to provide insights into nation branding and recommendations to follow from global practices. Findings from this research can guide to develop the nation branding in order to understand the basics of the topic, and main elements to focus on to enhance nations' ranking. Products, tourism, political and cultural brandings have been classified as main elements of nation branding after analysing main determinants' rankings from Anholt-GfK Roper Index. Therefore, this study contributes to existing researchers by providing a thematic study based on indices.

3.16 Human Capital and Innovation in the UAE

According to global innovation index (GII) 2017, UAE was ranked 35th among 127 countries, but in year 2018 the ranking has dropped to 38th position (www.globalinnovationindex.org). The government is aiming to be among the top ten innovative nations. In the scope of Vision 2021, the government of UAE has set the agenda, aiming at building a world-class health care system. The mandate is to achieve this objective by enhancing the healthcare system's readiness to deal with epidemics and health related risks. In the fiscal year 2017, a budget of AED 48.7 billion was allocated for the Innovation, out of which AED 4.2 billion (8.6 percent) was

granted to Healthcare innovation and protection of society (www.mof.gov.ae). The healthcare of UAE is at the divergence and cusp of health Innovation. Automation, artificial intelligence and Nano technology are being introduced in the UAE health system (www.gulfnews.com). The implementation of the healthcare innovation demands skilled human capital, which can foster the new challenges. An organization can improve the performance and enhance its innovation capability by building and employing efficient workforce (Kim et al., 2015). With Innovation implementation strategy, the concerned authorities should diffuse knowledge to stakeholders to strengthen the human capital (Chatain and Meyer-Doyle, 2017; Greer et al., 2017). Proactive behavior of employees act as a precursor of the innovation performance (EscrigTena et al., 2018). Cognitive flexibility of the employees play an important role in discovering new strategies. (Huebner and Fichtel, 2015). The findings are that the UAE health system is challenged by physicians/nurses shortage, especially the national personnel, high turnover rate and retention problem, skill-mix imbalance, weak knowledge base and inadequate investment in human resources (Hannawi and Salmi, 2014). With These current problems, it's interesting to explore that how UAE healthcare can develop resilient human capital by knowledge integration to embrace the forthcoming Healthcare Innovation.

3.17 The role of human capital in the implementation of healthcare innovation in the UAE

The UAE government is aiming to be among the top ten innovative nations by the year 2020. In the scope of Vision 2021, the government of the UAE has set the agenda, aiming at building a world-class health care system. The mandate is to achieve this objective by enhancing the healthcare system's readiness to deal with epidemics and health related risks. The healthcare innovation strategy is meant to promote advanced technologies and to stimulate the growth of the biotechnology, pharmaceutical industries and medical research. This paper will investigate the current challenges and will explore the UAE health care system's preparedness human capital readiness for the upcoming healthcare innovation strategy. Using secondary qualitative data, we show that the UAE government and healthcare authorities are enthusiastic to implement the Healthcare innovation strategies, but there are limitations and weaknesses on the human capital capability. The UAE healthcare system is challenged by physician and nurse shortages, high turnover rate, retention problems, skill-mix imbalance, weak knowledge base and inadequate investment in human resources. We show that the implication of healthcare Innovation strategies require a sophisticated approach of continuous improvement, carefully crafted change management procedures and above all, well trained and competent human

capital (i.e. Physicians and Nurses). If innovation is imposed superficially, then desired outcomes cannot be achieved. Moreover, outsourcing technologies and experts will not lead to sustainability of healthcare innovation. Professional research and development is pivotal for well-established and sustainable innovation. The paper will discuss that how knowledge integration can contribute in the development of resilient healthcare human capital, which is ready to endorse the forthcoming healthcare innovations.

4. Conclusion

This paper, through the above contributions, offers new knowledge which is not only helpful to students and academics but also to practitioners interested in the region. More specifically this paper has aimed to fill the following gaps. First, there is a lack of a collection of studies on human capital and HR issues in the Middle Eastern context, which is confirmed by Budhwar, Pereira, Mellahi and Singh's (2018) recommendation for the need for a such research. We, therefore, highlight the current state and role of human capital in the sustainable growth of the UAE. Second, the Middle East is evolving with a drive to become more innovative on the back of liberalization policies. However, the complexity of managing people working in this context from over the world and the high number of expatriates compared to the locals brings up challenges which need to be addressed.

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MILLENNIALS AND THEIR PERSPECTIVE ON MARKETING OF SUSTAINABLE FOOD IN BELGIUM

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Abstract

Scientists expect that up to 50% more food will need to be produced in the current food system to be able to feed this growing global population. What we produce and how we produce it is more important. The food system needs to meet the needs in a way that is as efficient and healthy as possible, while having an environmental impact that is as low as possible. (Rikolto, 2019).

Since the consumers of the future are the youth of today, we focused on the perspective on sustainable food of the so called “Millennials”, consumers born between 1980 and 2000). Within this perspective, we were mainly interested in understanding the potential of marketing to increase sustainable food consumption among Belgian Millennials. Using literature review and surveys we gathered insights on the attitude of Belgian Millennials towards sustainable food and on how their consumption of sustainable products could be intensified. We confirmed and enriched these insights by organizing series of focus groups.

We learned that many Millennials are aware of the concept of sustainable food consumption. However, they find sustainable food products to be expensive. The high price however does not seem to be insurmountable: there is potential on the producers’ and sellers’ side to increase Millennials’ sustainable food consumption level, if the high price is countered by eliminating some other thresholds: product visibility, more clear communication, example of ways to prepare and product innovation focusing on convenience and speed. Social media and influencers should play an important role in this all.

Keywords (up to 10): Food – Retail – Sustainability – Millennials – Trends – Marketing – Innovation – Pulses – Seaweed - Quinoa

Track No: 30

Introduction

The research for this paper originated in a co-creative multi-stakeholder project called “Wanted: Food for the Future”. The partners¹ looked for ways to feed the growing global population in a sustainable way, and this together with young people, experts, farmers.... The main goal was to raise awareness and to fuel the debate on sustainable food choices. By 2050, there will be over 9 billion people on the planet; 70% of which will live in cities. This demographic evolution will take place against the backdrop of global warming, land, resource and water scarcity, reduced biodiversity and increased social and economic deprivation and exclusion of farmers worldwide. Scientists expect that up to 50% more food will need to be produced in the current food system to be able to feed this growing global population. Increasing production is not enough. What we produce and how we produce it is more important. The food system needs to provide products that feed the population in a way that is as efficient and healthy as possible, while having an environmental impact that is as low as possible. (Food for the future, 2018)

At University College UCLL we have the role to actively involve our students in development and elaboration of innovative ideas around development and marketing of sustainable and healthy food, thus stimulating sustainable entrepreneurship. The consumers of the future are the youths of today. Young people provided input for product development and scientific research, participated in taste panels, told the story and critically reviewed the project. Apart from that, teachers worked with a lessons package ‘Food for the Future’, which submerges the pupils in the subject. (Food for the future, 2018) Together with marketing and food science and dietetics students we deep dived into the question: “How can we increase the consumption of sustainable food among Millennials in Belgium?”. Because we were working in the context of the Food for the future project, we developed our research questions around the three food groups that were the focus of this project: seaweed, quinoa and pulses (dry beans, dry peas, lentils and chickpeas). Using literature review, focus groups, in-depth interviews and surveys we gathered insights on the attitude of Belgian Millennials towards sustainable food and how their consumption of sustainable products could be intensified. We learned that many Millennials are aware of the concept of sustainable food consumption. Moreover, a large group attaches great importance to sustainable food. However, they find sustainable food products to be expensive. The high price however does not seem to be insuperable: there is potential on the producers’ and sellers’ side though to increase Millennials’ sustainable food consumption level, if the high price is countered

¹ Province of Flemish Brabant, Rikolto (Vredeseilanden), Colruyt Group, University College UCLL and KU Leuven.

by eliminating some other thresholds that Millennials experience in their sustainable products consumption.

A first threshold is that sustainable products are not always visible enough in shops and other retail channels. So retailers and producers could work on their in-store placement and in-store advertising in order to increase this visibility. In addition, retailers and producers could more clearly communicate about the positive impact of sustainable consumption. Realizing the impact they can have by consuming in a more sustainable way could increase consumption levels among Millennials, according to our findings. Millennials also indicate in our research that if sustainable products were to be used more in cooking TV/online shows and were listed more often on menus in restaurants, they would tend to consume in a more sustainable way. According to our findings, time is money for Millennials, they tend not to spend too much time on preparing their food. So the easier it is for them to get a sustainable product on their platter, the better. Producers and retailers could therefore advertise more recipes with sustainable products, and focus on those variants of sustainable food products that are processed and ready-to-eat. A final insight was that as influencers on social media play an important role in the lives of many Millennials, retailers could give social media and influencers a more important role in their advertising strategy.

Literature review

In this chapter we review the literature on the most important definitions and topics studied in this paper: sustainable development, sustainable food, Millennials, their interaction with sustainable food and the role of social media therein.

Sustainable development and sustainable food

Sustainable development as a concept has been introduced in the '70s but the introduction of the Sustainable Development Goals (SDGs) by the United Nations in 2015 has brought it to international mainstream attention of governments and other stakeholders. Sustainable development is the sort of development that meets the needs of today without endangering the capacity of next generations to meet their needs. Food production and consumption plays an important role in sustainable development, and is referred to specifically in SDG 2 (Zero Hunger), SDG 12 (Responsible consumption and production) however directly or indirectly plays a role in the other SDGs as well (UN, 2019).

In Belgium, the Federal Council for Sustainable Development defined a sustainable food system as follows: "A sustainable food system guarantees the right to food, abides by the principle of

food sovereignty, provides for sufficient and healthy food for everyone in the world at an affordable price, and ensures that the final price of a product reflects not only the overall production costs, but also internalizes all the external social and environmental costs. Such a system uses raw materials and resources (including labor and natural resources such as soil, water and biodiversity) at their rate of recovery, and respects the different facets of food culture. All the actors in the food chain and the authorities must contribute to bringing about such a sustainable food system.” (FCSD, 2010)

According to Keulemans and Avermaete (2017) a sustainable food pattern should be environmentally friendly, healthy and fair. In practice it is not straightforward to produce, transport and package food environmentally friendly. It can be the case that a farmer in the South grows quinoa in a more sustainable way than a farmer in Belgium, due to the production circumstances. But to get the product from the South to Belgium, it has to be transported by plane and requires a lot of packaging, which demands a lot from the environment.

Sustainable food should also contribute to food security and health. We are nothing near the ideal situation: worldwide 750 million people are suffering from malnutrition, of which 98% lives in developing countries. Next to this, overfeeding is also a problem both in the developed and the developing countries. (Keulemans and Avermaete, 2017) Financial freedom with middle and upper classes results in an increased choice in food options. This allows people to find a good balance between healthy ingredients and fats. Lower income classes try to meet their daily needs in the cheapest way possible, which often means that food with a high degree of fat and sugar will be bought. (Keats and Wiggins, 2014)

Sustainable food also requires righteous trade rules on local, national and global level. Fair trade should contribute to a humane income, also for farmers in the South. It should strive for maximal transparency and restrict the number of intermediaries to limit the environmental impact and the cost.

For the consumer there are a lot of options to switch to a more sustainable food pattern, some with more impact than other. The first and easiest step is to decrease the overconsumption that is omnipresent nowadays. The switch to more sustainable and ecological food groups is very challenging and a process that takes years. (Keulemans and Avermaete, 2017)

Millennials

The term “Millennials” is used to indicate people in the age group of 18-35 years at the time of our research (born 1980-2000). This group of humans is also called “Generation Y”. (Howe &

Strauss, 2000). Millennials grew up alongside technology and are living in a digital age with a dominance of social networks. (Why Millennials Matter, 2018) Some typical characteristics for Millennials are their search for freedom and flexibility, and for an authentic lifestyle. This generation really knows what they want in life. (Heemskerk, 2016)

Consumption behavior of Millennials

In general, Millennials are less loyal to brands than previous generations. When they shop, most of them prefer to do that in a physical store instead of online, despite their technological expertise. The reason for that is that Millennials are less of a planning generation, and more a “live in the moment” generation. Online shopping requires planning, whereas in a physical shop they can decide on the spot what they would like to buy. (Foodservice institute, 2016)

Communication with Millennials

As the Millennials have grown up in a world filled with technology, online interaction with this generation is crucial. At the same time, this generation desires to be fully offline sometimes, in order to reconnect with the offline world. (Berelowitz, 2014)

De Boer and Harzevoort (2016) discuss 4 important aspects to be accounted for when communicating with Millennials. The first aspect is that Millennials are looking for interaction. A company that communicates only in one direction towards Millennials will not do very well in the eyes of this type of consumer. A company should be reactive, for instance in case of questions about the product coming from the consumer. Millennials like the communication to be natural and non-intrusive. Secondly, Millennials are used to make their own choices. Due to the fact that they grew up in smaller sized families than previous generations, they are used to being a part of the decision making in a household. A third aspect that is important in communicating with Millennials is recognizing their conscious consumption behavior. A brand should communicate open, deep and honest and really offer a solution to the consumer. The final important aspect is the visual culture and attitude of Millennials. The visual aspect in communicating with Millennials better ensures that the message gets across. (MICwatching, 2016).

Millennials and food

According to Boone (2014) there are 4 important food consumption trends among Millennials: “authentic products and concepts”, “healthy and nutritional”, “human, animal and nature” and “fast, faster, fastest”. We will discuss these 4 trends in more detail in the following paragraphs.

Authentic products and concepts

Millennials want to go ‘Back to basics’. They are less open to industrially fabricated food with a lot of unknown and unnatural ingredients. ‘Clean label’ (no additives) has been replaced with ‘clear label’ (as low as possible ingredients). Millennials are also receptive to products with a story: traditional recipes, regional products and local community products. (Boone, 2014)

Healty and nutritional

Millennials are aware of the impact that unhealthy food choices have on their health. They are not keen on taking medication for ailments or diseases related to food (e.g. lowering cholesterol, heartburn or insulin). The vast success of movements like “sugarless fasting” and “Thursday Veggie-day” confirms this awareness. Millennials choose consciously for more vegetables and fruit, healthier fats and less sugars. They are also open to experimenting with new ingredients, flavours and textures in order to increase the variation in their diet. (Boone, 2014)

Human, animal and nature

Millennials are aware of climate change. Food groups that score high on sustainability are popular, as do products that contribute on a human level (charity, fair trade, inclusive society). As far as they can afford it, they are willing to pay a premium price for this type of products. (Boone, 2014)

Research by Nielsen (2014) confirms that Millennials are prepared to pay more for environmental and human friendly produce. 53% of the respondents in this research indicate they would pay more for a product from an environmentally friendly company, 58% wants to pay more for an environmentally friendly packaging, and 58% wants to spend more on a product from a company that contributes to society. According to Millennial Marketing (2019) 70% of Millennials buys less bottled water due to its negative impact on the environment.

Fast, faster, fastest

Millennials were born and raised in a busy high tech society. They consider cooking extensive meals or harvesting from their kitchen garden more as a hobby than as a daily occupation, as they do not have the time for that. Preparing meals has to go fast, and are all too often replaced with fast food and snacks. These snacks are not the usual hamburger though, think more of pre-cut fruit: the nutritional value of these snacks is an important parameter. Not surprisingly, Millennials want to get information about what they eat the easy way, and they do not like to go outdoors to get this information. Apps on the smartphone with information on ingredients,

allergies, seasonal products and the like are increasingly popular among this generation. (Boone, 2014)

Millennials and social media

Importance influencers

Influencers are gaining importance when companies set up a social media strategy. According to Nielsen (2014) 90% of consumers trust recommendations of other consumer, whereas only 33% of consumers puts their trust in ads. Consumers start to close their eyes for traditional ads, and take purchase decisions based on social networks they belong to.

According to Hitz (2016), earned media (e.g. word of mouth, conversations on social media, positive reviews) contributes a lot to the publicity of a brand and 51% of Millennials claim to be more influenced by earned media than by traditional media. The reason for the effectiveness of earned media is the control the consumer has on what they want to learn about products, and the trust consumers have in each other.

Influencer marketing has grown importance over the years and has become a fundamental part in building a relationship with the customer. The idea is that influencers tell the story of a brand in an authentic way, so they generate trust in the target groups. Even before thinking about buying a product, consumers can get in touch with the product or a brand via influencers. (Wersterink & Snijders, 2016)

Millennials loyal to influencers

Since Millennials grew up being constantly exposed to advertising and commercials, they are more skeptical towards promotion material. When they buy products, they will rely more on the opinion of friends and experts rather than on advertising commercials. Classic advertising therefore has little to no effect on Millennials. Millennials tend to be more loyal to influencers than to a brand or a shop, as they are open towards content of others on social media. (Schawbel, 2015)

Research (Schwabel, 2015) shows that 33% of Millennials consults blogs before a purchase. The most important aspect in influencing via social media is the presence of visual elements. Millennials prefer visual content over text, hence the popularity of Pinterest, Instagram, Youtube and Tumblr. Good visual content triggers attention, and is easier to share online. Photos and videos also ensure that content is remembered better. (Van De Ketterij, 2014)

Methodology

Research problem and research goal

The demographic evolution we are facing the coming decades in combination with the problems of global warming, reduced biodiversity and exclusion of farmers worldwide requires drastic societal changes. Very specifically, we will need a food system that will be able to feed this growing global population in a sustainable way. (Food for the Future, 2018) The current generation of Millennials (born 1980-2000) is an important target group in this change towards more sustainable food consumption. One of the objectives in the “Wanted: Food for the future project” was to gain insight in the attitude of millennials towards more sustainable food consumption, with as a main objective to increase their sustainable food consumption. In this paper, we specifically look for parameters that could play a role in enlarging the interest for sustainable food among Belgian Millennials, and this from a marketing perspective.

Research question

The main question that we answer in this research is the following: “How can we increase the consumption of sustainable food among Belgian Millennials?” As “sustainable food” is a very broad term, we focus on three specifically selected sustainable produce: pulses, seaweed and quinoa. The selection of these three sustainable produce was made in the first phase of the “Wanted: Food for the future” project and was based on a list of criteria set by the different project partners: all three comply with important conditions such as the potential to provide healthy, climate-proof food with the potential to provide social, ecological and economic value in both the North and the global South (Food for the future, 2018). Further, our geographical focus is on Millennials living in Belgium. To answer the above question, we have developed three research questions:

How aware are Millennials about sustainable food?

What are thresholds for Millennials in buying sustainable food?

What marketing techniques can influence Millennials to increase their sustainable food consumption?

Research methodology

In order to answer our research questions, we performed both quantitative and qualitative research. For the quantitative research we performed surveys with 319 Millennials (aged 18-35) during the period of March 2017-June 2018. Of these, 221 answered questions about pulses

only, the other 98 respondents replied to questions about seaweed and quinoa. The largest part of the surveys was disseminated online via mail, Facebook and other online channels. About one third of the respondents filled out the questionnaires offline. Of the survey respondents (all aged 18-35) the majority was between 20 and 24 years old. 57% of the respondents were female, 43% male. The most filled out occupation in the survey was “student”. Geographically, the largest part of the respondents lived in Flemish Brabant (with a strong concentration in the city of Leuven).

For the first part of our qualitative research, focus groups were organized. In 2017 we had 10 participants in a focus group on pulses, in 2018 we had one with 8 participants on seaweed. On the music festival of Pukkelpop 2018 we had over 100 participants joining our focus group conversations on sustainable food. In these focus group talks, the questions were more general on the attitude towards and the knowledge of sustainable food among Millennials. We confirmed and enriched our insights from literature and the quantitative research thanks to these conversations about sustainable food.

A second part of our qualitative research consisted of an experiment in which 5 Millennials followed 8 bloggers and/or food influencers active on social media in the theme of sustainable food and well known in Flanders, and this during 1 month (April 2017). The Millennials had to keep track of their food consumption and purchase behavior, in order to find out whether the food bloggers/influencers had an impact on the level of sustainability of the food consumption of these 5 Millennials.

Insights from surveys and focus groups

The surveys, focus groups, observation and experiment have led to some general insights as well as to some more specific insights: on the popularity of and the knowledge on the three food groups of the Food for the Future project (pulses, quinoa and seaweed), on the purchase thresholds for sustainable food and on the factors that facilitate sustainable food consumption among Flemish Millennials.

General insights

From our research, we can draw some general insights on the consumption behavior of Millennials. To begin with, we found that Millennials take a central role in the decision making on food consumption in their households. They attach great importance to sustainability. They perceive food to be more sustainable when it complies with one or more of the following

characteristics: to be locally produced, biological, seasonal, with a small impact on the environment and consisting of less meat.

A lot of the Millennials we surveyed buy sustainable food quite often: about 20% buys sustainable at least once a month, 25% buys on average once a week, about 20% several times a week. Only 5% claims to never consume sustainable food. This latter group says not to buy sustainable because they either have a lack of knowledge about sustainability of food produce or they are not interested. For those Millennials that have a limited knowledge, there is opportunity to increase consumption as this generation tends to consume consciously, once well informed (cf. supra, literature review). Next to these reasons, the price is also a threshold to consume sustainable or not.

Pulses

According to our survey, pulses (i.e. dry beans, dry peas, lentils and chickpeas) are currently not a widespread used food group among Millennials. When Millennials do eat pulses, they are chosen because they taste good (57% of the respondents) or because they are perceived as a healthy food group (45%), not because they are sustainable. The main threshold for buying pulses is also this lack of knowledge on how sustainable they are.

Millennials are concerned about their health, so pulses fit into their healthy lifestyle choices. Respondents state that after the sustainable aspect of pulses is explained to them, they would consider increasing their consumption of pulses (43% of the respondents). Millennials are aware of the existence of pulses and the different varieties, however they lack knowledge on how to incorporate pulses into their eating and cooking habits. 60% of the respondents state that if they would know of more recipe ideas with pulses, they would eat more of this food group.

The buying process of pulses is influenced, like any other food group, by habits and routines. When respondents claim to have incorporated pulses into their eating pattern, it is often because they were used to eating pulses in their home situation (35% of the respondents).

The most popular pulse is the chickpea, mostly due to its usage in hummus, a product that has become very mainstream on the Belgian market the last years. The popularity of the chickpea can thus be explained by the fact that hummus, as a recipe using chickpeas, has become an international success.

When our respondents eat pulses, they usually eat it together with meat or fish and consider it to be vegetables (79% of the respondents).

Our respondents prefer to buy food that does not require too much cooking time. They lack the time and the knowledge to incorporate the dry, raw version of pulses into their cooking and eating habits. The pre-cooked version of pulses, both in cans and bowls, are more likely to have success among Millennials (71% of the respondents). Saving time is really essential for Millennials. From our focus groups we know that they are not used to plan ahead their meals, and that they do not spend their time reading entire labels (to know whether they bought a sustainable product or not, for instance). They also indicated they want to pay more for ready-to-eat versions of sustainable produce. About 20% of the respondents in the surveys claimed that a larger choice in ready-to-eat or processed versions of pulses would increase their consumption level.

Quinoa

Quinoa is well known among Millennials: more than 90% of our respondents know the product. Millennials mostly get acquainted with quinoa at home or with friends (75%). About one third of the respondents indicates they know quinoa from television or social media. Almost all respondents (93%) consider quinoa to be a healthy product, and a lot of them (61%) know that it is a highly nutritional product (with lots of proteins and minerals). The origin of quinoa (Peru) is less known to Millennials (only 20% of the respondents), as is the fact that it has a low environmental impact (20%) and production cost (compared to similar crops) (10% of the respondents).

Despite the fact that quinoa is well known among Millennials, and the interest of Millennials in sustainable food, a large part of our respondents (81%) rarely eat quinoa. The Millennials that do put it on the menu, mostly eat it for dinner or lunch, and this in the form of a salad. It is rarely consumed as breakfast or snack.

In order to increase consumption of quinoa among Millennials, our respondents (both from the survey and the focus groups) indicate that the low environmental impact of the production process should be emphasized more. In addition, more recipe ideas should be provided, and if restaurants would put quinoa more on the menu, it would inspire our respondents to buy more quinoa.

Seaweed

The largest part of Millennials does not often consume seaweed. Only 4% of our respondents eats it more than once a week. The most claimed reason for this (in the focus groups) is that it does not look very tasty and the opportunities to eat seaweed in their daily lives are considered

to be rather small. Of those respondents who do eat seaweed a considerable part stated they got to learn about seaweed in a restaurant (28%). The most important reason for them to consume it is because of its health benefits (high nutritional and vitamin values). Vegetarians are a large part of the group that often consumes seaweed. They are more likely to try out new food groups in order to find alternatives for meat. The fact that its production process has a low impact on the environment is definitely a bonus. However from our research, we found that mostly food choices are made based on taste: Those Millennials who consume seaweed, really like the taste. Those who do not consume it, dislike the outlook and the taste of it (often too salty).

Most respondents associate seaweed with sushi. Those respondents who had eaten seaweed before, mostly ate it in the form of sushi (80%). Millennials prefer to consume seaweed when it is processed in a dish or meal. From our focus group we know that next to sushi, seaweed salad, seaweed chips and seaweed balls are the most tasty, and that seaweed spaghetti and seaweed salad (more pure variants of seaweed) are only popular when they are mixed in a dish.

Millennials are starting to realize that seaweed is a sustainable food source. Those respondents that have already eaten seaweed are more aware of its sustainability than those who have not consumed it yet. The sustainability aspect would convince a lot of our respondents (63%) to start consuming or to consume more seaweed.

From our focus group we know that it is difficult to find products with seaweed, which is a clear purchase threshold. The Millennials in our focus groups indicate that the presence of tastings combined with recipe ideas in supermarkets would decrease the threshold to buy seaweed. Next to this, cooking programs and social media working with famous chefs would increase their interest in seaweed.

Social media and influencers

Social media and more importantly influencers can play an important role in increasing sustainable food consumption among Millennials. Both the literature review and the experiment show that Millennials are very open minded and even put their trust in influencers when making a purchase decision. In our experiment, all participants admit to be influenced in their buying behavior by influencers on social media, and they also do not see a problem with that. Especially when Millennials are already well aware of the importance of sustainable food choices, influencers and bloggers can have a positive impact on their behavior. 3 out of 5 of our participants have introduced changes in their food choices during the time of the experiment (thus while following sustainable food bloggers). However, these participants did claim that

there was no guarantee for these changes to be durable. An important aspect to be considered in this context is the visual content in getting across a message on social media: all of our experiment participants stated that the photos are the most important to get a message across on social media. Specifically for food, a colorful close up of a (sustainable) food platter is the most attractive. The experiment confirmed the earlier insight from literature and the surveys that “time is money” for Millennials. Even with the most visually attractive sustainable food composition on Instagram, our experiment participants confirm that they must be able to fit sustainable food prepping into their busy lifestyle.

Conclusion and recommendations

We learned that many Millennials are aware of the concept of sustainable food consumption. Moreover, a large group attaches great importance to sustainable food. However, they find sustainable food products to be expensive. This means there is potential on the producers’ and sellers’ side to increase Millennials’ sustainable food consumption level, if the high price is countered by eliminating some other thresholds that Millennials experience in their sustainable products consumption. A first threshold is that sustainable products are not always as visible in shops and other retail channels. So retailers and producers should work on the visibility of sustainable food products. In addition, retailers and producers should more clearly communicate about the positive impact of consuming sustainable food products. Realizing the impact they can have by consuming in a more sustainable way will definitely increase consumption levels. In order to give more concrete advice on the specific way in which producers and retailers could advertise and communicate about sustainable food products in order to increase consumption with Millennials, further research is necessary. Millennials also indicate that if sustainable products were to be used more in cooking TV or online shows they would tend to consume in a more sustainable way. The latter also holds for more sustainable food listed on menus in restaurants. Increasing the availability of recipes with sustainable products, so that consumers get inspired and are more motivated, would also motivate more Millennials, according to our research. Further, the supply of more convenient and thus easy to cook variants of sustainable products should increase, as Millennials prefer not to spend too much time preparing their food. Finally, we can say that in their advertising strategy for sustainable food products, producers and retailers should provide for an important role to influencers on social media, and focus on attractive visual content.

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TESTING MARKET EFFICIENCY OF SELECT INDIAN PHARMACEUTICAL STOCKS

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Abstract

Through our research, we aim to test the market efficiency of the pharmaceutical industry in the Indian market. To achieve our objectives, we tested the market efficiency of pharma stocks for all three forms i.e. the weak, the semi-strong and the strong form of market efficiency. For testing weak form of efficiency, we collected stock price data of ten listed pharma companies for the past six years from the NSE website and conducted a run test. For testing semi-strong form of efficiency, we collected data on the announcement of events like buyback, stock split, rights issue, dividend, bonus issue and conducted an event study on the data. For testing the strong form of efficiency, we collected data consisting of NAV of some mutual funds (pharma funds) and the returns of a benchmarking index to compare. Our research concludes that the Pharmaceutical Industry is efficient in Weak Form of Market Efficiency. Whereas, the industry is not efficient in the semi-strong or strong form of market efficiency.

Keywords: Pharmaceutical industry, market efficiency, NSE, buyback, stock split, rights, issue, dividend, bonus, Mutual funds, NAV, benchmarking index.

I. Introduction

Effective Market Hypothesis or EMH was developed in 1970 by acclaimed economist Eugene Fama. The theory states that in an efficient market, it is not possible for an investor

to outperform the market because all available information is already built into all stock prices. Market efficiency refers to the degree to which stock prices and other prices reflect all the relevant available information. One may say that when it is not possible to predict the future value of the stocks, the market is said to be efficient else the market is not efficient. An inefficient market, according to efficient market theory, is that market in which an asset's market prices do not always accurately reflect the true value of the asset. Efficient market theory, or more accurately, the efficient market hypothesis (EMH) states that in an efficient market, asset prices accurately reflect the asset's true value. In an efficient stock market, for example, all the public and private information available about the stock is fully reflected in its price, in an inefficient market, this is not the case, thus, leaving scope for some investors to benefit from insider information and therefore consistently beat the market.

Efficient Market Hypothesis or market efficiency theory has been researched on several times in the past, some in support of theory and some not. The theory enlists three variants of the market efficiency. These types of efficiency are weak, semi-strong and strong forms.

1. Weak-Form EMH: In weak-form of market efficiency, a prediction regarding the future stock prices cannot be made by analyzing the past prices, i.e. the investor is unable to find a pattern in the prices for future price prediction. Investment strategies based on historical data such as historical stock prices cannot help earn abnormal returns. Even the technical analysis techniques will not be able to perform consistently and produce excess returns continuously for a long period of time, although it may be possible for the investors to use some forms of fundamental analysis to earn excess returns. Stock prices show no serial dependencies, implying that there are no patterns to share prices. This further leads us to the fact that future movements in the price of the stock are determined entirely by information other than that already contained in the price series. So, a random walk must be followed by the share. This 'soft' EMH only requires that investors not be able to systematically earn abnormal profit from the market 'inefficiencies' and does not require the prices to remain at/near equilibrium. However, while EMH predicts that all the stock price movement in the absence of change in the fundamental information doesn't follow a pattern i.e. it is random, various researchers and studies have shown a tendency for the stock markets to trend over time periods of weeks or longer and that, also, there is a positive correlation between length of time period studied and degree of trending. There are various reasons found for the price following a non-random movement or pattern, which have been researched upon by many researchers.

2. Semi-Strong EMH: a Semi-strong form efficiency is a form of EMH (Efficient Market Hypothesis) which states that all information available to the public is calculated into a stock's current price, rendering both fundamental and technical analysis useless for achieving superior gains. This class of EMH suggests that to gain abnormal returns, only insider information that is not available publicly can be used by the investors.

3. Strong-Form EMH: The strong-form EMH implies that the market is fully efficient, i.e. it reflects all information both the public and the private information, building and incorporating the weak and the semi-strong form of Effective Market Hypothesis. Given the above assumption that stock prices reflect all information i.e. both the public and the private information, no investor would be able to generate abnormal profit.

II. Literature Review

Augustus Degutis & Lina Novickytė (2014) explain an efficient stock market as a market where stock prices reflect all the basic information about the organization, this means that the internal value of the company accurately reflects the company's market value. Allen, Brealey, and Myers (2011) defined a market as efficient when it was not possible for an investor to earn an abnormal profit over the market return. This means that the value of shares reflects the fair value of the company and is equal to the future cash flows discounted by an alternative cost of capital. Eakins and Mishkin (2012) argued that an efficient market was a market where asset prices fully reflected all information available.

Poshakwale (1996) tried to determine the efficiency of the stock market in India. His study on the period 1987-1994 based on tests for serial correlation and runs test found evidence that weak form efficiency on Bombay Stock Exchange (BSE) was being violated. Gupta and Gupta (1997) conducted a similar study and obtained resembling results for 1988-1996. Since even the weak form of efficiency is being violated, both technical and fundamental analysis could be used to help determine and predict the stock values and exploit the market. As the theory suggests, weak form market should not be predictable by technical analysis.

Noman Siddiquee & Noor Nahar Begum (2015) examine the market efficiency of the pharmaceuticals company of Dhaka Stock Exchange (DSE). Their results showed that there exists a predictable pattern in the data which suggests that formulating a technical trading rule can result in investors making large profits out of it. Pushkar Dilip Parulekar (2017) evaluates the weak form of market efficiency theory for some five companies from nifty. He drew out several conclusions from his study. One, he determined that stock returns are inefficient in extreme short terms, but they can be efficient for medium and long-term periods. Secondly, all sectors do provide long-term investment opportunities to investors.

Kathryn Sprague (2015) tries to analyze the effects of innovation on market efficiency. In her paper she tries to analyze the effects of three types of announcements, patent application date, patent publication date, and FDA approval date on market efficiency in case of active ingredients in the major antidepressant and antipsychotic drugs. From her research, she finds significant increases in returns were observed in the pre-event window leading up to a drug's application date. Thus in her paper she concludes that the hypothesis stating private and public information is already incorporated into a firm's security price could be rejected. In the case of patent application date for CNS, pharmaceuticals were found to be inefficient. She finds that patent publication announcements yield decreasing returns in the pre-event window, as a result of which her null hypothesis that the market is strongly efficient could not be rejected.

Sharma and Lacey (2004) observe that in a three-day window around innovative announcements there is a significant effect on stock volatility, they also observe that the effect was not there for periods that lie beyond the window. Sharma and Lacey (2004) examine if product development pays, observe the results and find them consistent with the efficient market hypothesis: that the market responds to FDA approval of a drug positively.

Loughran and Ritter (2004) find that American companies which offer rights issues have a tendency to underperform in the long term as compared to the companies that do not. Suresha and Gajendra (2012) find that previous studies suggest that stock returns are affected significantly either positively or otherwise around rights issue announcement dates. Their study concludes that the Indian market reacts negatively to rights issue announcement. Kumar and Halageri (2011) observed the market efficiency of the Indian stock market for 15 days before and after the bonus announcement for 54 bonus announcements from listed companies. The study indicated that the stock price didn't absorb the information of the announcement

immediately leaving scope for making abnormal profits. Muscarella & Vetsuypens (1996) find that after the stock split the liquidity improves, resulting in wealth gain for investors. Their conclusions back the model of Amihud & Mendelson (1986), which predicts a positive relation between equity value and liquidity.

Thirumalvalavan and Sunitha (2006) conclude that the market reacts more positively to share buyback announcements as compared to dividend announcements which indicate the strong signaling power of share repurchase announcements. Mishra (2005) studied empirically the price reaction on the announcement of share buyback when a company wants to go ahead with targeted share buybacks. Many times it was observed that the company that offered very high buyback price which was even far above premium had oversubscription and the prices fell after the buyback. A sustained rise in the price of the scrip could not be ensured using buyback.

III. Objectives& Hypothesis

Objectives:

1. To test whether the return of Pharma Industry is in weak-form of market efficiency
2. To test whether the return of Pharma Industry is in semi-strong form of market efficiency
3. To test whether the return of Pharma Industry is in strong-form of market efficiency

Hypothesis:

1. Pharma Industry Return is not in the weak form of market efficiency.
2. Pharma Industry Return is not in the semi-strong form of market efficiency.
3. Pharma Industry Return is not in the strong form of market efficiency.

IV. Methodology

4.1 Weak Form of Market Efficiency

For testing the weak form of efficiency, a run test was carried out on the closing price for the ten selected companies for a period of 6 years. A run test is a statistical procedure that examines whether a string of data is occurring randomly given a specific distribution. The run test analyzes the announcement of similar events that are separated by events that are different. We used the run test to determine if our null hypothesis holds true or not. After running the run tests, it is to be checked whether the number of runs lies between derived upper and lower limit

of the tests. The data showed that for 9 out of the 10 companies, the data lies between the limits which imply that the pharma sector are in weak form of market efficiency. The data for the runs test along with the final result for each individual company is given in Table 1. Following equation was used. Where,

$$T = R - X / \sigma$$

$$R = \text{Total number of runs}$$

$$X = (2 * n1 * n2) / (n1 + n2) + 1$$

$$n1 = \text{Number of positive runs}$$

$$n2 = \text{Number of negative runs}$$

$$\sigma^2 = 2 * n1 n2 (2 * n1 n2 - n) / (n^2 (n - 1))$$

$$n = n1 + n2$$

Now if n , which is the total number of runs as a summation of the number of positive and negative runs lies between the upper and lower limits, the market is concluded to be weakly efficient as the market cannot be predicted using historical stock data of the company for the past few years. For our analysis, we chose Runs Test, which is a non-parametric statistical test that checks the randomness for a two-valued [data sequence](#). To carry out runs test on our data, we collected the stock data for each of the company for the past 6 years, which is from 2012 to 2017. We then cleaned the data saved it in a format suitable for analysis and removed the columns not required for our analysis. Then, we calculated the change in closing price for each month and then used the change to code it to a binary form of data. Using the coded data, we determined the number of runs for that data set. The data has been predicted with 0.05 significance level. As the vast majority of the companies turn out to be weakly efficient, we can conclude that the pharmaceutical market in India is weakly efficient. We reject the null hypothesis which states that Pharma industry return is not in the weak form of market efficiency.

The companies we chose for analysis were as follows:

1. GlaxoSmithKlineGlobal Corporate

2. Glenmark Pharma.
3. Lupin Limited.
4. Biocon Limited.
5. Cadila Healthcare.
6. Cipla Limited.
7. Dr. Reddy's Laboratories.
8. Merck Limited
9. Pfizer Limited
10. Sun Pharmaceutical Industry.

4.2 Semi-Strong of Market Efficiency:

For testing for the semi-strong form of efficiency in the pharma industry, we planned to analyze the closing stock price of a few companies listed on NSE 30 days prior to and 30 days after the announcement of events. For this purpose, we have obtained the announcement dates from moneycontrol.com and have extracted the price related data from the NSE website. To analyze if the market is in semi-strong form of market efficiency we decided to conduct an event study around the announcement of the following events:

1. Stock split
2. Rights Issue
3. Dividend
4. Buyback
5. Bonus

All the pharma companies may not have all the all the event during the period of our study therefore only the companies which had a particular event during the period of our study have been taken.

For Bonus Announcement we analyzed the following companies:

1. Pfizer Limited
2. Lupin Limited
3. Glenmark Pharma
4. Biocon Limited
5. Sun Pharmaceutical Industry

For Buyback Announcement we analyzed the following companies:

1. Dr. Reddy's Laboratories
2. Pfizer Limited
3. Ajanta Pharma Limited
4. GlaxoSmithKline
5. Sun Pharmaceutical Industry

For Dividend Announcement we analyzed the following companies:

1. Sun Pharmaceutical Industry
2. Biocon Limited
3. Glenmark Pharma
4. Lupin Limited
5. Pfizer Limited

For Rights Issue Announcement we analyzed the following companies:

1. Neuland Labs
2. Sun Pharmaceutical Industry
3. Piramal Enterprises

For Stock Split Announcement we analyzed the following companies:

1. Natco Pharma
2. Sun Pharmaceutical Industry
3. Ajanta Pharma Limited (2 Dates)
4. Dr. Reddy's Laboratories

For analysis of the above data, we planned to conduct an event study. For which we assigned dummy days for standardization of every firm being analyzed under the type of announcement also we calculated the percentage return of the stocks, the expected return, the daily abnormal returns and the CAR or Cumulative Abnormal Returns for each company and then the average CAR for the event announcement in concern, plotted the graphs to better understand the average CAR for the particular event announcement.

- 1. Stock split:** A corporate action in which a company divides its existing shares into multiple shares for the purpose of boosting the liquidity of the shares is known as Stock Split. As

this action does not add or reduce any value the total dollar value of the shares remains unchanged i.e. as it was pre-split, although there is an increase in the number of shares outstanding because of the split, by a specific multiple as decided by the company. Commonly 2-for-1 or 3-for-1 are the most known split ratios, which means that the stockholder will have shares in multiples of 2 or 3 for every share he held pre the split event. The companies analyzed for this event are Natco Pharma, Sun Pharma, Ajanta Pharma (for two different dates) & Dr. Reddy's Laboratories.

2. **Rights Issue:** Inviting the existing shareholders to purchase additional new shares in the company is called a Rights Issue. Through Rights Issue, existing shareholders are given securities called "rights" which, gives the shareholders the right to purchase new shares at a discounted rate on a stated future date. The company is giving shareholders a chance to increase their exposure to the stock at a discount price. The companies analyzed for this event are Neuland Laboratories, Sun Pharma, and Piramal.
3. **Dividend:** The distribution of a portion of a company's earnings is called dividend, it is decided by the board of directors, paid to its shareholders. It can be paid in any form like Cash payments, as shares of stock, or other property dividends. The companies analyzed for this event are Sun Pharma, Biocon, Glenmark, Lupin, Pfizer.
4. **Buyback:** A buyback is the purchase of its outstanding shares that reduces the number of its shares on the open market by a company, it is also called repurchase. There are various reasons behind the companies buying back their shares, for example using simple economics of demand and supply, by reducing the supply of shares to increase the value of shares. The companies analyzed for this event are Dr. Reddy, Pfizer, Ajanta Pharma, Glaxo, Sun Pharma.
5. **Bonus:** The act of offering free additional shares to existing shareholders is known as Bonus Issue, or it may be also known as a scrip issue or a capitalization issue. As an alternative to increasing the dividend payout, a company may decide to distribute further shares. For example, a company may give one bonus share for every ten shares held. The companies analyzed for this event are Pfizer, Lupin, Glenmark, Biocon, Sun Pharma.

The **% change in Return** was calculated by subtracting the close price of each day from the close price of previous day divided by the previous days price multiplied by 100 with a **fake time** series assigned to the daily returns starting from the first % change in return value, an **event time** series is assigned to the daily returns with 0 assigned to the date of the announcement of the event and the **fake time** corresponding to the announcement date acts as the **fake time event date** for the rest of the dates. The expected return is calculated as the average of the percentage change in return in the estimation window, then to find the **abnormal return** we subtract expected return from actual return, then finally **cumulative abnormal return** was calculated by summing all the abnormal return upto that point. The same was done for companies being observed under a particular event then a CAAR was obtained by taking the average of all and a graph of the same was plotted.

$$R_{i,\tau} = \mu_i + \epsilon_{i,\tau}$$

$$E[\epsilon_{i,\tau}] = 0$$

$$VAR[\epsilon_{i,\tau}] = \sigma_{\epsilon i}^2$$

$$\hat{\mu}_i = \frac{1}{M_i} \sum_{i=T_0+1}^{T_1} R_{i,\tau}$$

The parameter μ is estimated by the arithmetic mean of estimation-window returns, where M_i is the number of non-missing returns over the estimation window.

Even though the constant mean return model is simple and highly restrictive compared to other models, Brown and Warner (1980, 1985) show that results based on this model do not systematically deviate from results based on more sophisticated models, for only analyzing short-term event studies.

4.3 Strong Form of Market Efficiency:

For testing of strong form of market efficiency in the pharma sector, we needed to find if it is possible for the asset manager of various mutual fund companies to beat the market using insider information. To test this form of efficiency we collected data pertaining to the following mutual fund schemes (pharma funds) from www.amfiindia.com:

1. UTI Pharma & Healthcare Fund-Income Option
2. UTI Pharma & Healthcare Fund-Growth Option
3. Tata India Pharma & Healthcare Fund-Direct Plan-Dividend Payout
4. Tata India Pharma & Healthcare Fund-Direct Plan-Growth

5. SBI Pharma– Regular Plan - Dividend
6. SBI Pharma– Direct Plan -Growth
7. Reliance Pharma Fund - Direct Plan Dividend Plan
8. Reliance Pharma Fund - Direct Plan Growth Plan - Growth Option

The return of these mutual funds scheme has been compared with the NIFTYPHARMA index for a period of 5 years from 2013 to 2017.

To analyze the above data we calculated the percentage return for the funds and for the index also we calculated the cumulative percentage return for both. We analyzed if the NAV return of the fund consistently beats the benchmark used for analysis purpose. If the mutual fund returns were found to be able to outperform the index returns, one can conclude that the market is not in the strong form of market efficiency as the asset manager is able to use the insider information to his benefit.

V. Results

5.1 Weak Form of Efficiency:

Table 1: Runs test result for testing weak form of efficiency

	Glaxo	Glenmark	Lupin	Biocon	Cadila	Cipla	Dr. Reddy	Merck	Pfizer	SunPharma
Total										
Runs =	705	733	774	744	756	795	742	742	717	757
n1=	715	774	799	756	756	756	756	716	713	770
n2=	772	714	724	733	734	731	732	772	775	717
Mu=	741.407532	741.790323	758.653316	743.322364	743.837584	742.289845	742.806452	741.946	741.708333	741.555481
s.d=	19.2459909	19.2494451	19.4590697	19.2826922	19.289568	19.2688792	19.2757959	19.2535	19.247319	19.2498289
t=	1.96	1.96	1.96	1.96	1.961	1.961	1.961	1.96	1.96	1.96
Lower										
limit	703.68539	704.06141	720.513539	705.528287	706.010741	704.503573	705.006616	704.209	703.983588	703.825816
Upper										
Limit	779.129674	779.519235	796.793092	781.116441	781.664427	780.076117	780.606287	779.683	779.433078	779.285145
Results	Weakly Efficient	Weakly Efficient	Weakly Efficient	Weakly Efficient	Weakly Efficient	Not Weakly Efficient	Weakly Efficient	Weakly Efficient	Weakly Efficient	Weakly Efficient

Source: Compiled by authors

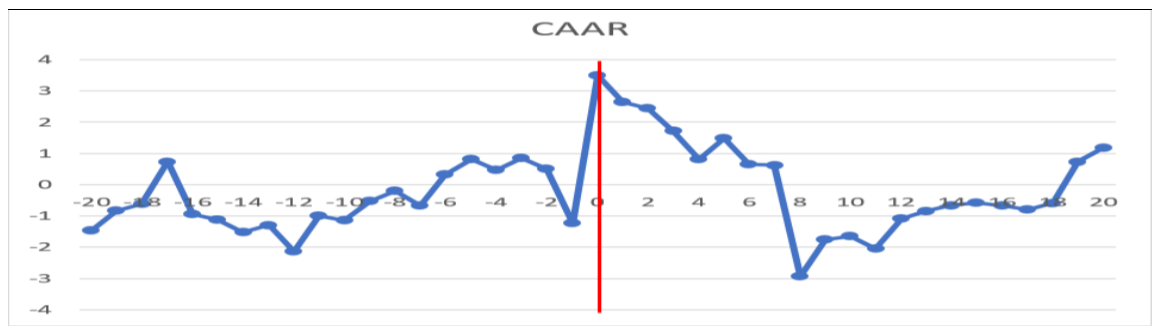
The only company that showed to be not efficient in weak form is Cipla. Other companies such as Glaxo, Glenmark, Biocon, Merck, etc. turned out to be efficient in weak form.

5.2 Semi-Strong Form of Efficiency:

- 1) **Stock split-** The CAAR graph (Graph-I) for the stock split event indicates that the market changes behavior, linearly increasing from 20 days before the event to 17 days before the event then decreasing till 13 days before the event announcement then again

linearly increasing till 2 days before the event before a steep decline 2 days before the announcement of the event then sharply increasing till the event announcement. The CAAR then decreases steadily till 8 days after the event before linearly increasing till 20 days after. Since the CAAR curve depicts a predictable behavior the market can be said to be inefficient since the information takes time to make an impact. Such a pattern can help us conclude that the investors had some idea of the announcements before they happened and after the event date the new information was not efficiently incorporated into the stock price leaving room for some investors to make abnormal returns on their investments.

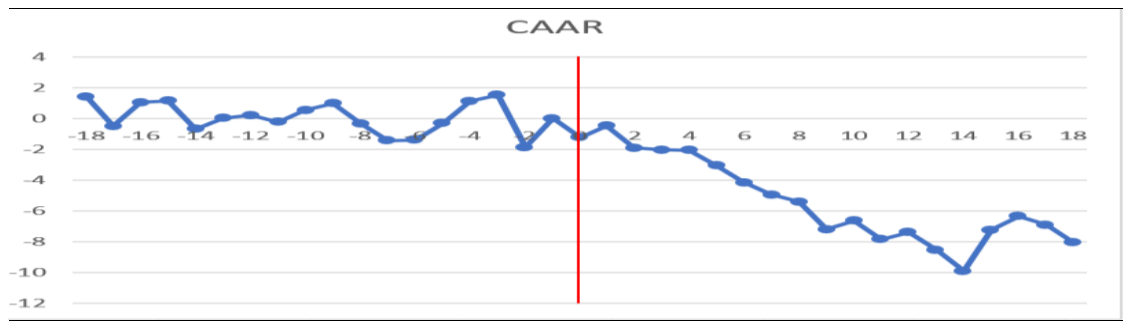
Graph-I: Stock split



Source: Compiled by authors

- 2) **Rights Issue**-The CAAR graph (Graph-II) for the rights issue event indicates that before the announcement of the event the CAAR curve shows no pattern that allows investors to make abnormal profits, the information has no immediate impact on the CAAR on the announcement of the event. After the announcement of the event the curve shows a linear decline till 14 days after the announcement of the event before again linearly increasing for a few days till 16 days after the event and then again declining for 2 days till 18 days after the event announcement, signifying that the announcement information was not incorporated in the stock price effectively and immediately but rather over the time. Since the CAAR curve shows a pattern of linear decline and information does not have an immediate impact on the market it can be said to be inefficient.

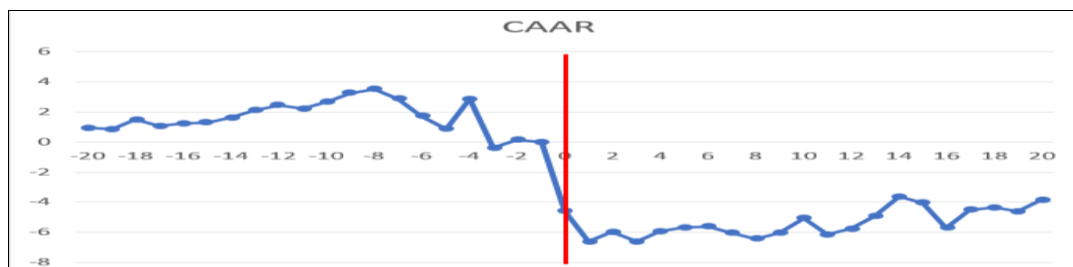
Graph-II: Rights Issue



Source: Compiled by authors

- 3) **Dividend**-The CAAR graph (Graph-III) for the announcement of dividend event indicates that from 20 days before the announcement of the event to 8 days before the announcement of the event the CAAR gradually increases, then it declines relatively till 5 days before event announcement before increasing till 4 days before the event announcement then again declining till 2 days before event announcement the market is inefficient throughout this period. After the event announcement the CAAR curve shows no significant pattern although a gradual linear increase till 20 days after the event announcement hence the market can be said to be inefficient.

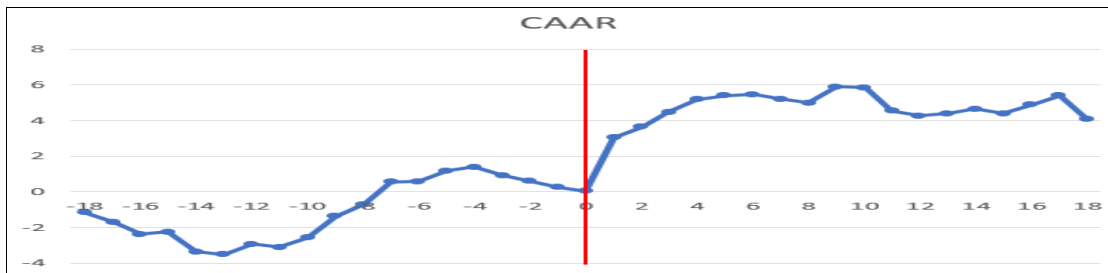
Graph-III: Dividend



Source: Compiled by authors

- 4) **Buyback**- The CAAR graph (Graph-IV) for the Buyback event announcement shows a pattern of decline from 18 days before the event announcement to 13 days before the event announcement then increasing till 4 days before the event announcement then gradually declining till the event announcement leaving room for some investors with extra information to make abnormal gains. After the event announcement the CAAR curve shows an increase till 6 days indicating slow incorporation of information in the price again leaving room for some abnormal investor gains.

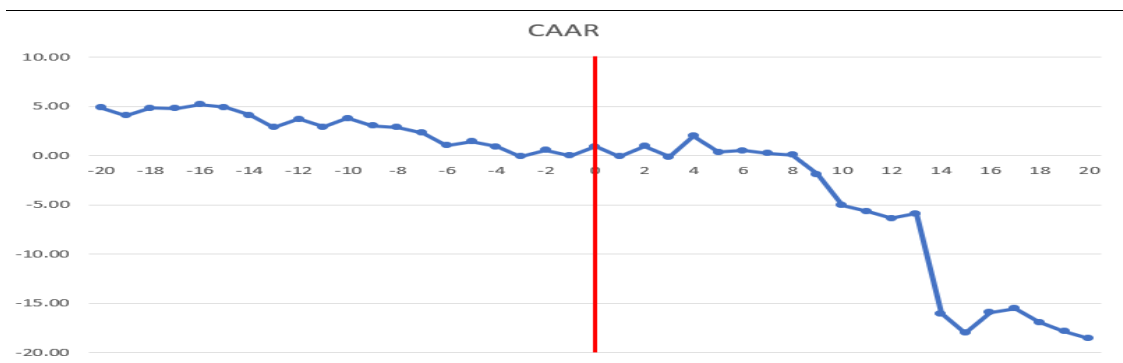
Graph-IV: Buyback



Source: Compiled by the authors

- 5) **Bonus**-The CAAR curve (Graph-V) shows a gradual decrease from 20 days before the event announcement till the day of the event indicating some prior information to the investors making it possible for them to make abnormal gains. After the event announcement for 8 days the CAAR curve shows no pattern and is unpredictable and efficient before showing a steep decline till 13 days after the event announcement then again steeply declining from 14th day to 15th day after the event before gradually increasing till 17 days after the event and again declining a little till 20 days after the event showing very slow incorporation of the information in the stock prices, thus one may say that the market inefficient.

Graph-V: Bonus



Source: Compiled by authors

For all the five events there was a possibility for investors to gain abnormal returns as either there was some prior information or slow incorporation of the information provided in the announcement in the price of the stock, thus we can say we were unable to reject our null hypothesis '*Pharma Industry Return is not in the semi-strong form of market efficiency*'.

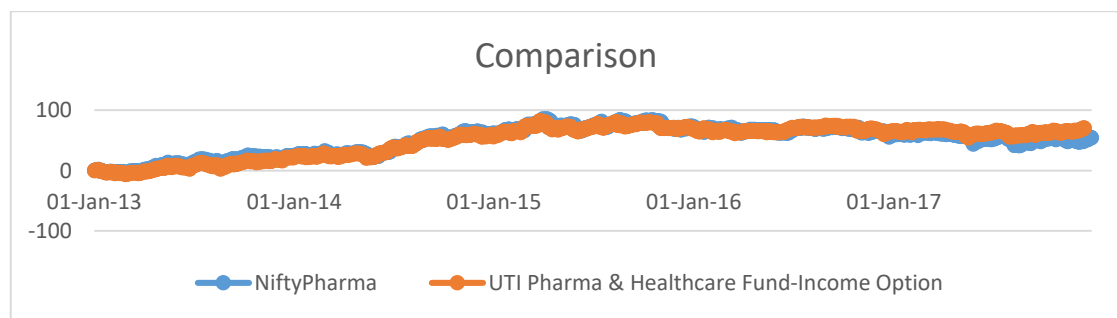
5.3 Strong Form of Efficiency:

We first calculated the cumulative percentage return for Nifty Pharma and pharma fund. We analyzed if the NAV return of the fund consistently beats the benchmark. If fund return is beating the benchmark return then the market is not efficient in strong form.

1. Comparison of performance of UTI Pharma & Healthcare Fund-Income Option

Graph-VI depicts the performance of UTI Pharma & Healthcare Fund-Income Option Fund in comparison to the NiftyPharma(benchmark). It can be concluded from the below graphical representation that the performance of the UTI Pharma fund is better than that of the NiftyPharma index for most of the period starting 2016, indicating the use of insider information to beat the market. The average of cumulative return of the fund is 49.63% while the average cumulative return of the index is 49.621%.

Graph-VI: UTI Pharma & Healthcare Fund-Income Option

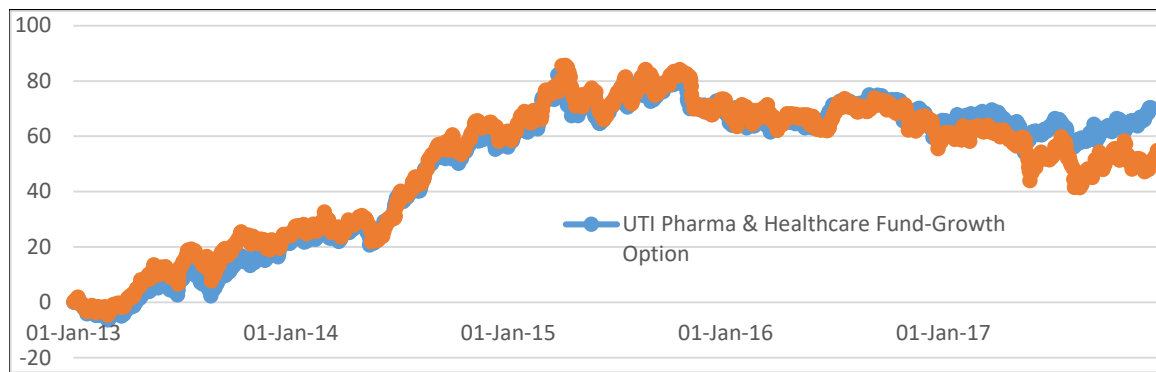


Source: compiled by authors

2. UTI Pharma & Healthcare Fund-Growth Option

Graph-VII depicts the performance of UTI Pharma & Healthcare Fund-Growth Option Fund in comparison to the NiftyPharma. It can be seen from the graph that the performance of the fund is higher than that of the NiftyPharma for most of the period starting 2016, indicating the use of insider information to beat the market ever since. The average of cumulative return of the fund is 49.63% as compared to the average cumulative return of the index is 49.62%.

Graph -VII: UTI Pharma & Healthcare Fund-Growth Option

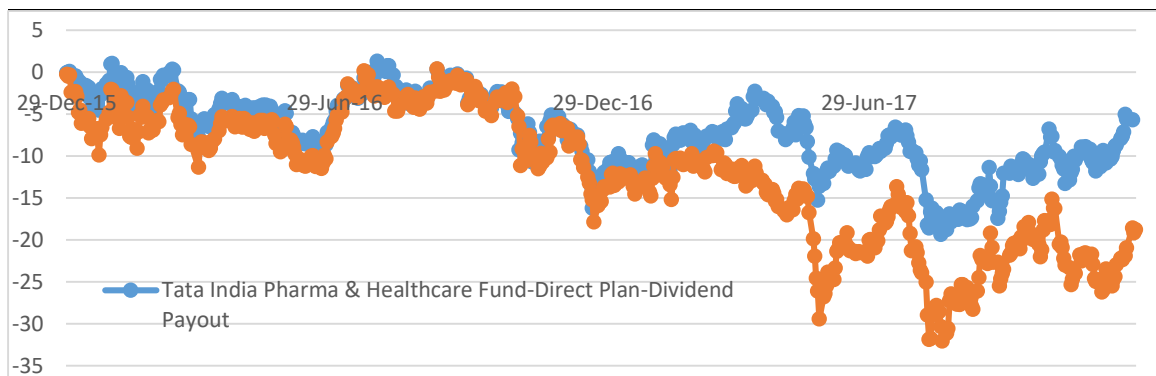


Source: compiled by authors

3. Tata India Pharma & Healthcare Fund-Direct Plan-Dividend Payout

Graph-VIII depicts the performance comparison of Tata India Pharma & Healthcare Fund-Direct Plan-Dividend Payout with NiftyPharma. It can be seen from the above depiction that the performance of the fund is superior to that of NiftyPharma for most of the period, indicating the use of insider information to beat the market ever since. The average of cumulative return of the fund is -12.27% whereas the average cumulative return of the index is -7.18% which signifies better performance.

Graph -VIII: Tata India Pharma & Healthcare Fund-Direct Plan-Dividend Payout



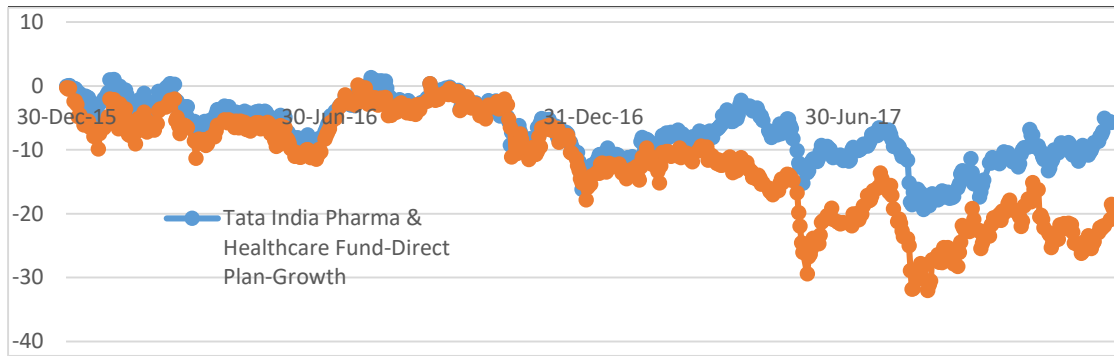
Source: compiled by authors

4. Tata India Pharma & Healthcare Fund-Direct Plan-Growth

Graph-IX depicts the performance comparison of Tata India Pharma & Healthcare Fund-Direct Plan-Growth and NiftyPharma. It may be concluded from the graphical representation that the performance of the fund is superior to that of NiftyPharma which is used as a benchmarking index for our analysis for most of the period, indicating the use of

insider information to beat the market ever since. The average of cumulative return of the fund is -12.27% whereas the average cumulative return of the index is -7.18%

Graph -IX: Tata India Pharma & Healthcare Fund-Direct Plan-Growth

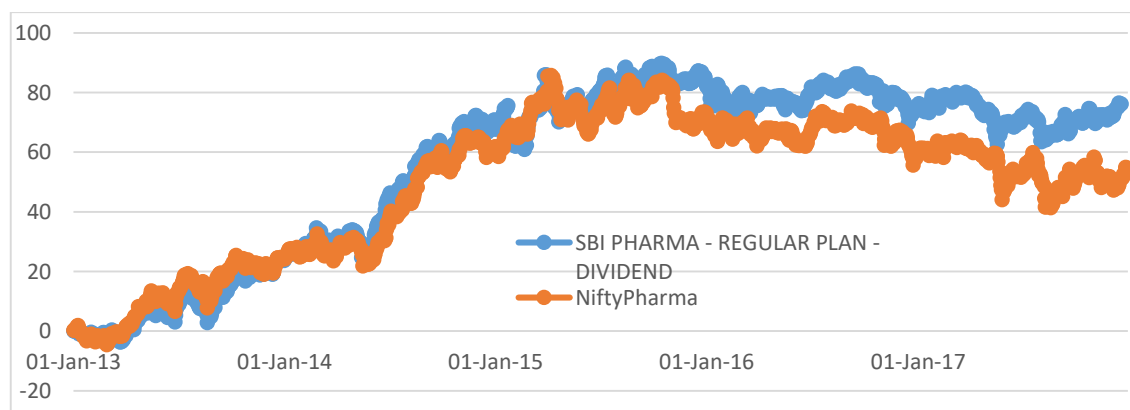


Source: compiled by authors

5. SBI Pharma – Regular Plan – Dividend

Graph-X depicts the performance of SBI Pharma – Regular Plan – Dividend as compared to the NiftyPharma. It can be observed from the graph that the performance of the fund is superior to that of the benchmarking index used for this analysis for most of the period, indicating the use of insider information to beat the index ever since. The average of cumulative return of the fund is 49.64% whereas the average cumulative return of the index is -56.68%

Graph-X: SBI Pharma – Regular Plan – Dividend

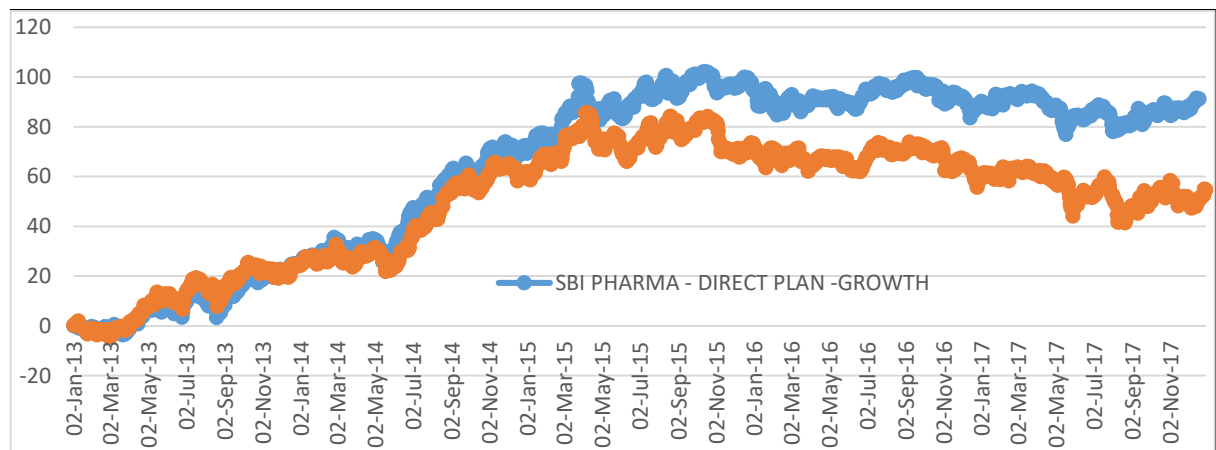


Source: compiled by authors

6. SBI Pharma – Direct Plan -Growth

Graph-XI depicts a comparison of the performance of SBI Pharma – Direct Plan – Growth with the NiftyPharmawhich is chosen as the benchmark for our analysis. It can be observed from the graph that the performance of the fund is superior to that of the index used for the study for most of the period, indicating the use of insider information to beat the market ever since. The average of cumulative return of the fund is 49.64% whereas the average cumulative return of the index is 64.73%

Graph -XI: SBI Pharma – Direct Plan -Growth

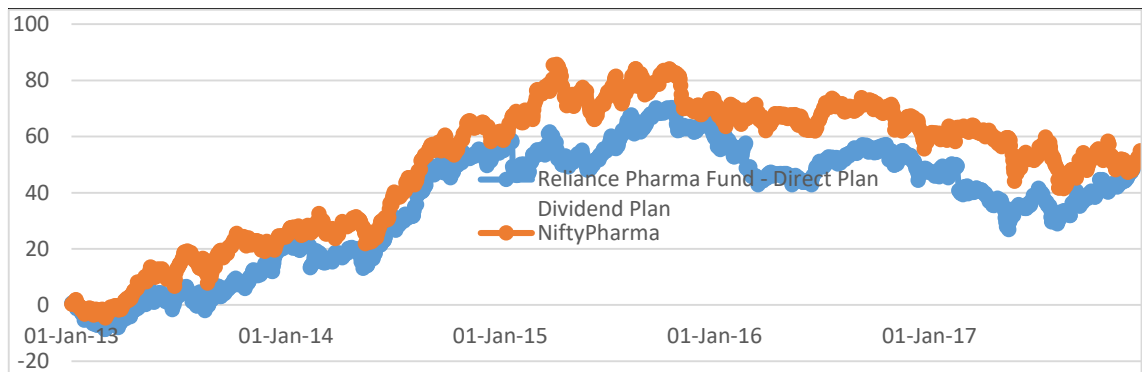


Source: compiled by authors

7. Reliance Pharma Fund - Direct Plan Dividend Plan

Graph-XII depicts the performance comparison of Reliance Pharma Fund - Direct Plan Dividend Plan with the NiftyPharma index chosen as the benchmark for the study. It can be concluded from the graph that the performance of the fund is inferior to that of NiftyPharma for most of the period. The average of cumulative return of the fund is 49.64% whereas the average cumulative return of the index is 36.66%

Graph -XII: Reliance Pharma Fund - Direct Plan Dividend Plan

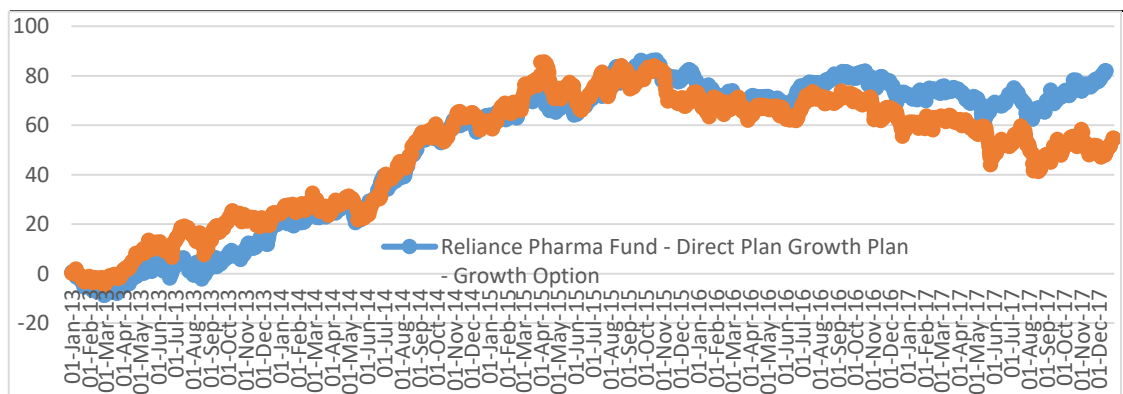


Source: compiled by authors

8. Reliance Pharma Fund - Direct Plan Growth Plan - Growth Option

Graph-XIII depicts the performance comparison of Reliance Pharma Fund - Direct Plan Growth Plan with the NiftyPharma chosen as the benchmarking index for our analysis. It can be concluded from the graph that the performance of the fund is not superior to that of the index for most of the period. The average of cumulative return of the fund is 49.64% whereas the average cumulative return of the index is 52.17%.

Graph -XIII: Reliance Pharma Fund - Direct Plan Growth Plan - Growth Option



Source: Compiled by authors

Thus, one may conclude that as the Pharma funds are beating the index most of the time. It shows that insider information is available to the asset managers, so we were unable to reject the null hypothesis '*Pharma Industry Return is not in the strong form of market efficiency.*'

VI. Conclusion

After conducting the research and analysis on each of the forms of market efficiencies for the Pharmaceutical Sector we found that nine out of ten companies showed weak form of efficiency in the Runs test, thus enabling us to reject the null hypothesis. While in case of Semi-Strong form of efficiency when we conducted the event study we found indications of availability of information either prior to the actual announcement date or slow absorption of the information given out in the announcement in the stock prices leaving a scope for some investors to make abnormal gains, thus we fail to reject our null hypothesis. For the strong form of efficiency, we conducted a comparison between the NAV Returns of some of the major Pharma Funds and the Nifty Pharma Index and found that in majority of the cases the fund returns were able to beat the industry returns thus indicating the availability of insider information with the asset managers enabling them to make abnormal profits, so we were unable to reject our null hypothesis. We may conclude that the Pharmaceutical Industry may be in Weak Form of Market Efficiency.

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ROLE OF UNCONSCIOUS BIAS TRAINING PROGRAMMES AND CULTURE IN PROMOTING WOMEN LEADERSHIP IN CORPORATE ORGANIZATIONS

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Abstract

There has been much research and conjecture concerning the barriers women face in trying to climb the corporate ladder with evidence suggesting that they are still not advancing to senior positions at the same rate as their male colleagues, even when they are recruited in good numbers. The study examines the role of Unconscious Bias Training programmes in the selection of women candidates for leadership positions in organizations. It also explores the role of Unconscious Bias Training in evaluating the culture fitment and leadership potential of women in organizations. Qualitative research method has been adopted here. Semi structured interviews conducted on HR and Talent Acquisition Heads as well as D&I consultants reveal that a gap exists between the expectations as well as the perspectives of the corporate organizations undertaking the training programmes and the D&I consultants. Adopting strategies to further customise the training programmes taking into consideration the varied cultural element in each organization by the training consultants would go a long way in enhancing the feasibility of such training programmes. The study suggests organizations to opt for sustained interventions to benefit from these programmes along with effective communication. Contrary to critics comments on the probability of these training programmes having adverse impacts, this study clearly reveals that training sessions intentionally designed to attain a more discrete and narrower outcome definitely can have a significant impact in mitigating bias in organizations. The limited sample size in the study calls for further research in the area.

Keywords: Women leadership, Culture, Unconscious Bias, Selection process, Training, Sustained Interventions, Recruitment, Evaluation Criteria, Women Empowerment, Organizational Culture

TRACK NO: 12

Introduction

Women's march into senior management positions in organizations has been over the years far from smooth in most cases. People's implicit theories of management and gender are not only descriptive, but also powerfully prescriptive (Heilman, 2001 : Rudman & Glick, 2001). They seem to be guiding how we act ourselves as well as our expectations on how others should act. These stereotypes have the potential to substantially impact the way women and men are treated in their workplaces. These researched upon implicit theories have the potential to affect women's perceived suitability for management roles which arise from a perceived lack of fit (Heilman, 1983 : Kent & Moss, 1994) and expectations of failure. Again past studies suggest that women leaders are evaluated less favourably than their male counterparts , even when they behave in exactly similar manner (Agars, 2004: Eagly et al., 1992). Identifying the criteria for leadership positions, is usually done from a group of senior managers (mostly male) and this may lead to a gender based criteria for subsequent assessment processes. A very different set of attributes might appear if the sample has an equal percentage of women, attributes which resembles the transformational leadership attributes more (Alimo-Metcalfe, Beverly. Gender Management; Bradford, 2010). Review of many research papers revealed that despite the fact that women are moving into management roles more readily and more importantly seem to possess that style of leadership which is closely aligned to transformational leadership, they are still not advancing to senior positions at the same rate as their male colleagues, even though at times they are also recruited in similar numbers.

By focussing on the content of theories on leaders and gender, much of the research and analysis fails to take into account the contextual variation in these stereotypes (Haslam 2001; Oaks, Haslam & Turner, 1994: Perry, Davis-Blake & Kulik, 1994). Most of the research on women leadership positions is done by interviewing women in leadership positions and not by studying or interviewing their surroundings (Anna Nikkila, Thesis, May 2017). Perceptions of gender and leadership change along with culture (Snaebjornsson, Ingi Runar Edvardsson, Vilma Zydziunaite, Vlad Vaiman. 2015). Culture's expectations of leader behaviour are the

most accurate predictors of leadership styles as they have a direct influence on leader conduct (Inga Minelgaite et al., 2015). So, to further understand the gap which is prevalent in women leadership in organizations, it is imperative to explore the barriers with **organizational culture** as the context of study. This may aid in identifying more and probably better evaluation criteria that would be conducive for promoting more women to senior positions in organizations. Ovretveit (2014) defines context as ‘all factors that are not part of a quality improvement intervention. Many authors have developed taxonomies, theoretical and conceptual frameworks to segregate the key elements of context that influences the success of quality improvement initiatives. Typical aspects of context highlighted in such frameworks include leadership, organisational culture, teamwork, resources, organisational characteristics and various external environmental factors. Culture forms a relevant facet of the internal social contextual factors in an organization. While exploring unconscious bias and women leadership in organizations in this study, both literature review as well as the interviews conducted has helped to identify culture as the basis of the study. Culture can be defined as the “learned beliefs, values, rules, norms, symbols and traditions that are common to a group of people” (Northouse, 2013, p 384). Culture shapes the perspectives of people based on their values and attitudes, influencing leadership traits (Ayman et al., 2012).

Despite all the talk around gender diversity and affirmative action, Corporate India has failed to bring more women into leadership positions in recent times. Out of every 100 CEOs and Managing Directors of companies listed on the National Stock Exchange, only about three are women and this has been the case since 2014 (Prime Database, Economic Times, 2019). Out of the 1814 Chief Executives and MDs of NSE-listed companies, only 67 or 3.69% are women as of March 6, 2019 as per the latest data from Prime Database. This shows that the percentage of women CEOs/ MDs has remained almost stagnant since 2014 when out of 1249 CEOs/MDs, 40 or 3.2% were women. Globally too, men are on the drivers seat in most multinationals. There were just 24 or 4.8% women among CEOs of companies that made up the 2018 Fortune 500 list. This was a 25% fall from 2017 when women were at the helm of 32 or 6.4% companies in the Fortune 500 list. (2019 Mar, Economic Times). Again, women make up just 14.4 percent of all people working in STEM occupations, according to WISE (Women in Science, Technology, Engineering and Mathematics). This definitely shows bias on women in technical roles. The trends in corporate hiring often portray men assuming the role of interviewers more than women. This has every possibility of promoting a sub-conscious bias leading to more men than women in senior management positions. A gender diversity report suggests that 66% of

organizations have strategies for diversity hiring, however, only 25% resort to real gender diversity targets. Past studies have also documented the benefits of women assuming senior roles in organizations as well as other sectors in the society (Madsen,2015).The subject of ‘Unconscious Bias’ seems to be gaining momentum in Indian corporate scenario only in the recent past. Dealing with unconscious bias might be an option in our personal lives, but it becomes a problem when it creeps into our workplace. On average, 85 percent of CEOs and top management of Fortune Global 500 enterprises share nationality with the firm they head (Forbes India, March 2019). According to the Kirwan Institute for the Study of Race and Ethnicity at Ohio State University, unconscious bias, also known as implicit social cognition, refers to “the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner.” Different types of biases are prevalent.Previous studies, Reports as well as the current study conducted have all brought to light the fact that recruitment and talent management is one area where biases are rampant. Right from the time an organization places an ad for a job, biases can come into playThe sad reality, underlined further by the study conducted, literature review done as well as other reports referred upon shows that decision making about talent is rife with unconscious assumptions and personal biases. This study explores unconscious bias and women leadership with organizational context as the backdrop of the study.

Literature Review

Alice H Eagly and Steven J Karau (2002), in their study, explores the sparse representation of women in leadership roles in organizations creating the ‘pipeline problem’. Studying this problem, they propose the ‘Role Congruity Theory’ of prejudice towards female leaders . This theory focusses on the perception of inequality between the female gender role and leadership roles that paves the way for two forms of prejudice, a) perception of women less favourable than men as potential leaders and b) evaluating behaviour that fulfils the prescriptions of a leader role less positively when it is enacted by a woman . Evidence from previous research have substantiated that these perceptions heighten the inequality that exists between the female gender role and the leadership roles. The study reveals very little significance imparted to cultural variations while defining these female gender roles and leadership roles, especially in certain contexts. The study says that with the help of this role congruity theory as well as the relevance of contextual and individual variations studied, researchers would be able to anticipate whether gender prejudice is likely to happen in organizations. The study also stresses

that the identification of the right contexts for prejudice can aid in initiating interventions that would help to prevent discrimination. The role of both the cultural aspect as well that of interventions based on the contexts of prejudice, in reducing the role congruity towards female leaders prevalent in organizations and the need for future research to delve deeper into this gap for further contribution to the area of women leadership has been highlighted here. Diana Bilimoria, Deborah O' Neil, Margaret M Hopkins and Angela M Passarelli (2008) through their article presents a comprehensive perspective of leadership development that addresses the unique needs of women in organizations. The study focusses on the significance of focussing on leadership development with exclusive focus on women. More so, to be effective such programmes should be conducted on both individual as well as organizational levels. 'Accountability' is also a vital aspect to be looked into here. The study reveals that women can provide unique insights into the consumer behaviour and also offer varied and beneficial perspectives on client relations and overall business practices than the mainstream (male) thinking (Biliomoria 2000). Utilising these positives to the maximum would enable promotion of leadership development culture for women at all levels. This would require a mindshift throughout the organization, especially at the management levels. The article goes on to say that this is where consultants as well as HR professionals come into the picture. The study stresses on the need to advocate for such individual and organizational culture shifts that would support the themes of promoting women and in framing policies and procedures that would address the underlying issues. Susan R Madsen and Maureen S (2018), focusses on the reason for the continued underrepresentation of women in leadership despite efforts to counter the pattern. It mentions that the LDP's and women only programs very much prevalent today have not prepared women to successfully face the reality of a subtle gender bias that shapes the organizational cultures. The study recognizes unconscious bias as a critical leadership development component and uses it to demonstrate how effective women's leadership programming can and should be guided by further research and theory. The article subtly pinpoints the gap in women leadership development that still persists in organizations, where handling of unconscious gender biases are concerned. Again, Inga Minelgaite Snaebjornsson, Ingi Runar Edvardsson, Vilma Zydziunaite & Vlad Vaiman (2015), in their study explores how perceived leader behaviour and gendered behaviour relate to national culture and actual leader behaviour. This study confirms the need to include both gender and culture into leadership style research and highlights the need to have a longitudinal approach to leadership studies. This research bases itself on the study (Dorfmal et.,al, 2012), suggesting that culture's expectations of leader behaviour are the most accurate predictors of leadership style as they

have a direct influence on leader conduct. Hence it states that leadership studies should take both gender and culture into account. Madeline E Heilman (2012), focusses on the workplace consequences of both Descriptive as well as Prescriptive Gender stereotypes. The main argument in this paper is that gender bias in evaluations is a major contributor to the scarcity of women in upper level organizational positions and that gender bias is rooted in gender stereotypes. The paper aims at enhancing the understanding about why and how gender stereotypes produce career hindering judgements and discriminatory decisions and focusses on the question as to why being competent and qualified provides a woman no assurance that she will advance to the same organizational level as an equivalently competent and qualified man. The paper points out that there is ample evidence that there are inequities in the recruitment (e.g., Gaucher et al., 2011), selection (e.g., Schmader, Whitehead & Wysocki, 2007), evaluation (Eagly, Makhijani & Klonsky, 1992) and promotion of women. Lack of clarity of the evaluation criteria as well as lack of specificity of the evaluative structure (how the criteria are to be combined) have all contributed to expectation based distortion. Although the paper has suggested the possibility of mitigating biases in evaluations by reducing the ambiguity through better structuring as well as standardising (making the evaluation criteria concrete), further research on this would be necessary to evaluate the feasibility of such initiatives. Again, Madeline E Heilman, Francesca Manzi & Susanne Braun (2015), stresses on the 'lack of fit' model (Heilman 1983, 2001) as a framework for understanding the causes and consequences of gender bias in the recruitment and selection of women in organizations as well as a model that could be used for remedial action. The paper points out that they have been shown to be consistent across cultures (William & Best 1990), to exist in work as well as non work settings (Heilman et al, 1989), and to be held by women as well as men (Parks-Stamm et al., 2008). There is also evidence that gender stereotypes can be activated automatically without the evaluators awareness of their impact (Banaji & Hardin, 1996). Such diversity initiatives are also said to have a n adverse impact on the impressions on women as they also at times create a pathetic image of them (Heilman & Welle, 2006). Standardising evaluation criteria has also been discussed as an option though its feasibility still needs to be explored. This conflicting viewpoint highlights the need for further research in this area . It also lays stress on figuring out ways and means to effectively curb the prevalence of bias in organizations. Williamson Sue, Foley, Mariah (2018), discusses the efforts taken up by the Western Governments who are trying to address the negative impacts of Unconscious Biases on employees in organizations. Although Unconscious Bias has received limited attention in Human Resources literature, Social psychology literature has identified inadequacies with their practice of awareness and

training programmes for mitigating the same. This is also an indication for the possibility of such training programmes being responsible for entrenching and even normalising such biases to some extent ! Consistent with research, many of the negative consequences of training programmes could be reduced through thorough evaluation of training programmes. The study argues that although the agencies view these training programmes as a silver bullet, the effectiveness of these training programmes is likely to be limited unless they are sustained interventions.

The literature review clearly reveals the existence of unconscious bias in organizations, highlighting the ample scope for a lot more that needs to be done in order to mitigate these biases, which in turn would lead to promotion of more women to senior positions. Although Unconscious Bias training programmes are very much prevalent today, and play a role to create awareness, the effectiveness of such programmes seem to be underutilised or rather the corporate organizations seem to be adopting a lackadaisical approach to many such programmes. The main objectives of this study is to understand the role of Unconscious Bias training programmes in significantly contributing towards reducing bias against women in organizations. The study also focusses on understanding the role of these training programmes in evaluating the culture fitment and leadership potential of women in organizations.

Methodology

Qualitative research was adopted here as it would facilitate natural enquiry into the real world using flexible data generation methods which would also be sensitive to the particular social context. Semi structured interviews were conducted on a sample size of eight. Purposive sampling method was used here. Four of the respondents were from the Human Resources and Talent Management Departments of various corporate organizations and another four interviews were conducted on Diversity and Inclusion consultants who were catering to Unconscious Bias training programmes in organizations. The questions used were open ended and revolved around citing any instance of unconscious bias experienced by him/her during selection processes and also on how he/she thinks leader behaviour can be formally and informally evaluated in organizations. Grounded Theory approach was used here. The information and cues from each of the interviews formed the basis for the next one. The various perspectives and insights collected were further analysed in a systematic manner using the Thematic Synthesis of Qualitative Research. Thematic analysis is a method rather than a methodology (Braun & Clarke 2006; Clarke & Braun 2013). We decided to adopt this method

as it is not tied to any particular epistemological or theoretical perspective and thus would provide lot of flexibility. The analysis lead to the development of common concepts which were coded and further translated to form common themes. The interviews conducted were transcribed and thematic synthesis was done on the collected data. Line by line coding was done. Some of the text that were coded were: “Of course, there were inequalities going on”, “I realised that my salary was less than him for the same job”, I felt there were golden handcuffs on me !”, “Overnight no one could change a person’s mindset”, ‘we need to look at various forms of diversity, that is where the talent is”, “A good leader is a strong person who can understand the entire journey and he/she could fit into any culture any which ways”...and so on. The codes which were later reduced to descriptive themes. The themes clearly revealed the respondents perspectives. The descriptive themes were later developed into analytical themes. The results more or less confirmed my findings based on the literature review.

Findings

The analysis has brought to light that women were definitely at the receiving end of such biases, more than men in these corporate organizations. Lack of Senior Management Support was cited as a major factor inhibiting the adoption of a sustained and efficient follow up of such training programmes in these organizations. The interviews conducted clearly revealed a gap prevalent between the expectations and the attitudes of the corporate organizations hosting such training programmes and the training consultants. The inclusion of more structured and customised training programmes on the part of the D&I consultants would definitely go a long way in effectively promoting sustained interventions which would in turn reap more positive results in the long run. Culture fitment can be a major assessment criteria for assessment of candidates. A thorough and proper understanding of the culture of each organization by the training consultants could be done with support from the organization itself. This can probably be incorporated into the training content also with support from the respective organization.

Discussion

Past research on women leadership and unconscious bias have been integrated here to identify Unconscious bias training programmes and their role as a significant element for the basis of study. The interviews and their analysis confirm the preliminary findings from the literature review. The interviews conducted revealed variations on the significance allotted to ‘culture fit’ during the selection processes. Advocating the significance of ‘culture’ as a relevant criteria during selection processes could go a long way in reducing biases. This could be

highlighted through training programmes. A very significant perspective common to all the interviews conducted was the role the respondents attributed to not only culture fitment, but competency and leadership traits while evaluating candidates during interviews in organizations. All of them were of the view that competency evaluation in organizations are generally standardised. Significant variations were found in the ratings each of the respondents allocated to culture fitment, associated with the informal evaluation procedure. Hence, this study focusses on culture. Standardising questions or including preset questions to capture culture fitment and assessment of leadership traits were difficult to do on across the board basis, but, for select roles, assessment tools like MBTI could be used which would include the assessment of leadership traits and culture fitment. These could definitely bring down the bias significantly. Both the literature review as well as the analysis further conducted on data from the interviews, clearly revealed a mismatch in the perspectives as well as expectations of both the training consultants as well as the corporate organizations undertaking such unconscious bias training programmes. Rather than mere 'awareness creation' through these training sessions, a major shift in the approach of these corporates involving effective communication and dedication which in turn would enable improved customisation and sustainability of the training programmes would ensure the mitigation of biases during selection processes in the organizations.

Conclusion

In spite of the scepticism about whether training programmes are as effective as they are made out to be in some cases, with critics pointing out that such training sessions can even backfire without visibly moving the needle on diversity numbers, the study done has revealed that such training programmes can definitely have a real positive impact if designed intentionally to attain a more discrete and narrower outcome. Literature, by foreign researchers has brought to light that the method of structured interviewing has been shown to promote more objective and less biased decision making. Such structured interviewing could be based on a set criteria the interviewer could also incorporate into his mindset during the informal assessment that happens. Creating awareness on how to further improve the quality and effectiveness of training programmes would go a long way to enhance the positive impacts they could have in mitigating the biases. This could be just one of the aspects which would contribute to improve the feasibility of the training programme. Unconscious bias training can be a useful component of diversity and inclusion efforts, only if it is thoughtfully designed with research in mind and its limitations are well understood.

The sample size used in this study is relatively small and confined to the corporate sector. Future research on a larger and probably varied sample could add additional value to the current *findings*.

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PREDICTION OF STOCK PRICE MOVEMENT USING TWITTER AND NEWS SENTIMENTS

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Abstract

Prediction of stock market movement using artificial neural networks has been an active area of research in finance whereby many researchers and experts have developed a keen interest in predicting behavior of stock market. Several methods have been developed for forecasting stock market trend based on the knowledge of historical data. Recently, studies suggested that investor sentiments like twitter and news have significant effect on the behavior of stock market. The key objective of this paper on developing a model for predicting stock market movements using Probabilistic Neural Network (PNN). First, historical prices are used as input to the PNN to make prediction about stock market. Second, investor sentiments such as twitter and news are collected. Finally, day twitter sentiment score and day news score are calculated and then fed to PNN as additional inputs with historical prices to evaluate any improvement in accuracy. The developed model is tested on Infosys and Bharti Airtel Limited. Daily stock prices, twitter data and news data of selected companies from January 2018 to December 2018 are employed to develop a model. Numerical results are presented to demonstrate performance of the proposed model. A comparison of the proposed model with few existing models also presented. The results proved that adding twitter and news sentiment score as additional inputs with historical data resulted in improved prediction accuracy.

Keywords: *Artificial neural network, financial market, Natural language processing, News, Tweets, Prediction accuracy, Sentiment scores and Stock prediction.*

Introduction

Stock market prediction is a thriving topic in the field of financial world and has received more attention from investors, experts and researchers. Prediction is the process of attempting to determine future price or movement of stock market. It involves the process of taking historical stock prices and technical indicators and capturing patterns in the data that are seen via some techniques. Then the model employed to make prediction about the future direction or price of

stock market. An accurate prediction of a stock market movement or price could yield high profit.

Stock market research encapsulates three elemental trading philosophies: (i) fundamental analysis (ii) technical analysis and (iii) time series forecasting. Fundamental analysis is a method of estimating share value of a company by analyzing some factors such as sales, profits, earnings and other economic factors. Technical analysis utilizes the historical prices of stocks for identifying the future movement or price (Selvin et al. 2017). Fundamental analysis is a long-term investment strategy whereas technical analysis is considered far more of short-term methodology. Time series forecasting involves two basic models: (i) linear models and (ii) non-linear models. Autoregressive Moving Average (ARMA) and Autoregressive Integrated Moving Average (ARIMA) has been widely accepted linear models used to make predictions about the stock market. Linear models use some predefined assumptions such as normality and postulates to fit a mathematical model (Adebisi et al. 2014) (Chung and Shin 2018). These models need more historical prices to meet these assumptions. Due to this reason, it is not possible to identify the patterns present in the stock data. Since stock markets are considered as non-linear systems, more flexible methods that can learn hidden information in stock data are essential to enhance the prediction accuracy. Soft computing techniques, Artificial Neural Networks (ANNs) have strong advantages in that respect, because they can extract the nonlinear relationships between data without prior knowledge of input data via training process. Several studies showed that the ANN techniques outperform the linear models (Faria et al. 2009) (Sheta et al. 2015).

Sentiment analysis is contextual mining of text which aims at determining and extracting subjective information in source material and assisting a business to understand the social sentiment of their brand, product or service while monitoring online conversations (Collomb et al. 2015). Further to this, sentiment analysis helps companies to assess what consumers like or dislike and thus take a step in improving their service thus improve their reputation. Therefore, companies need to be aware of what is said about them in the public sphere as it may impact them either positively or negatively and have a direct influence on their values in the stock market thus impacting on either gaining returns or losing their investments value (Ondieki et al. 2017).

Forecasting movement of stock market by interpreting historical stock data has always been an interesting topic to both traders and researchers. Among many methods have been developed, ANN based prediction models are popular and widely used due to their ability to identify stock movement from the massive amount of stock data that can capture the underlying patterns

through training process. However, there is limited research devoted to analyze the impact of social media sentiments in enhancing prediction accuracy. Stock sentiment score may either be positive or negative sentiment which may make investors be bullish or bearish with regards to a particular stock.

The main focus of this work is to evaluate the impact of twitter sentiment and news sentiment score in enhancing the prediction accuracy of stock market movements using Probabilistic Neural Network (PNN). Initially, historical prices such as opening price, highest price, volume and lowest price are fed as input the PNN to make prediction about stock movement. Then, day twitter sentiment score, day news sentiment score and stock indicators are applied to PNN to validate whether there will be an improvement in accuracy or not. Finally, a comparative analysis of stock movement prediction between technical analysis and sentimental analysis is done.

The rest of the paper is organized as follows. Section 2 presents a brief review of related work in this domain. Section 3 explains the research methodology used. Numerical results and analysis are provided in Section 5. The paper is concluded in section 5 followed by relevant references.

Review of Related Work

The stock market movement prediction is a very tricky and highly challenging tasks in finance since stock market is complicated, volatile, dynamic and non-linear. Moreover, the factors affecting stock market include trader's expectations, political events, psychology, economic conditions and other stock market movements (Chandar 2019).

Several research efforts have been devoted to predict the stock market using ANNs. Faria et al. (2009) predicted the Brazilian stock market with ANN and exponential smoothing methods. Results proved that ANN based model produce outstanding performance as compared with exponential smoothing method. Rao and Srivastava (2012) investigated the impact of sentiment score in predicting stock market trend. Correlation between closing price and sentiment score, return and sentiment score and volatility and sentiment score are computed. Expert Model Mining System (EMMS) performed the prediction task. Results showed that negative and positive dimensions of public mood carry strong cause-effect relationship with price movements of individual stocks/indices. Schumaker et al. (2012) evaluated the strength of news sentiment in predicting future movement of stock market. Prediction model was developed using SVM. 53.2% accuracy was obtained. Sheta et al. (2015) proposed a stock prediction model using ANN and Support Vector Machine (SVM). 27 potential financial and

economic variables are used as input to the developed models. The developed SVM model with RBF kernel model provided good prediction capabilities compared to regression and ANN models. Kordonis et al. (2016) identified the correlation between twitter sentiment score and stock market and the predicted the future behaviour of stock market. Two prediction models namely Naïve Bayes Bernoulli (NBB) and SVM developed using investor sentiment and stock market data. Feature vectors such as Positive Sentiment Score (PSS), Negative Sentiment Score (NSS), closing price, High-Low Percentage (HLPCT), percentage change and volume are employed to predict the future movement of stock price. 87% prediction accuracy was obtained by applying SVM. Dang and Duong (2016) forecasted the future movement of stock market using news article dataset. An accuracy of 73% was achieved by linear SVM. Ho et al. (2016) employed PNN to predict the stock market movement based on news sentiment score and obtained mean accuracy of 54.47%. Ondieki et al. (2017) combined twitter sentiment score with the historical prices to improve the prediction accuracy. The daily sentiment scores were computed with WordNet and Sentiwordnet lexicons used for classification and scoring. Non-Linear Autoregressive Neural Network with Exogenous Inputs (NARX) models which were trained using Levenberg-Marquart (LM) back propagation employed to predict the stock movement. The results proved that adding twitter sentiment scores as additional inputs to the historical prices resulted in more accurate prediction. Table 1 presents the summary of reviewed papers.

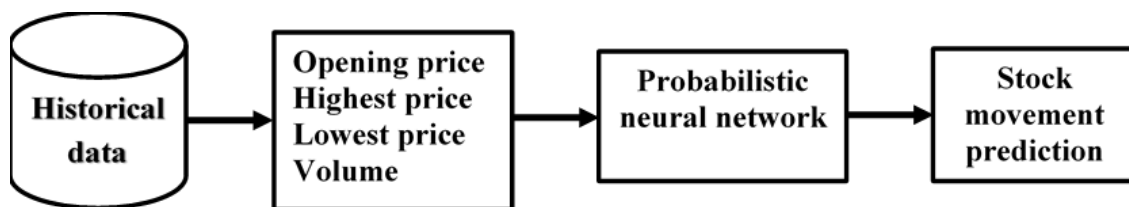
Researchers	Features	Model	Accuracy (%)
Rao and Srivasta (2012)	Twitter sentiment score	EMMS	NA
Schumaker et al.(2012)	News sentiment	SVM	53.2
Dang and Duong (2016)	News sentiment	Linear SVM	73
Kordonis et al.(2016)	PSS, NSS, closing price, HLPCT, percentage change, volume and twitter sentiment	NBB, SVM	87

Ho et al.(2016)	News sentiment	PNN	54.47
Ondieki et al. (2017)	Historical prices and Twitter sentiment	NARX	85

Table 1. *A Summary of reviewed papers*

Proposed Methodology

The main focus of this work is developing a model to predict the stock market movements with the help of historical prices, tweets sentiment score and news sentiment score. Framework of the proposed prediction model is shown in Figure.1. The prediction model is developed using probabilistic neural network. PNN is a type of feed forward neural network, which is widely used in pattern recognition and classification problems. The method applied in this work involves gathering twitter and news sentiment score and historical prices. Prediction model is developed and accuracies compared when there is tweet and news sentiments score versus when there is no tweet and news sentiment score as inputs.



(a)

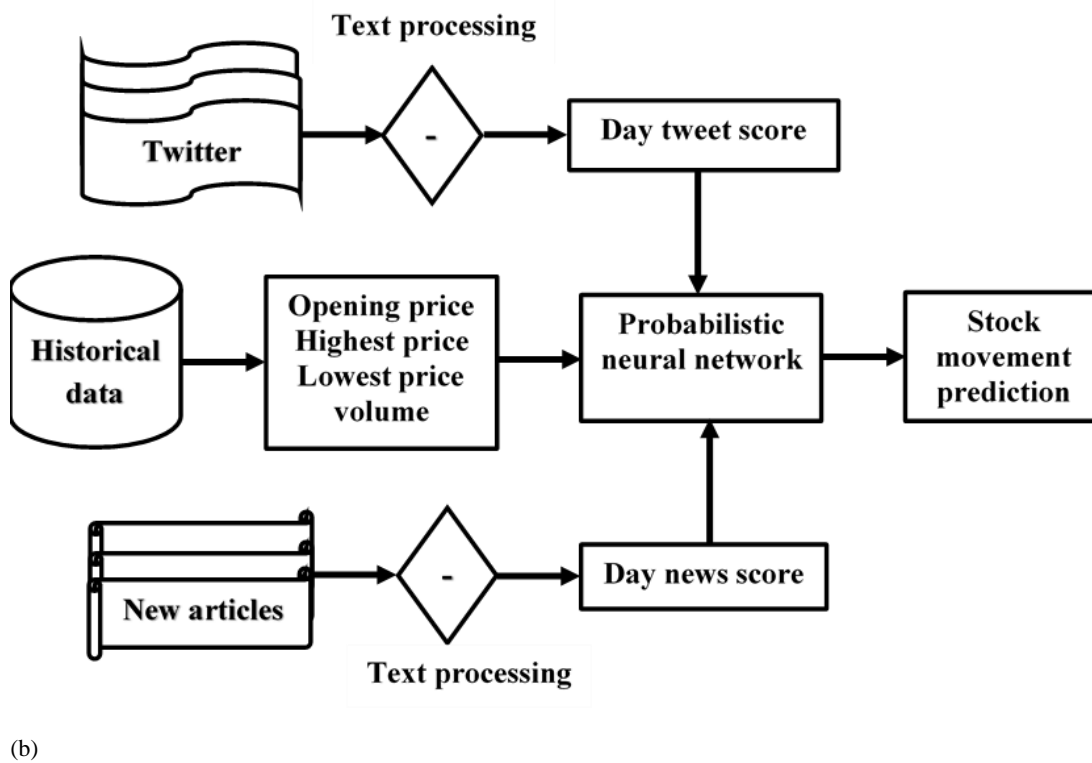


Figure 1. *PROPOSED METHOD FOR STOCK PREDICTION (A) PREDICTION WITHOUT INVESTOR SENTIMENT SCORES (B) PREDICTION WITH SENTIMENT SCORES*

Historical data preprocessing

Historical stock prices are collected using Yahoo Finance API (<http://Yahoo.finance.com>). The dataset consists of the opening, closing, highest, lowest and volume prices for each day. Stock market data had to be preprocessed to become more suitable for further process. The main problem we faced the missing stock prices. Stock value was absent for weekends and other holidays when the stock market is closed. To fill the missing values, we used simple statistical function and can be computed as,

$$y_i = \frac{(x_{i-1} + x_{i+1})}{2} \quad (1)$$

Where, y_i is the missing value on i^{th} day, x_{i+1} and x_{i-1} represents the previous value and next value respectively.

Sentiment score

To investigate the relationship between stock market trend, news and twitter, series of twitter sentiment is collected from the twitter API. Positive sentiment score and negative sentiment

scores are computed from the collected tweets using the method presented by (Ondieki et al. 2017). Similarly, daily news of selected companies is gathered and stored in database. Natural Language Processing (NLP) (Kim et al. 2014) is used to extract the news sentiment score from the unstructured news. We removed number, punctuation, html tags and stop words. The remaining sentences are then used to calculate the news sentiment score.

After calculating sentiment scores, day tweet sentiment score and day news sentiment score are calculated. Day tweet score is calculated to decide about positivity or negativity of overall tweets of the day by averaging positive and negative scores of the company tweets (Ondieki et al. 2017). Mathematically, day tweet score can be expressed as,

$$\text{Day tweet score} = \frac{\text{Sum of scores for sentence}}{\text{Total number of day tweets}} \quad (2)$$

Similarly, day news score is defined as,

$$\text{Day news score} = \frac{\text{Sum of scores for sentence}}{\text{Total number of news publication}} \quad (3)$$

The calculated values were then applied to the PNN as additional feature vectors to test for any improvement in the accuracy.

Labelling

After collecting the stock data for the intended period, all the daily closing prices are labeled as up or down using Equation (4)

$$\text{Stock market movement} = \begin{cases} \text{"up"} & \text{if closing price}_i > \text{opening price}_i \\ \text{"down"} & \text{otherwise} \end{cases} \quad (4)$$

Proposed model uses “up” and “down” movements of stock prices as training patterns.

Probabilistic neural network

PNN is a feed forward network with complex structure. It was developed by Specht in 1990. Figure.2 depicts the structure of typical PNN. The network consists of four layers namely an input layer, pattern layer, summation layer and an output layer. As in Figure.2, the input layer receives the external data and then moved to pattern layer. The pattern layer is a radial base layer. Each neuron in the pattern layer has its own center.

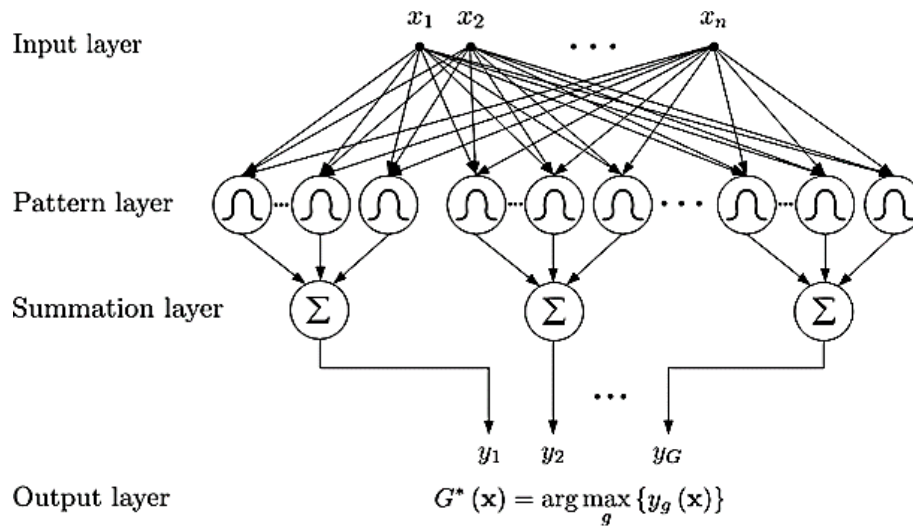


Figure 2. *STRUCTURE OF PNN*

Pattern layer accepts the data from the inputs layer, then distance between center and received input data is calculated (Xu et al.2016) The resulting value is passed to the next layer. Summation layer calculates the weighted average of the same type of neuron nodes from the pattern layer. After calculating each neuron node in the summation layer, we select the maximum probability as the result node and transport it into the output layer. In this work, the PNN is implemented by using the MATLAB Neural Network Toolbox, with the network structures specified according to the default settings.

Numerical Results and Discussion

Data description

Two stock companies namely Infosys and Bharti Airtel Limited are selected. The dataset used in this work are from three sources: historical data, twitter sentiments and news sentiments. For the experiment, daily news for the selected stocks are gathered over a period of 3 years for January 2016 to December 2018. Twitter sentiments are downloaded from twitter API corresponding to the period from January 2016 to December 2018. Similarly, historical prices for selected stocks are obtained from Yahoo finance over a period of 3 years. Table 2 shows the list of companies and duration used in this work.

Stock name	Stock ID	Start date	End date
Bharti Airtel Limited	BHARTIARTL.NS	01/01/2016	31/12/2018
Infosys	INFY.NS	01/01/2016	31/12/2018

Table 2. *List of companies*

Results

The main aim of this work is to examine the influence of investor sentiments in predicting stock movements. After collecting data, a feature matrix is created with the following attributes: opening price of the day, highest price of the day, lowest price of the day, volume, day tweet score and day news score. The PNN is designed with m input neurons and n output neurons. m represents the number of features and n represents the number of classes. In this work, m is 4 (historical data) and 6 (with additional inputs) and n is 2 (up and down). Figure.3 shows the developed PNN in MATLAB environment.

Performance of proposed model is assessed in three cases:

Case 1: Predict the stock market movements using stock indicators

Case 2: Predict the direction of stock market movement with stock indicators and twitter features

Case 3: Predict the direction of stock market movement with stock indicators, twitter features and news features

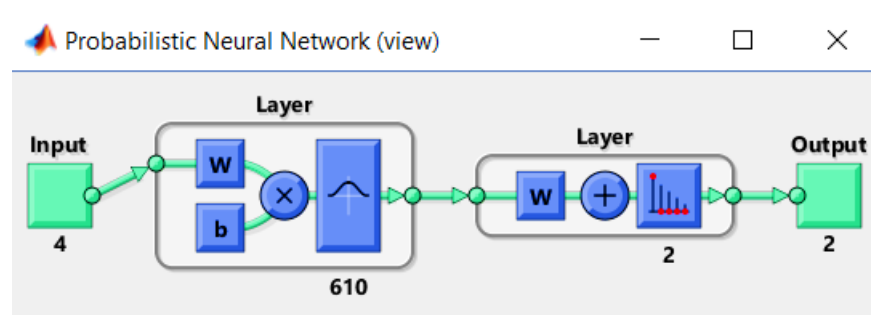


Figure 3. DEVELOPED PNN IN MATLAB ENVIRONMENT

For the PNN process, the MATLAB 2018a neural network toolbox is used. The whole data is divided in the following ratio: 80% of samples used for training the network and 20% of samples used for testing the performance of the model. The PNN is trained with training pattern and validated with testing samples to assess the prediction ability of the model. Training process helps the network to determine the optimal weights by minimizing the error between actual and predicted value. Initially, the network is trained with historical prices. Several experiments are conducted to determine the optimal value of spreading factor. After finding optimal value of spreading factor, the network is trained with historical prices along with sentiment scores. The trained network employed to predict the future direction of stock market. Performance of the model is measured in terms of prediction accuracy. Simulation results are compiled and presented in the form of bar graph, as shown in Figure.4.

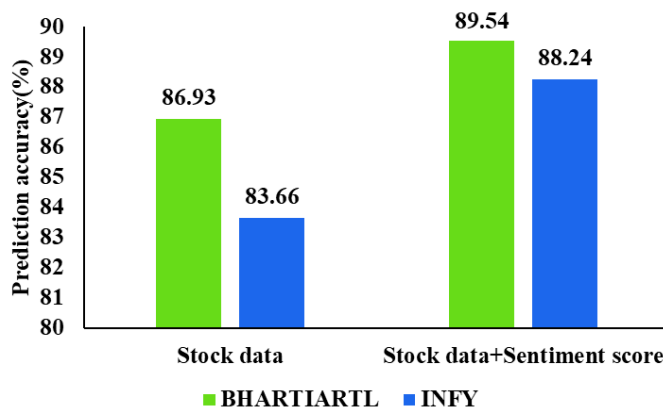


Figure 4. PREDICTION ACCURACY BEFORE AND AFTER ADDITION OF SENTIMENT SCORE ARE ADDED AS INPUTS TO PNN

Results showed that for the selected stocks, higher prediction accuracy was the ones that had day and news tweet scores as additional inputs to the PNN. It strongly indicates that the PNN is reliable in determining future movement of stocks if addition of investor sentiments as inputs to PNN.

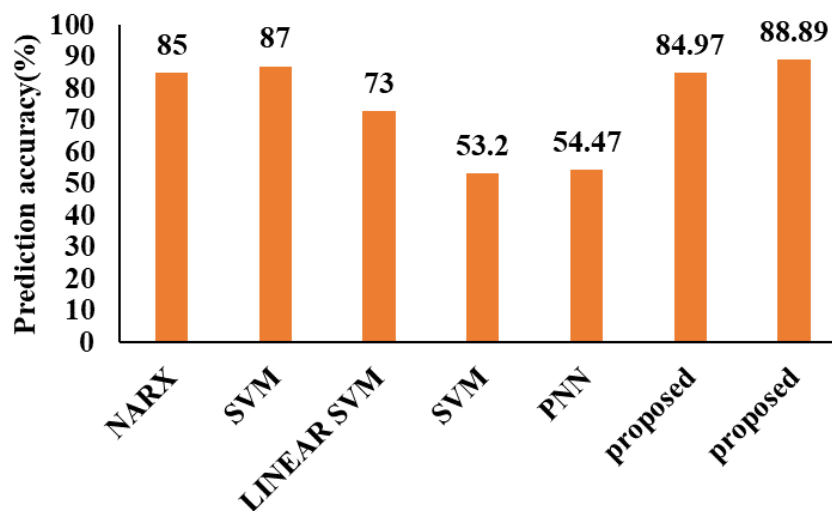


Figure 5. PERFORMANCE COMPARISON IN TERMS OF MEAN ACCURACY

To demonstrate the prediction ability of the proposed model, performance of PNN model is compared with the other earlier models such as NARX (Ondieki et al.2017), SVM (Kordonis et al. 2016.), linear SVM (Dang and Duong, 2016), SVM (Schumaker et al.2012) and PNN (Ho et al.2016) in terms of prediction accuracy reported in the literature. Ondieki et al. (2017) predicted the stock market movement by combining historical prices with twitter sentiment score. Kordonis et al. (2016) forecasted the stock market trend using twitter sentiment score

along with stock data and achieved an accuracy of 87%. Dang and Duong (2016) used news sentiment score as an input to SVM to predict the stock trend. Schumaker et al. (2012) used SVM and Ho et al. used PNN to predict the stock market trend with news sentiment score. As in Figure.5, it is noticed that the proposed model can predict the stock market with an accuracy of 84.97% for historical input data and 88.89% for additional input data (historical data and sentiment score). Further to this, it is obvious that prediction accuracy of the proposed PNN is higher when compared to other methods taken for comparison since proposed model uses historical data, twitter sentiment score and news sentiment score to make prediction about stock market movement.

Conclusion and Future Enhancement

This paper presented an artificial neural network model for stock movement prediction and uses input a combination of historical data and public sentiment, as measured from twitter and news. Historical prices are taken as input vectors to be trained by probabilistic neural network in order to predict the trend of stock market. Performance is measured in terms of prediction accuracy. Then, news and twitter sentiment score are used in probabilistic neural network in combination with the historical prices to determine its influence in prediction accuracy. The results proved that that proposed neural network model can predict the movement of stock market with high prediction accuracy when adding public sentiment score, news and twitter score as input to the network. In addition to this, by labelling up(down) in day i as closing price is higher (lower) that the opening price in day i, proposed probabilistic neural network model provide better result than other models. In future, we focus on improving prediction accuracy by collecting more public sentiment and analyzing different combinations to find the best model.

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NEUROTICISM AND INNOVATIVE WORK BEHAVIOR: THE MEDIATING ROLE OF THRIVING

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Abstract

Traditional perspectives on the relationship between neuroticism and job performance assert that neurotic employees have a significant negative impact on organization and research suggests that hiring these employees should be avoided. We posited positive linkage between neuroticism innovative behaviour at workplace when mediated by thriving. The study adopted survey method to test the hypotheses. As hypothesized, results suggest that though the relationship between neuroticism and innovative behavior is negative but it can be improved when mediated by thriving and its sub-dimensions. The study has strong theoretical and practical implications. The study extends literature of neuroticism to organizational context which was earlier primarily restricted to medical journals. The study also has important implications for the talent management function in organizations.

Keywords (up to 10): *Neuroticism, Thriving, Learning, Vitality, Innovative Work behaviour*

Introduction

From a personality theory point of view, organizations generally prefer employees who show satisfactory scores on big-five traits (agreeableness, conscientiousness, openness, extroversion and emotional stability) of personality. But organizations are not ideal places. It also have employees with personality traits displaying neuroticism, less agreeableness (or disagreeableness), and introversion. There is not much research on how these negative traits in general, and neuroticism in particular, can be transformed in ways that create positive contributions for the organization (Fuller, Hester, & Cox, 2010). Therefore, the present paper focused on the relationship of neuroticism with innovative work behavior along with dimensions of thriving as the mediator variable.

Literature Review

Neuroticism

Neuroticism is a temperamental factor that predisposes individuals to a range of emotional psychopathologies and aversive negative effects, such as anxiety (Costa & McCrae, 1992; Rafienia, Azadfallah, Fathi-Ashtiani, & Rasoulzadeh-Tabatabaie, 2008).

Innovative work behavior

Innovative work behavior (IWB) typically not only includes exploration of opportunities and generation of new ideas (creativity related behavior) but could also include behaviors directed towards implementing change, applying new knowledge or improving processes to enhance personal and/or business performance (implementation oriented behavior). Taking a leaf from works of Barrick and Mount (1991), Turiano (2012) and Bendersky and Shah (2013) we hypothesize that:

H₁: Neuroticism will be positively correlated to innovative behavior at work

Neuroticism and Learning

Social characteristics of a job contribute to mutual learning and cognitive and behavioral development through social interactions at multiple levels (Oldham & Hackman, 2010; Perry-Smith, 2006). Mount, Barrick, and Stewart (1998) showed a significant association between neuroticism and job performance for individuals who held jobs that required interpersonal dependence (e.g., customer service or teamwork).

H₂: Neuroticism is positively correlated to learning in the workplace

Upal (2014) showed that job performance of highly neurotic individuals is influenced by job characteristics of the workplace. Learning reduces anxiety and makes them more connected to their work. Therefore we hypothesize that

H₃: Learning will lead to experience of vitality at work

A number of studies have shown that that vitality is related to creative work. (Spreitzer, Atwater & Carmeli, 2009; Kark & Carmeli, 2008; Lam, & Quinn, 2011). Therefore we hypothesize that:

H₄: Vitality will lead to innovative behavior in the workplace for the neurotics.

The Mediation of Thriving in Relation to Neuroticism and Innovative Work Behavior

Almost all organizations provide some avenues of thriving at work and therefore thriving is always present, only the intensity varies.

H₅: Thriving (learning and vitality) mediates the relationship between neuroticism and innovative behavior at work.

Research methodology

This study was conducted in India. The study used convenience sampling and collected data from respondents from organizations in manufacturing, oil, and gas, mining, not-for-profit, and government sector to study how respondents not falling in the category of artists and scientists responded to the questionnaire. The final data was collected from 223 employees.

Scales Used:

The dimensions of learning and vitality were measured by the 10 items scale of Thriving (Porath, Spreitzer, Gibson & Garnett, 2011). Its Cronbach alpha was 0.90. Neuroticism was measured by the items of the N scale taken from Johnson's 120 item IPIP-NEO (Johnson, 2014). Innovative behavior was measured by four item Innovator scale (Denison et al., 1995) taken from Spreitzer, De Janasz, & Quinn (1999).

Result

Table 1: Descriptive Statistics and Correlations

	Variable	Mean	SD	1	2	3	4	
1.	Thriving-Learning	3.93	0.60	(.76)				
2.	Thriving-Vitality	3.84	0.66	.593**	(.84)			
3.	Thriving	3.89	0.56	.880**	.904**	(.86)		
4.	Neuroticism	2.76	0.51	-.308**	-.462**	-.435**	(.81)	
5.	Innovative behavior	3.57	0.74	.648**	.554**	.670**	-.301**	(.89)

N = 273. Reliabilities (Cronbach's α) on the diagonal parentheses.* $p < .05$, ** $p < .01$.

Table 2: Confirmatory Factor Analyses

Constructs	χ^2	df	χ^2 / df	CFI	TLI	RMSEA
Neuroticism	371.417	242	1.535	0.915	0.903	0.049
Thriving	83.600	32	2.613	0.949	0.929	0.085
Innovative Behavior	2.044	2	1.022	1.000	1.000	0.010

Table 3: Measurement Model and Alternate Models

Models	χ^2	df	χ^2 / df	CFI	TLI	RMSEA
Measurement Model (3 factors)	967.536	648	1.493	0.904	0.896	0.047
Alternate Model 1 (combining Neuroticism & Thriving)	1629.246	652	2.499	0.708	0.685	0.082

Alternate model 2 (combining Neuroticism, Thriving & Innovative Behavior)	1894.288	653	2.901	0.629	0.600	0.093
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Table 4: Mediation Analysis using PROCESS

Predictor Variable (x)	Criterion Variable (y) outcome variable					
		β	SE	t	p	Remark
Neuroticism (main effect)	Innovative work behaviour	-0.44	0.09	-4.68	***	H ₁ not supported
		$R^2 = 0.09$				
Neuroticism	learning	-0.36	0.08	-4.81	***	H ₂ not supported
		$R^2 = .095$			***	
Learning	Vitality	0.55	0.06	9.37	***	H ₃ supported
Neuroticism	Vitality	-0.40	0.07	-5.80	***	
		$R^2 = .44$			***	
Learning	Innovative work behaviour	0.61	0.08	7.99	***	
Vitality	Innovative work behaviour	0.28	0.07	3.74	***	H ₄ supported
Neuroticism	Innovative work behaviour	-0.05	0.08	-0.64	0.52	H ₅ partially supported
		$R^2 = 0.47$			***	

Table 5: Sobel Test and BootStrap

Indirect effect and significance using Sobel Test	Value	SE	Z	P	
Indirect effect of Neuroticism on Innovative Behavior	-0.422	.069	-6.150	***	H ₅ supported
Bootstrap Results for Indirect Effect	BValue	SE	LL (95% CI)	UL (95% CI)	
Indirect effect of Neuroticism (X) on Innovative Behavior (Y)	-0.3856	.0766	-0.5439	-0.2419	

* $p < .05$, ** $p < .01$, *** $p < 0.001$

Discussion

The paper is an attempt to study the relationship between neuroticism and innovative work behavior with the dimensions of thriving (learning and vitality) as mediating variables. The study found that neuroticism was not correlated with innovative work behavior and the hypothesis stating that thriving mediated the relationship between neuroticism and innovative work behaviour was partially supported (high R^2 and complete mediation shown by Sobel test but negative beta value).

The study has implications for the HR department. Since social characteristics of a job contribute to mutual learning and cognitive and behavioral development through social interaction at multiple levels (Oldham & Hackman, 2010; Perry-Smith, 2006) it can be concluded that it leads to the thriving of the employees. These studies also point at the learning and vitality dimensions of thriving.

The study is not without limitations. The data collected was cross-sectional and no longitudinal data was used. Second, the data was collected through self-reports from employees, raising the possibility of common-source bias. The study has strong implication for the recruitment process. One should be careful that the variable of thriving focuses on thriving at work rather than thriving in life. Simply because a person is thriving at work does not suggest a comparable level of thriving outside of work. Therefore the referent for the assessment of thriving matters. Future research can focus on the spillover effect of workplace thriving on thriving in life in general.

Unlike the neuroticism scale which is a trait scale, thriving scale does not address the dispositional bases of thriving. The study holds the key to look at work and employees through a different lens and thus create organizations of tomorrow which are more inclusive of neurotics and also more open to creating innovative work places

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IDENTIFYING THE FACTORS AFFECTING THE QUALITY IN HIGHER EDUCATION INSTITUTIONS WITH REFERENCE TO SELECTED ADMINISTRATIVE PROCESSES

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Abstract

Customer's expectations and the value that they derive from a service are very important aspects of Quality. In an era of tough competition and survival, a study of quality in the education will be helpful to the Board of Governors and Managements of the Institutions. This paper attempts to identify the factors that affect Quality of the Admissions, Examination and Placement processes in higher education institutes. Quality of processes is an important aspect in determining the quality of institutions. A Literature review on Total Quality management and its implementation, particularly in the administrative processes of higher education led us to the research gap. The study involved making a questionnaire and administering a survey in few professional higher education institutions. Analyzing the data so collected with SPSS software gave us distinct groupings of the scales into the relevant factors. Having grouped the Independent variables and the Dependent Variables, the study helps identify the factors affecting the quality of higher education institutions with respect to Admissions, Exams and Placement processes. The findings are based on the primary data collected. The academic institutions can find out the factors and the corresponding items that affect the quality in terms of customer expectations in the 3 processes studied. Quality of the institute in the context of these processes can be evaluated and improved.

Keywords: *Professional, Higher Education, Processes, Total Quality Management (TQM), Administrative*

Introduction

Quality is related to profitability and growth of the organization and is demonstrated in a way through the processes of an institute. The Indian professional higher education sector is facing the issues of globalization and competition. After the country's liberalization, business education

institutions have mushroomed in India. These competing forces have compelled Indian management institutions to focus on quality of service (Choudhury, K., 2015)

Higher education is important in realizing the potential of a country and thus lays the foundation for its success. Various reports point out the fact that though the number of higher education institutions across India is high, the quality of education is not up to the mark. In an era where some institutions are closing and many seats are going empty, a study of quality in the education will be helpful to the Board of Governors and Managements of the Institutions.

This study delves into finding the factors and the variables affecting the Quality with respect to Admissions, Exams and Placement processes in the Operations of an academic institution.

This study will focus on the activities (processes) of academic institution with the aim of identifying the factors and variables affecting quality. The study considers the processes and quality therein from the stakeholder point of view. The learnings can be used to know what factors and items to address while improving the quality of the academic institution.

Review of literature

Quality was originally implemented in manufacturing industry. According to (Gandhi, 2014), Higher Education is an instrument for development & change. Higher education, particularly professional education, should be able to deal with market dynamics and global requirements. Total Quality Management (TQM) in Higher Education is a process of continuous improvement with the following features: (1) Focus on customer (stakeholders) expectations, (2) Prevention of problems (3) Building commitment to quality in the work force. Institutions need to take proactive initiatives and measures for successful implementation of TQM in Higher education.

The Indian higher education sector has grown phenomenally. But, declining quality standards in these institutions is a cause of concern for all the stakeholders (Begum Sayeda *et al.*, 2010). Proper implementation of Quality Management can enable organizations to cope with the dynamic business environments in a sustainable manner (Hackman and Wageman, 1995). In higher education, Quality management consists of improving student support & service (Tulsi, 2001, as quoted by Begum Sayeda. *et al.*, 2010).

(Jain *et al.*, 2011) have conceptualized the dimensions of service quality in higher education. Technical and Management education have a major share in the higher education. Educational institutes should incorporate the TQM in their activities and processes. It is important to understand the customer expectations properly so that systems leading to customer satisfaction and delight can be designed. They studied the stakeholders as follows: faculty, administrative

staff, students and industry. The study was confined to engineering and management institutions at graduate and post graduate level in and around Delhi.

In education, Quality encompasses the quality of inputs such as students, faculty, support staff, infrastructure and capital; the quality of processes such teaching, learning and administrative activities; and, the quality of outputs (Sahney, 2012).

(Adam *et al.*, 1997) in their study on quality improvement proposed that operating and financial performance are enhanced and costs are reduced by quality improvement. They link organization success to the quality of its products and services.

There are critical barriers to the implementation of TQM in academia (Mathews, 1993). Important among them are: 1) a lack of consensus within the academic environment as to the meaning or implications of "quality and excellence" 2) the reluctance of college or university leaders to play an aggressive and creative role in TQM implementation. (Mathews, 1993) suggested seven steps for TQM implementation which will help institutions of higher education in their pursuit of excellence at all levels of staff.

(Hwang & Teo, 2001) demonstrated the implementation of Quality Function Deployment (QFD) in a higher education institution at an operational level. The real power of the QFD is to translate the customer requirements into service parameters and service parameters into actionable operations requirements. They concluded by stating that listening correctly to the Voice of Customer helps institutions design processes to improve quality.

The study by (Băcilă, M. *et al.*, 2014) aimed to develop a tool to measure student satisfaction and the services provided by business education institutions. Satisfaction with the admission process, the admission staff, the admission information provided to students on various media such as brochures, websites or telephone are some of the predictors of the Admission process (Helgesen and Nettet, 2007; Munteanu *et al.*, 2010; Navarro *et al.*, 2005; Sultan and Wong, 2012 as quoted by Băcilă, M. *et al.*, 2014) which were intended to be measured in their proposed model.

Exploratory factor analysis conducted by (Shivakumar, B. *et al.*, 2012)) has resulted in 62 variables and 10 factors in the TQM model. The factors are mostly about Admin services, Infrastructure, Institute policy and Leadership to name a few.

The paper by (Chowdhury *et al.*, 2010) has tried to extract the factors that affect quality of education in Bangladesh. In order to identify the basic dimensions of service quality of the

private universities in Bangladesh, a factor analysis was conducted on the thirty one items. Their factors are summarized as follows:

Table 01: Factors affecting Quality based on SERVQUAL

Factor	Items Contained
Tangibles	Campus facilities, well-furnished class rooms, use of modern equipments and technologies, study materials provided, library with adequate editions of books, journals, magazines for all students in private universities.
Reliability	Predetermined time of start and end of the semesters, timely finishing of semester, availability of competent and world class faculties, adequate permanent faculties, Availability of financial aids to students, scholarships and waiver.
Responsiveness	Staffs showing a sincere interest and prompt student advising and counseling, co-operative faculty members who are available beyond the class time, follow of structured admission procedures, university staffs who are always willing to answer students 'questions.
Assurance	Appropriateness of the academic curriculum and study materials provided by the university, Follow of standard grading policy as compared to the best universities, university staff members have pleasant demeanor, information and student's records are safe from unauthorized use at the university, wide acceptance of degrees offered in your university.
Empathy	University campus is located in a convenient place, university staffs have the adequate knowledge to clearly meet their queries, university staffs quickly respond to students, students getting education at affordable tuition fees, flexibility about lab and library facilities, university offers market-oriented courses.

Source: (Chowdhury *et al.*, 2010)

For each of the above dimensions the authors (Chowdhury *et al.*, 2010) have explained the variance between perception and expectation.

Sahu *et al.*, (2013) discussed the factors of TQM that can be used for addressing the quality aspects at technical institutes. According to the authors, Administration is one of factors. Though the role of Administrative staff is important, the institutes must have a closer look at the administrative set up to identify possible areas of improvement.

Teeroovengadam, V. *et al.*, (2016) have given a model for measuring service quality. They have used Correlation and Exploratory Factor Analysis to arrive at the factors. The factors Administrative Quality and Administrative processes are matching some of our variables. However our study delves more into the 3 specific Administrative processes, which they have not covered. Their variables span across processes.

Widrick *et al.*, (2002) have tried to measure the dimensions of quality in higher education. According to them, quality comprises of quality by design, quality by conformance and quality by performance. The measurement parameters that have been put forth in the paper seem to depend upon the nature of leadership and governance.

Siddique *et al.*, (2011) in their paper have proposed a conceptual framework which is useful for the management and leaders of higher education. They have shown how an effective institute can better serve their students and how effective leadership can help retain good faculty and thus improve quality. Conversely, if leadership is not good then the benefits don't reach the faculty. Faculty then starts to lose motivation to continue and as a consequence the quality of education suffers.

Leadership is an art to instigate and motivate followers so they can strive hard toward attainment of specific objective Siddique *et al.*, (2011). Their paper identifies important academic leadership styles that can help in motivating or satisfying the faculty members by providing various rewards, and in turn increasing the organizational effectiveness as a whole.

As TQM is critical for an education institution, personnel (staff) should be ready and trained to implement TQM. Staff must display a culture of commitment (Hani Samimi Sabet *et al.*, 2012). With quality improvement, we can satisfy customers and increase their loyalty and thereby get the profits.

Service quality in higher education setting comprises seven dimensions (factors) viz., input quality, curriculum, academic facilities, industry interaction, interaction quality, support facilities and non-academic processes. Jain *et al.*, (2013). The instrument used had variables regarding the administrative (non Academic), Staff Interaction and Admissions (Input) processes. The variables further had relevant items to capture the student perceptions. However, the objective of their study was to develop a scale to measure service quality from the students' perspective only.

Research gap

From the literature review, it has been observed that there are studies about application of Total Quality Management (TQM) and stakeholder expectations in higher education institutions as also on quality in academic settings. Some papers have thrown light on the Results, Student participation, perception and effectiveness of teaching learning process. Studies based on SERVQUAL model have brought out the dimensions and variables affecting quality. However, there is not much study on Quality while implementing TQM in Admissions, Examinations or Placement processes in Institutions. Moreover, there are no studies particularly in non-aided, autonomous professional engineering and management colleges in Mumbai.

A gap that has not been addressed is the relationship (link) between TQM initiatives, their implementation in the processes such as Admissions, Examinations and Placements and its impact on the quality of the processes.

It would be interesting to study the link between Admissions, Exam, Placement Processes and Quality and ascertain the variables which affect the quality in professional higher education institutions. Grouping of these variables leads us to finding the factors that affect quality.

Research objective

To understand the Independent and the Dependent Variables that affect the Quality of the Professional Higher Education Institutions with reference to Admissions, Examination and Placement processes.

Research methodology

The study was descriptive. With the help of Surveys, the study describes the relation between stakeholder expectations and the quality in the academic institute processes. The research relates the Quality Management aspects with the Admissions, Exams and Placement processes in professional higher education institutes. The activities carried out in these processes (transactions) are considered for the study of Quality.

The study was restricted to Private (non aided) institutes and colleges in Mumbai region. Only Management schools and Engineering colleges in Mumbai were contacted. The data was collected from 2 Engineering and 2 Management Institutes in Mumbai and Thane

Secondary Data was reviewed from various published/non published sources.

Primary Data was collected from the Process owners of the above 3 processes and the stakeholders such as Faculty, Support staff and Students.

Quota sampling was used to select the Respondents. From each of the institutes, about 40 respondents were contacted and survey questionnaire was given to them: 15 from faculty/staff and 25 students. The students included under graduate as well as post graduate students. The questionnaire had questions in clear segregated sections pertaining to the 3 processes being studied and the Independent and Dependent Variables. The questionnaire had 53 items (questions).

Data analysis

Reliability

The overall Reliability of All the scales taken together is

Cronbach's Alpha	N of Items
.952	53

Thus, the Reliability of the scales was found to be satisfactory

Factor analysis

Independent variables of admission, exam and placement

Kaiser-Meyer-Olkin Measure of Sampling Adequacy was **0.721**, which is adequate.

The factor analysis resulted in a final solution of 21 variables and 3 factors that explain **52.24** percent of total variance.

Dependent variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy was **0.872**, which is adequate.

The factor analysis resulted in a final solution of 32 variables and 3 factors that explain **54.492** percent of total variance.

Limitations of the study

There are number of academic processes that are involved in academic institution. For the study purpose and to evolve the model we have restricted to Admissions, Examination and Placement processes only.

The study was restricted to Engineering (Technology) and Management (Business) institutions in Mumbai only. Some of stakeholders such as students' parents and recruiters are difficult to be tracked and reached and hence are not considered.

Managerial implication and findings

The study has contributed to bring out the variables and factors that impact the quality in the 3 process of the higher education institutions. Most institutions including higher education are going for some Quality program like ISO certifications. The study will thus, help institutions to target factors that affect the quality of its deliverables (which is based on the stakeholder expectations).

The factors are classified into the following 2 groups.

Group 1: Factors based on Independent Variables **Factors from the Activities in the 3 Processes**

1. Variables in the EXAM Process
2. Variables in the ADMISSION Process
3. Variables in the PLACEMENT Process

Group 2: Factors based on Dependent Variables (**Factors of Quality of the Institution**)

1. Organizational Behavior and Employee/Staff Interaction.
2. Institute Leadership and Quality Management implementation.
3. Control and Measurement of the 3 Processes in the Institute

Future scope

The study can be extended to develop a framework for linking the stakeholder expectation with the Quality when the service delivery takes place. The impact and the relation between the variables and factors can be studied. Using the factors in based on the dependent variables, Quality of the institute in the context of these processes can be measured. The management can thus take proactive steps to improve the quality of education services. This is an ongoing study as a part of the doctoral work.

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IMPACT OF THE US-CHINA TRADE DISPUTE ON GLOBAL MANUFACTURING AND BUSINESS DIPLOMACY

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Abstract

Globalization and internationalization in the economic world has led to firms growing their reach to other countries. While low production costs and access to new markets is an essential factor, Government regulations and incentives make the process of doing business in foreign countries easier. Firms also need to make an effort to adhere to the domestic labour laws, human rights and deal with any financial instabilities in those markets. Firms adopt their own strategies and practices to deal with such situations along with geopolitical, national or international crises. This brings in the concept of business diplomacy to structure the firm's geopolitical environment and minimize or avert risks from geopolitical or economic crises on the international front to ensure the operation of the firm in concomitance not only in that particular country but across its several locations in the world (Ruël, 2015).

The importance of business diplomacy therefore is a consequence of keeping up with political and economic changes, several stakeholders in the process, nature of markets, institutions, and environment standards. Business diplomacy has been defined as 'the management of interfaces between the global company and its multiple non-business counterparts (such as NGOs, governments, political parties, media and other representatives of civil societies) and external constituencies' (Saner & Yiu, 2005).

Government relations and the firm's global governance are therefore essential in establishing business diplomacy while maintaining business opportunities. The responsibility to establish sustainable positive relationships and reaching out through various channel to the aforementioned government and non-government sectors make for smooth business diplomacy.

The ongoing trade dispute between the US and China on tariffs on imports have impacted several US based firms with their manufacturing in China. (BBC, 2019) The leadership from both countries have been adding on tariffs on millions of dollars' worth of goods to bring down

the trade surplus and as protectionist measures, however it has caused several firms to take the hit owing to these increased tariffs. As a result, they have been looking elsewhere to shift their production.

Figure 1



Countries such as Bangladesh and Vietnam have become alternatives as manufacturing bases in this ongoing trade dispute's impact on global supply chain dynamics and investments. These countries have an export led growth model, depending on large scale manufacturing through investments by international firms. The standard and quality of goods manufactured in this area not only match up to the former standards, but also makes trading within these countries lucrative since they are part of much larger Free Trade agreements with several nations. These countries have been trading partners of USA and China for several years now, but the trade dispute has pivoted the relations to another dimension.

For example, according to a 2012 report by McKinsey, the decline of readymade garments from China, Bangladesh stands to be a major textile manufacturing hub, tripling its value from \$15 billion in 2010 by 2020. (Anwar, 2019) The Government in Vietnam is rolling out policies for international firms similar to those provided to domestic companies. Foreign investors are slowly shifting their base to Vietnam for high volume manufacturing from China for its open trade policies and attractive tax regime. Rising labour cost in China, shift to a high value added goods manufacturing and the increasing regulations are making it an alternative along with the ease of doing business ranking it higher than countries such as China, India, Bangladesh, Philippines. (Das, 2019)

In order to avoid higher tariffs, the talk of which haven't reached any significant agreements, and the latest rounds to come into effect scheduled in October followed by December 2019,

relocating factories from China to other Asian countries has been the trend especially in Bangladesh, Vietnam, Indonesia, Malaysia, and Cambodia for labour intensive industries. Main reasons for the relocation include availability of cheap labour, low production costs.

Table 1

	2017 Minimum Wages (Local currency/month)	2017 Minimum Wages (USD/month)	2018 Revised Minimum Wages (Local currency/month)	2018 Revised Minimum Wages (USD/month)	Status
Vietnam	2,580,000 to 3,750,000	114.29 to 166.13	2,760,000 to 3,980,000	122.27 to 176.31	In effect 1st January 2018
Philippines	7290 to 15,360	140.26 to 295.53	7680 to 9300 (only for Region I – Ilocos)	147.76 to 178.94 (only for Region I – Ilocos)	In effect 25th January 2018
Thailand	9000 to 9300	285.39 to 294.90	9240 to 9900	293 to 313.39	In effect 1st April 2018
Malaysia	920 to 1000	233.83 to 254.16	Same as 2017	Same as 2017	Government working on revised rates for 2018
Indonesia	1,337,745 to 3,355,750	99.80 to 250.35	1,560,000 to 3,920,000	109.20 to 274.40	In effect 1st January 2018

Source : (Das, 2019)

The geographical locations of these countries makes it significant in the global supply chain , thereby reducing costs of relocation, transportation or experiencing delays in their existing supply chain models for China based businesses.

The paper uses time series data to study China's exports to the US over the years and US investment in manufacturing to show the role of tariffs in the recent slowdown of exports and firms leaving China to for other alternatives. Data from Vietnam, Bangladesh is used to show the increase in low value added manufacturing in the past year in garment, footwear industry. The study also make use of the PESTLE Analysis to depict why emerging markets of the ASEAN countries make for suitable alternatives in the ongoing trade dispute between US and China and how it impacts the supply chain on the global level.

The main results indicate that the increase in tariffs have made it expensive for the US markets and consumers to keep purchasing Chinese made goods instead either buy higher priced American made good or decrease their profit margins by selling them at a competitive price.

ASEAN countries are not only geographically well located but also have an advantage in term of Government policies tax and free trade agreements that have eased the manufacturing process apart from low labour wages and cost of production. Business diplomacy has acted as an important tool in the shift to these countries and it is an essential feature for companies looking to keep their foothold in the Asian markets and make use of the supply chain here. The change in this supply chain has led to different scenarios for firms in the US dependent on Chinese manufacturing- tariffs, import from other South East Asian countries or manufacturing it within the US itself, which will increase consumer prices and manufacturing costs, decrease profit margins of the firms.

The study further looks at how the trade dispute amidst tariffs and retaliatory measures has provided an opportunity for low value added manufacturing to move from China and help in the economic development of the other countries. It concludes with how China is reacting to the sudden glitch in its supply chain and methods of adapting to the situation. It studies the various business diplomacy initiatives taken by the firms relocating outside China in these countries to ensure a smooth process and not be hit by economic forces.

Further scope of study includes the Chinese Governments measure to increase and keep the exports going and domestic measures it has taken for the same and how would the shift in global manufacturing affect China's trade relations with these countries.

Keywords: *Trade Dispute, global manufacturing, business diplomacy*

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VOLATILITY INSTABILITIES BETWEEN CRYPTO CURRENCY AND STOCK MARKET OF DIFFERENT DEVELOPING AND EMERGING COUNTRIES

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Abstract

The author studied the relationship between Bit coin USA and Australia trade volume with respect to three developed and emerging countries stock market index. The developed countries are considered as United States of America, Canada and Australia and three emerging countries stock index were Russia, India and China. For the study, we use daily price returns of the currency against which Bit coin is traded, these include the American dollar and Australian Dollar from period 17th February 2014 to 31st December 2017. The total observations are 1028. The developed countries are USA , Canada and Australia and the three emerging countries are China, Russia and India the daily stock market returns for the period 17th February 2014 to 31st December 2017 are considered these includes total 1028. The result suggest that if any fluctuations exists in Bit Coin USA and Bit coin Australia the Russian stock market will not affected but if any positive shocks occur in Bit Coin USA and Bit coin Australia the china stock market will shows the reverse effect on their stock returns. This study provides the useful information for economic development of the countries with respect to the currencies and stock market index. Also, it will help the investors to prepare the portfolio for making the investments in the different stock market index of the countries and its impact on the currency.

Keywords: Bit Coin, EGARCH, ARCH, stock market and ordinary least square model

1. Introduction

An unspecified Programmers group propelled the online link called Bitcoin on the 3rd January, 2009. The purpose was to make online payments between two parties without involvement of any financial organization. Now a day's internet usage is increasing and computer-generated societies are flourishing. With this great interdependence between everyday lifespan and the internet, the currency has customary growing devotion universal. (ECB, 2012), Grinberg (2011) had mentioned in his research that Bitcoins represent the great level of impulsiveness in comparison to the other hard currencies. Therefore Bitcoin is the part of portfolio management and has the place in the financial markets. (Dyhrberg, 2016).

Lo and Wang (2014), talk about the Bitcoin currency that it has or not the capability to execute the functions required to a fiat money? Bariviera et al., (2017) identified the existence of Long memories and insistent impulsiveness. Because of high volatility, it defends the application of GARCH Models. In their study they concentrated only on the bit coin USD currency in our paper we have considered the different developed and emerging market stock returns as well we also taken into consideration of Australia currency.

Dyhrberg (2015) identified the equivocation ability of Bitcoin in contradiction of the USD/EUR and USD/GBP exchange rates and UK equities. Katsiampa, P. (2017) has compared the GARCH-Models to predict the impulsiveness of Bitcoin returns for the historical data from 2010 to 2016 and identified the better model i.e. ARCGARCH model.

Gronwald, M. (2015) studied the complete analysis of the dynamics of Bitcoin prices. Researcher has used the GARCH model to understand the volatility clusters and extreme price movements and suggests that these price movements remain mostly unaffected over time. In Addition, bitcoin delivers an exclusive chance to recognize the financial value of social media. People are discussing online about bitcoin and varied in form. These appearances make bitcoin a unique test site for examining new theories.

Smith and Roseveerr (2017), says that the Bit coins is the medium of exchange to execute the desired market prices. Economic policy uncertainty (2017) also reflects about the high level of policy uncertainty. This high level of uncertainty has a negative impact on the performance of the stock market across the country (Bloom 2009).

Antonakakis, Chatzaintoniou and Filis (2013) also studied in their research that there is the negative correlation exists between the period which have high level of uncertainty and stock market returns. It has been observed in the financial crises. Schwert (2011), identified the positive relationship between the stock market volatility and unemployment rate. Smith and Roseverr (2017) found that the political activities namely the Brexit referendum and the United States Presentational election affects the Bit coin prices and there is the large fluctuation observed during that period.

Brauneis and Mestel (2018), estimated the performance between 73 crypto currencies with a market capitalization over USD 1 Million. Their study concludes that the performance of Bit coin is most efficient currency in the digital market.

The aim of this study is to investigate, the existence of Auto Regressive Conditional Heteroscedasticity (ARCH). To identify the volatility pattern between Bit coins USD and three developed countries stock market index i.e. Australia (AUS), United States (USA) and Canada and three emerging countries stock market index i.e. India, Russia and China. Further, we identified the relationship between Bit Coin returns in United States dollar and Bitcoin in Australian dollar with three developed and emerging countries market index.

The rest of the paper is structured as follows section 2 describes the econometric model and Methodology, section3 describe the data and summary statistics, section 4 presents the empirical results and section 5 provide the conclusions and limitation.

2. Econometric Model and Methodology –

2.1 Auto Regressive Conditional Heteroscedasticity (ARCH) -

Eagle (1982) introduced ARCH model which is designed to forecast conditional mean and variance. We are using ARCH LM (Lagranges Multiplier) test to detect the ARCH effect in the time series data. The ARCH LM test is as follows:

$$c_t^2 = \beta_0 + \left(\sum_{i=1}^r \beta_i c_{t-i}^2 \right) + v_t \quad (1)$$

Where c_t is square residual for the time series data? The LM test statistics is asymmetrical distributed as $\chi^2(r)$ under certain market conditions.

2.2 Generalized Auto Regressive Conditional Heteroscedasticity (GARCH) -

The GARCH model is introduced by Bollerslev (1986) and Tylor (1986). The study consists of autoregressive model of conditional mean and conditional variance for the first order GARCH type model are as follows:

$$e_t = c + \phi c_{t-1} + \varepsilon_t \quad (2)$$

$$\varepsilon_t = \sigma_t Z_t, \quad Z_t \sim \text{i.i.d } N(0,1)$$

$$\sigma_t^2 = w + \alpha \varepsilon_{t-1}^2 + \beta \sigma_{t-1}^2 \quad (3)$$

Where e_t is the Bitcoin and stock market returns index on day t , ε_t is the error term and σ_t is the conditional standard deviation?

2.3 Methodology –

The main Research question to be answered within this research is:

Evaluate the performance of Bit Coin USA and Australia trade volume with respect to the developed and emerging stock market index?

To answering the research question the following hypothesis were prepared:

1. H1: there is statistically significant impact of developed and emerging market stock index on Bit Coin USA trade volume.
2. H2: there is statistically significant impact of developed and emerging market stock index on Bit Coin Australia trade volume.

To categorize the relationship between Bitcoin returns and developed and emerging stock market index returns. To determine the relationship we had used ordinary least square (OLS) equation. The model for Bitcoin returns in US dollar and three developed countries index returns i.e. Australia, United States and Canada is formulated as follows:

$$A_{bit(US)} = \beta_0 + \beta_1 \Omega A_{US} + \beta_2 \Omega A_{AUS} + \beta_3 \Omega A_{Canada} + \varepsilon_t \quad (4)$$

The dependent variable $A_{bit(US)}$ represent the daily Bitcoin returns in US dollar, the first independent variable A_{US} represent the stock return for USA, the second independent variable A_{AUS} for Australia, and third represents the A_{Canada} for Canada stock market returns.

The model for Bitcoin returns in Australian dollar and three developed countries index returns i.e. Australia, United States and Canada is formulated as follows:

$$A_{bit(AUS)} = \beta_0 + \beta_1 \Omega A_{US} + \beta_2 \Omega A_{AUS} + \beta_3 \Omega A_{Canada} + \varepsilon_t \quad (5)$$

The model for Bitcoin returns in US dollar and three emerging countries index returns i.e. Russia, China and India is formulated as follows:

$$A_{bit(US)} = \beta_0 + \beta_1 \Omega A_{russia} + \beta_2 \Omega A_{China} + \beta_3 \Omega A_{India} + \varepsilon_t \quad (6)$$

The dependent variable $A_{bit(US)}$ represent the daily Bitcoin returns in US dollar, the first independent variable A_{russia} represent the stock return for USA, the second independent variable A_{China} for Australia, and third represents the A_{India} for Canada stock market returns.

The model for Bitcoin returns in Australian dollar and three emerging countries index returns i.e. Russia, China and India is formulated as follows:

$$A_{bit(AUS)} = \beta_0 + \beta_1 \Omega A_{russia} + \beta_2 \Omega A_{China} + \beta_3 \Omega A_{India} + \varepsilon_t \quad (7)$$

The dependent variable $A_{bit(AUS)}$ represent the daily Bitcoin returns in US dollar, the first independent variable A_{russia} represent the stock return for USA, the second independent variable A_{China} for Australia, and third represents the A_{India} for Canada stock market returns.

3. Data Description and Summary Statistics -

In our study, we use daily price returns of the currency against which Bit coin is traded, these include the American dollar and Australian Dollar from period 17th February 2014 to 31st December 2017. The total observations are 1028. The Bi coin return is calculated as the difference in the prices multiplied by 100 and is downloaded from coindesk.com.

To determine the impact on Bit coin Australia and US dollar, three developed and emerging countries stock market index are considered. The developed countries are USA (NASDAQ), Canada (TSX_Composite) and Australia (S_P_ASX_201) and the three emerging countries are China (SSEC), Russia (MOEX) and India (NIFTY 500) the daily stock market returns for the period 17th February 2014 to 31st December 2017 are considered. The total observations are 1028. The data has been downloaded from investing.com.

Table 1 – Overview Stock Country Index and Currencies –

Country	Stock Index	Country	Currency
United States	NASDAQ	Bit Coin Australia	AUD
Canada	TSX_Composite	Bit Coin United States	USD
Australia	S_P_ASX_201		
Russia	MOEX		
India	NIFTY 500		
China	SSEC		

We calculated the descriptive statistics are shown in Table 2, on the Australia and US bit coin returns and for all the developed and emerging stock market returns. The average returns are high for Bit coin USA dollar with least variation in comparison to Bit coin Australian dollar. Among the three developed countries USA stock returns has the maximum average returns i.e. 5.57% with high volatility. Whereas among all the three emerging countries India has maximum average return followed by China and Russia and maximum volatility were found in the Indian Stock market returns. Bit coin Australian and US dollar are negatively skewed with more peaked than a normal distribution. All the three developed countries stock market returns are negatively skewed with highest peaked than a normal distribution, for all the three emerging countries stock returns shows highly leptokurtic distribution that is more clustered around the mean. The Jarque Bera for Bit coin Australia dollar, US dollar, three developed and emerging countries stock market returns are found to be statistically significant so we can conclude that they are not normally distributed.

Table 2 - Descriptive Statistics Bit coin Currency, developed and emerging stock market returns –

Statistics	Stock Index – Developed			Stock Index – emerging			Bitcoin Currency	
	USA	Canada	Australia	China	India	Russia	Australia n Dollar	US Dollar
Mean	0.0557	0.020	0.0150	0.0501	0.0823	0.0410	0.3621	0.3751
Median	0.0969	0.065	0.0474	0.0771	0.1274	0.0197	0.2339	0.2818
Standard Deviation	0.9010	0.714	0.8185	1.5230	1.8397	1.1603	5.4424	4.9742
Skewness	-0.455	-0.315	-0.2670	1.1351	7.895	-0.6164	-6.0089	-7.8831
Kurtosis	5.3569	5.1099	4.7715	9.8675	343.63	11.2195	116.001	166.4191
Jarque Bera	273.4	207.7	146.6	2240.9	5039176.0	2958.9	553139.7	1154546.0
Probability	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observatio n	1028	1028	1028	1028	1028	1028	1028	1028

4. Empirical Results –

Table 3., shows the results of the ARCH (10) and EGARCH type model for the Bit coin USA and Australia , Three developed and emerging countries stock market returns.

Table 3 - Estimates of ARCH and EGARCH –

Returns	ARCH (10)	EGARCH			
		ω	α	β	γ
Bit Coin USA	11.0772***	0.857***	0.125***	0.812***	0.073***
Bit Coin Australia	10.997**	1.037***	0.082**	0.765**	0.091**
USA	5.869***	-0.444**	0.125***	0.754***	-0.511***
Canada	3.059***	0.253**	0.182**	0.957***	-0.182***
Australia	4.1643**	-0.323***	0.423***	0.903***	-0.038***
China	16.732*	-0.198***	0.215**	0.976**	-0.160**
India	3.278***	-0.440***	0.362***	0.943***	-0.502
Russia	2.810***	-0.230***	0.395***	0.903***	0.0226**

***, **, * indicates statistical significance at 1%, 5% and 10% levels.

As reported in Table 3, Bitcoin US, Bitcoin Australia, developed and emerging countries stock returns are found to statistically significant so there is presence of volatility and it justify the suitability of using the EGARCH effect. In the Bit coin USA , Bitcoin Australia and Russia stock market returns the series γ found to be positive and significant that represent the negative shock developed more volatility as compared to the positive shocks of the equal magnitude. And, for the developed countries i.e. USA, Canada and Australia and emerging countries i.e. India and China found to be negative and significant that represent the positive shock developed more volatility as compared to the negative shocks of the equal magnitude.

The results from the model for the hypothesis 1 found in table 5. The result represents for Bit coin USA with respect to the developed countries i.e. Canada, USA and Australia stock market index. The tables shows the beta coefficients for each independent variable with the p value less than significance level at 5 % this model, represented that the developed countries stock index i.e. for USA (p = 0.001), Canada (p = 0.002) and for Australia (p = 0.001) significantly affect Bit coin US trade return. Bit coin USA trade volumes are majorly affected by the USA stock index followed by Australia and Canada. Furthermore a model shows a very high

explanatory power with the R^2 (0.629). Bit coin USA with respect to the emerging countries i.e. China, India and Russia stock market index. The tables shows the beta coefficients for independent variables of India and China with the p value less than significance level at 5 % this model, represented that the emerging countries stock index i.e. for India ($p = 0.001$) and for China ($p = 0.001$) significantly affect Bit coin US trade return. Bit coin USA trade volumes are majorly affected by the Indian stock index. But Russia Stock Market index are not found statistically significant with Bit coin USA so we can conclude that there is no impact of Russians stock market index on Bit coin USA trade volume. Furthermore a model shows a very high explanatory power with the R^2 (0.553).

Table 5 – This table represents the results from hypothesis 1 based on equation 4 and 6 -

Bit Coin United States						
	Developed Countries			Emerging Countries		
	USA	Australia	Canada	India	China	Russia
Beta value	2.885 (0.001)	1.492 (0.001)	0.236 (0.002)	2.0283 (0.001)	-1.154 (0.001)	0.590 (0.105)
R Square	0.629			0.553		

As reported in Table 6 for Hypothesis 2, the result represents for Bit coin Australia with respect to the developed countries i.e. Canada, USA and Australia stock market index. The tables shows the beta coefficients for each independent variable with the p value less than significance level at 5 % this model, represented that the developed countries stock index i.e. for USA ($p = 0.001$), Canada ($p = 0.029$) and for Australia ($p = 0.001$) significantly affect Bit coin US trade return. Bit coin Australia trade volumes are majorly impacted by the USA stock index followed by Australia and Canada. Furthermore a model shows a very high explanatory power with the R^2 (0.614). Bit coin Australia with respect to the emerging countries i.e. China, India and Russia stock market index. The tables shows the beta coefficients for independent variables of India and China with the p value less than significance level at 5 % this model, represented that the emerging countries stock index i.e. for India ($p = 0.001$), Russia ($p = 0.0915$) and for China ($p = 0.001$) significantly affect Bit coin Australia trade return. Bit coin

Australia trade volumes are majorly affected by the India stock index followed by Russia and China. Furthermore a model shows a very high explanatory power with the R^2 (0.518).

Table 6 – This table represents the results from hypothesis 1 based on equation 5 and 7 -

Bit Coin Australia						
	Developed Countries			Emerging Countries		
	USA	Australia	Canada	India	China	Russia
Beta value	3.767 (0.001)	2.052 (0.001)	-0.312 (0.029)	2.648 (0.001)	-1.524 (0.001)	0.830 (0.0915)
R Square	0.614			0.518		

5. Conclusions and Limitations –

In the present scenario, virtual currency has developed in the market and Bit Coin is the definitely utmost illustrious for the economic relevance of all the countries. In this section, we will conclude our findings. Descriptive statistics explains about the average returns of Bit coin prices. Our findings suggest that average returns are high for Bit coin USA dollar with least variation in comparison to Bit coin Australian dollar. Whereas, USA and India stock market returns have the higher average returns. Further, results of Exponential GARCH model indicate that asymmetric term is positive and significant for the Bit Coin USA, Bit Coin Australia and Russia index. The returns series represents the negative shock developed more volatility as compared to the positive shocks of the equal magnitude. However for the other return series, the asymmetric term of E GARCH model is negative and significant.

The empirical results from the hypothesis 1 show the significant impact of the developed countries stock market on the Bit Coin price returns. But the impact of the emerging country i.e. Russian stock market is insignificant on Bit Coin USA price returns. Similarly, it is observed from the hypothesis 2 that the relationship between the trade volume of Bit coin Australia and the change in price for the equity indices of developed and emerging countries are positive and significant. And, there is the negative impact of China stock market index on

Bit USA and Bit Coin Australia trade volume. So we can conclude that if any fluctuations exits in Bit Coin USA and Bit coin Australia the Russian stock market will not affected but if any positive shocks occur in Bit Coin USA and Bit coin Australia the china stock market will shows the reverse effect on their stock returns. This study provides the useful information for economic development of the countries with respect to the currencies and stock market index. Also, it will help the investors to prepare the portfolio for making the investments in the different stock market index of the countries and its impact on the currency. Further there is scope to develop the portfolio based on the above result presented for making the investments in different countries stock market. We can also include more developed and emerging countries stock market index and more virtual currencies to identify the impact and volatility.

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ROLE DUALITY, INVESTOR CONFIDENCE AND BOARD EFFECTIVENESS: WITH RESPECT TO INDIAN FIRMS

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Keywords: *Investor Confidence, Role Duality, Board Effectiveness*

The purpose of this study is to empirically investigate the relationship between Role duality & Investor confidence with respect to Indian Firms. Role duality is refer to the situation where one person occupied both the positions; CEO as well as Chairman of the board. In some cases, positions occupied by close family member. Researcher's view is that there should be a separation between these two positions in the firm to ensure a balance of power, authority and responsibility. In India, where family run businesses dominates the corporate sector, understanding relation between role duality and investor confidence is important.

The researcher's will also try to understand the moderating impact of Board effectiveness on Role duality and Investor Confidence relationship. Board effectiveness will be measured on the basis of Size of Board, No of Independent Director, women Director, No of Non- executive Director Board Meetings, Other Engagements of Board Members, Board Attendance, Director Remuneration, Audit Agency and Disclosure of Voluntary Information on CG in Indian Context. Firm's Size, Age, Leverage, Sales growth, Tobin's Q, Industry Dummy will be considered as control variables in the study.

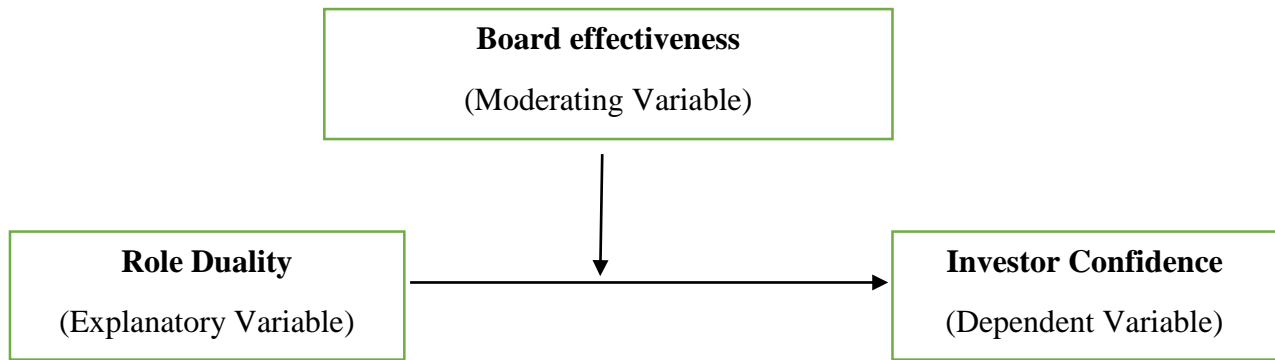
This study will be based on secondary data obtained from different sources like company's annual reports, Bloomberg, ACE Equity database etc. The proposed sample consists of top 200 listed firms in India from the period of 2001 to 2018. NIFTY 200 companies (NSE) will be taken as unit of analysis. The NIFTY 200 Index reflects the performance and behaviour of large cap and mid cap companies (80 % to 85% approx. of total market cap) of India. It includes companies of NIFTY 100 and NIFTY Full Midcap 100 Index. The data collected will be in Time – Series format, therefore, we proposed to use Random model for the regression analysis. However final analysis will depend upon the nature of data obtained.

The results of this study will be useful for investors, corporate, policy makers, market practitioners and researchers.

Investor confidence can be defined as his desire to participate in the investment opportunities given by the firm based on their risk and return criteria. Getting and maintaining investor confidence is the primary objective of a company. It gives them opportunity to grow and also shapes the future of any nation. Investor can be a small investor, who invested his hard earned personal money in the company; it can be an Institutional investor like mutual funds, pension funds, banks, big private players and foreign players. The major concern of the investors is how to trust the company and its management. Investor generally categorise the risk associated with any investment in two categories; controllable risk and uncontrollable risk. Uncontrollable risk related to external and market factors like political risk, economic risk, market risk etc which is not in control of anyone. Investors can only guard themselves against this type of risk. Controllable risk related to firm like management risk etc. Investors want to ensure themselves for no or less controllable risk before investment.

Company can earn investor confidence by protecting their interest in corporate decision making. But during this process Principal – Agent and Principal – Principal conflict always comes in the picture. Agency theory contended that there should be separation of CEO and Director in the firm. It argues that duality increases the power of CEO over the board and interferes in independency between managers and directors which is necessary to check managerial actions and protect investor's interest.

On the other side, researcher's perceives that duality in the role can further improve performance of firm. According to Stewardship theory CEO's enhances firm value by effectively managing firm's resources as a good stewards. Non- Financial factors like internal satisfaction from accomplishment, achievement, reputation, recognition and respect brings responsibility in stewards which further motivate them to work towards the welfare of investors. Resource dependency theory states that increased discretion and power provided by dual responsibility increase the ability of CEO's to respond more quickly and effectively in continuously changing business environment for the success of firms.



Proposed Conceptual Model

Research Questions

1. Is there any relation between CEO duality and Investor confidence with respect to Indian context?
2. What is the direction of relation between CEO duality and Investor confidence?
3. Is there any moderation effect of Board effectiveness in the relationship of CEO duality and Investor confidence?

Explanation of Variables

Investor Confidence: - It is a dependent variable in the proposed study and will be measured by Investor Sentiment Index (ISI). ISI represents investor confidence in respective company and will be calculated on the basis of methodology adopted in previous literature (Persaud, 1996; Bandopadhyaya and Jones, 2006). The first step is to calculate sample firms weekly returns. Second step is to measure historic volatility of firms for each day. It will be measured by calculating average standard deviation based on last four week returns. Then the calculated historic volatility and average return will be ranked to compute Pearson's Rank Correlations between the weekly returns and the historic volatility.

The ISI (SENTI) works out as follows:

$$ISI = \frac{\sum (R_i - R_i') (H_i - H_i')}{[\sum (R_i - R_i')^2 \sum (H_i - H_i')^2]^{1/2}} * 100$$

Where; R_i and H_i are the ranks of weekly return and historical volatility of security i . R_i' and H_i' represents the rankings of population average return and historical volatility. If the index gives positive value, it indicates that there is a positive correlation between return and historic volatility of the firm. This positive value shows risk loving behaviour or high confidence of

investors in the respective firm, represents as “ high risk- high return” situation. On the other side, negative values of the index represents low confidence of investors in firm.

Role Duality: - Explanatory Variable. It will be measured with a value 1 if CEO and Chairman are separate and Zero if they are same person.

Board Effectiveness: - will be measured on the basis of Size of Board, No of Independent Director, women Director, No of Non- executive Director Board Meetings, Other Engagements of Board Members, Board Attendance, Director Remuneration, Audit Agency and Disclosure of Voluntary Information on CG in Indian Context.

Control Variables: - Firm’s Size, Age, Leverage, Sales growth, Tobin’s Q, Industry Dummy will be considered as control variables in the study.

Keywords: Investor Confidence, Role Duality, Board Effectiveness

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ORGANIZATIONAL AMBIDEXTERITY IN START UPS – BALANCING EXPLORATION AND EXPLOITATION

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Abstract

For a start-up firm to successfully survive, it is critical that the firm pursues both exploration and exploitation of the initial idea. The balance between exploration and exploitation activities is equally relevant for start-ups, as it is in mature firms. However, the balance between the two concepts in a start-up is hard to pinpoint and something that few studies have brought up before. To address this dual need of growing start-up firms, the TMT would need to have members who value the need for exploratory activities, are skilled in such activities and promote the same; TMT would also need to have members who are skilled in exploitation activities, value their need and promote them. Sinha (2015) emphasizes the need to focus on how start-ups manage the joint perusal of exploration and exploitation, and how founders/leaders/TMT factors facilitate in creating the environment to influence ambidexterity in start-up firms. This study aims to understand how TMT/Leaders/Founders identify the underlying characteristics and dynamics necessary for achieving organizational ambidexterity by designing a context that supports balancing exploration and exploitation in startups.

Keywords: *Organizational Ambidexterity, exploration, exploitation, founders, top management team, contextual ambidexterity*

Introduction

The metaphor of ambidexterity has been used by researchers to refer to the ability of the organization to maintain dual attention on exploration and exploitation activities in order to survive and excel the present, and secure the future, by creating potential for sustainable growth in future. Managing this duality is a challenge as often the needs of both these activities are contradictory. With business environment becoming increasingly dynamic, it is becoming more essential for start-up firms to balance their attention and resource allocation for

exploration and exploitation activities.

Many start-ups are based on an original model or idea and, as such, their innovativeness and capability for exploration are the very essence of their *raison d'être* (Amason, Shrader, & Thompson, 2006; Schumpeter, 1934). But they are also under pressure to manage the present cash flows and generate an early surplus so that they can fund their exploitation activities on a sustainable basis. Also, start-up firms operate in relatively more resource constraint contexts (money, time, manpower, etc.), as compared to the established and mature firms, which may make managing this dilemma more difficult. With the business environment becoming increasingly dynamic, it has become more essential for start-ups to balance their attention and resource allocation for exploration and exploitation activities. It is unclear how start-ups cope with the dilemma of exploration and exploitation. This challenge faced by start-ups does not seem to have been addressed in the literature. Thus, studying the phenomenon of ambidexterity in the context of a start-up firm's growth would be useful and interesting.

Survival for start-up firms (new firms) is always a concern. More than 50–80 per cent of the new ventures wrap up within five years (Shane, 2008). Timmons (1990) found that the failure rate for new ventures was 40 per cent in the first year and became as high as 78 per cent over 10 years. The biggest drop came in the first five years. Therefore it becomes pertinent to understand how startups can achieve organizational ambidexterity.

Review of Literature:

Organizational Ambidexterity

“Organizational ambidexterity” has become an emerging research trend in both the organizational management and knowledge management field (Gibson et al., 2004; He & Wong., 2004). The central theme on organizational ambidexterity is about organizational capability to simultaneously deal with paradoxical or conflicting activities such as organizational alignment and adaptation; evolutionary and revolutionary change; manufacturing efficiency and flexibility; strategic alliance formation; and even strategic renewal (Adler, Goldoftas, and Levine, 1999; Gibson & Birkinshaw, 2004; Tushman & O'Reilly, 1996).

This emerging issue has increasingly gained its weight in research since organizations have to cope with or balance the seemingly contradictory tension within organizations under more and more dynamic environment and severe competition (Nonaka, Toyama, & Byosiore, 2001). Due

to the dynamism and complexity of the environment, organizations' short-term success does not necessarily guarantee their long term survival. Therefore, research on “organizational ambidexterity” tries to find out how organizations manage to maintain today's success while preparing to adapt to tomorrow's changing environment (Jansen, Bosch, & Volberda, 2005a).

Exploration and Exploitation

Exploitation and exploration are the most recurrent underlying dimensions regarding organizational ambidexterity. In general terms, March (1991) described exploitation related to things like “refinement, choice, production, efficiency, selection, implementation and execution” and exploration being relevant to “search, variation, risk taking, experimentation, play, flexibility, discovery, innovation”. March stressed that both exploitation and exploration are learning activities. In his words, “the essence of exploitation is the refinement and extensions of existing competencies, technologies, and paradigms; and the essence of exploration is experimentation with new alternatives” According to the definitions, exploitative and exploratory activities would require different and sometimes conflicting resources, mindsets and organizational procedures (Gupta, Smith, & Shalley, 2006; March, 1991). Therefore, should or could organizations pursue both activities to be ambidextrous also receives challenges (Raisch & Birkinshaw, 2008).

The learning process in exploration and exploitation follows two different trajectories: exploration involves following a new trajectory, while exploitation follows an existing trajectory. While exploration involves double-loop learning, exploitation involves single-loop learning (Gupta, Smith, & Shalley, 2006). Exploitation and exploration have different characteristics in terms of timeline, risk, and potential return. In the case of exploration, returns are less certain and more distant in time, whereas in the case of exploitation, the returns are more certain and achievable in a shorter timeframe. Thus, as described by March (1991), exploration and exploitation place essentially conflicting demands on organizational resources, and so trade-offs between exploration and exploitation are seen as unavoidable.

Often, firms focus more on either exploration or exploitation, and their performance gets affected. With rapidly changing tastes and preferences of consumers, organizations that focus exclusively on exploitation may become obsolete (Levinthal & March, 1993). Alternately, when an organization focuses solely on exploration, it may not survive to reap the benefits of the hard work being done and the investments being made (Chesbrough & Rosenbloom, 2002), and it may prevent the organization from benefiting from the economies of scale or economies

of scope (Güttel & Konlechner, 2009). Unless there is continuous innovation and exploration, the same competencies which facilitate one's leadership position in the present become a trap in the future. Thus, organizations need to focus on exploration and exploitation activities to survive the present, and, sustainably grow in future.

Startups

Wieblen and Chesbrough (2015) have emphasised that an established, large corporation is different from a start-up. Because of its size, a mature corporation has resources and routines to run its business model in an efficient way. An early stage firm, like a start-up, is not in possession of the aforementioned attributes. However, start-ups usually have novel ideas, are often more flexible, willing to take higher risks, and aspire rapid growth. Besides, start-ups typically quest speed as well as innovation (Wieblen & Chesbrough, 2015). Freeman and Engel (2007) stress that start-up firms typically also have less legitimacy, capital and fewer strategic alliances. Moreover, according to Sinha (2015), a start-up compared to a mature firm is faced with more resource constraints in terms of money, time and manpower. They are also pressured to survive and therefore need to grow sustainably in the future (Sinha, 2015). As mentioned before, due to the fact that resources are scarce; conflicts between exploration and exploitation arise because of conflicting demands for resources. This conflict is perhaps even more prominent in start-ups compared to mature firms, due to their smallness.

Freeman and Engel (2007) have stated that as time passes, the start-up's innovation process will slow down. Therefore, survival for start-up firms is always a concern (Shane, 2008). For a start-up firm to successfully survive, it is critical that the firm pursues both exploration and exploitation of the initial idea. The balance between exploration and exploitation activities is equally relevant for start-ups, as it is in mature firms. However, the balance between the two concepts in a start-up is hard to pinpoint and something that few studies have brought up before.

Lubatkin, Simsek, Ling, and Veiga (2006) found that small and medium enterprises (SMEs) faced the dilemma of managing exploration and exploitation activities. Lubatkin et al. (2006) argued that compared to large established firms, it was more challenging for SMEs to cope with the dilemma of managing exploration and exploitation. Based on a survey data from 139 SMEs, they found that behavioural integration of TMTs in SMEs positively influenced the extent of their ambidextrous orientation (joint perusal of exploratory and exploitative orientation), which in turn positively influenced SME firms' performance. Sinha (2015) points

out that exploration and exploitation activities are equally relevant and important in the context of startups. However, there is little discussion of the phenomenon of ambidexterity in the context of startups.

Start-up firms operate in relatively more resource constraint contexts (money, time, manpower, etc.) compared to established and mature firms. They also have the pressure of performing for survival in the present and sustainably grow in future (at least for those who aspire to grow). Thus, start-up firms have to balance their exploration and exploitation activities.

In the growth phase, a start-up firm needs to become more disciplined in exploiting its existing tangible and intangible resources. At the same time, it cannot lose its agility and opportunity driven entrepreneurial approach, which had been the reason for the success it has achieved so far. It has to balance its need for exploration and exploitation to grow at a high rate, and also sustain this growth ([Hamermesh, Heskett, & Roberts, 2005](#)).

Leadership and Context

Contextual ambidexterity is attained by building the behavioural capacity to simultaneously balance exploration and exploitation across an entire business unit (Gibson & Birkinshaw, 2004; Raisch & Birkinshaw, 2008). Based on Ghoshal and Bartlett (1994), Gibson and Birkinshaw (2004) define context as the set of systems, processes and beliefs, which influences individual-level behaviour in organizations. The leadership's role is to create such a supportive context that enables and motivates individuals to design for themselves the way they would address the conflicting demands of exploration and exploitation.

Extant literature suggests that context and leadership antecedents are more critical for start-ups and small firms ([Lavie et al., 2010](#); [Lubatkin et al., 2006](#)). Sinha (2015) emphasizes the need to focus on how start-ups manage the joint perusal of exploration and exploitation, and how founders/leaders/TMT factors facilitate in creating the environment to influence ambidexterity in start-up firms.

To address this dual need of growing start-up firms, the TMT would need to have members who value the need for exploratory activities, are skilled in such activities and promote the same; TMT would also need to have members who are skilled in exploitation activities, value their need and promote them.

Multiple studies have highlighted the criticality of leadership processes in the implementation

of structural as well as contextual ambidexterity (Gibson & Birkinshaw, 2004; Lubatkin et al., 2006; Simsek et al., 2009; Smith & Tushman, 2005). Gibson and Birkinshaw (2004) and Beckman (2006) stressed on the importance of the role of leaders at the apex of the organization and business unit in designing an effective context for the implementation of ambidexterity. Leadership processes have been posited as an independent antecedent (Lubatkin et al., 2006), as well as a moderator variable (Smith & Tushman, 2005) for ambidexterity.

In the context of start-ups, the founding team composition is an important antecedent of exploration and exploitation and organizational ambidexterity (Beckman, 2006). Founding team members (or the TMT) coming from the same company affiliation tend to engage in more exploitative behaviours, and those coming from different company affiliations engage in more exploration behaviours (Beckman, 2006). This is because sharing the same values and frame of reference does not allow executives to think differently. Diverse team composition increases the diversity of the options discussed. Thus, when both kinds of people, that is, the same company affiliation and different company affiliations, are present in a firm, then the firm performs better ([Beckman, 2006](#)).

Research Questions:

1. How is the need for ambidexterity recognized by the founders?
2. How do startups cope with the exploration and exploitation dilemma?
3. Do the nature of dilemma change over the growth phase of a new firm?
4. How do environmental factors and different stakeholders influence the process?
5. How do the mechanisms of balancing exploration and exploitation vary in the case of start-up firms from how they are managed in the established start-ups?
6. How do and what specific founder characteristics influence the process of managing ambidexterity in start-up firms; how and what TMT characteristics, actions and behaviours influence the process of managing ambidexterity?

Implications

A research on the said topic would greatly enrich our understanding of how if the founder or the founding team recognizes the need to pursue both exploration and exploitation, it may be beneficial for early commercialization, and survival and growth thereafter. It will also help in balancing the exploration and exploitation activities at startups while addressing the pressure

for survival in the present and sustainably growing in the future.

It will help the TMT/Leaders/Founders identify the underlying characteristics and dynamics necessary for achieving organizational ambidexterity by designing a context that supports exploration and exploitation in startups. (Thus attention on both exploration and exploitation activities in the growth phase of new ventures may influences better performance (sustainable growth) of the new ventures.)

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WHICH LEADERSHIP FOR THE DEVELOPING COUNTRIES? AN EXAMPLE IN THE AREA OF THE MIDDLE EAST AND NORTH AFRICA

Abstract

The countries in the process of development undergo an economic and managerial crisis, accentuated by a world financial crisis. This financial crisis is it at the origin of a crisis of management? In this context, the decision makers are challenged more than ever to reflect practices of leadership to ensure a durable development for the present and future generations. Morocco, in search of practices of leadership, adopted structural reforms which are considered leaders in the MENA (Middle East and North Africa) region (*Malka and Alterman*, 2006).

The question is to know if these reforms leaders make it possible to generate practices of HRM leader for the Moroccan companies. This paper proposes to answer this question by adopting a methodology of qualitative research. This qualitative research shows that the structural reforms though considered leaders in the MENA area, are not translated by the construction of an example of HRM leader for the Moroccan companies. We aim to clarify this paradox of Moroccan leadership.

Keywords: *Leadership – HRM - Reformer*

Introduction

The country's leaders in liberal economics and management of human resources realized the limits of their model of leadership. The management of human resources, these countries' leaders, considered strategic (*Beaumont*, 1993), or management of knowledge (*Brown*, 1999) or recently described as a new- management (*Halévy*, 2010), could not anticipate the crisis nor allowed to create conditions of revival and durable development. In this particular report, the decision makers are challenged more than ever to reflect practices of leadership likely to save the situation and to ensure a durable development for the present and future generations. In spite of their vulnerability, these countries can they create alternative examples of leadership and durable development? Have they specific assets and particular forces to make a success of the challenge of the durable development?

Today the decision maker's leaders are they brought to start opening on the world? Or to confine themselves in a national fold ? (*Myset*, 2013). Have we passed from a total crisis to crisis of our self ? Indeed, the implementation of the desired leadership is based as a preliminary on the conditions of mobilization of the values and the regard of the people and their ideals (*Marr and Thau*, 2013). *Gehman* and coll.(2013), recommend a new approach of ethics and durability allowing to pass from the cognitive comprehension of the values of the people as principles abstracted, towards a *performativity* comprehension from the values as practices in the fact and actions. .

Beyond a leadership drained by values and charismatic qualities of business leaders, we are mainly interested in this paper to different theories best known in the literature related to management. Leadership can be defined in relation to management and move away from the concept of leadership and domination. In relation to management, leadership takes over management. Leadership as the art of influencing others, however, illustrates, as opposed to management, this conception defended by *Kouzes and Posner* (1991) that "leadership begins where management stops ...» According to *Bean* (2001) an effective leader may not be a good manager. *Zaleznik* (1984) considers that the leader and the manager are two different actors. If the leader is defined by *Carlzon* (1986) as a person who creates the conditions for effective entrepreneurship, *Kotter* (1992) sees that leadership manifests itself in growth and change. *Thévenet and Arnaud* (2012) prefer to operate this difference between the manager and the leader in the sense that the first is the operator of the organizational machine and the second the inspirer

of a vision.

In this perspective of seeking a leadership that promotes sustainable development for current and future generations, Morocco among the countries in search of a model of leadership, has adopted structural reforms considered leaders in the MENA region (Malka and Alterman 2006 European report 2008).

The question is whether these reforms can generate a model of leading HR management practices for the Moroccan companies of tomorrow?

In this perspective, **the problematic** of our research highlights three forces involved to determine the type of leadership to be exercised. The first strength concerns the influence of structural reforms on the practices of Moroccan firms (Pettigrew, 1995), which could correspond to what Tannenbaum (1973), Dolan and Lamoureux (1990) call in the situational theory of leadership the forces specific to leader. The second force concerns the influence of international management (Burns and Stalker, 1966), which could correspond to the forces of the situation. The third strength concerns the effect of HR management in change-resistant firms (Lewin, 1951), which could correspond to the strengths of subordinates (Tannenbaum 1973, Dolan and Lamoureux, 1990, Hersey and Blanchard, 2002)

This paper proposes to answer this question by adopting a methodology of qualitative research based on the collection of the statements of actor-experts. In this perspective we mobilized three leadership theories: situational leadership, transformational leadership, and negative leadership.

To the research question that we have shaped after a round-trip in the literature: "How to build leading HRM practices for the Moroccan companies of tomorrow? », we will attempt to provide some elements of response in the following paragraphs.

By crossing the answers of the people interviewed, we note that the structural reforms though considered leaders in the MENA area are not translated by the construction of an example of HRM leader for the Moroccan companies. We aim to clarify this paradox of Moroccan leadership further. We present first the theoretical framework (I) before exposing the results obtained (II) followed by a discussion (III).

The theoretical framework

In the literature, several theories of leadership arise at us: situational theories, leadership centered on the behavior, the models transactional and transformational.

We mobilized three leadership theories: situational theories, transformational leadership, and negative leadership to found our research project and to explain the stake of the structural reforms.

The situational theory.

This theory means that the adopted leadership moves from a self-centered attitude to an attitude centered on its subordinates. The work of Tannenbaum and Schmidt (1973) thus emphasized not the styles of leadership, but the types of situations in which the leader could be situated (Henriet, 1993). Mintzberg (1982) points out that the firm's external environment has a considerable impact on the manager's choice of management and leadership. In order to adopt the most effective leadership style, the leader must indeed consider Tannenbaum's three variables or what Dolan and Lamoureux (1990) call the three following forces: Leader-specific forces; subordinates and forces specific to the situation. The influence of these forces on the choice of a leadership style varies with circumstances (Likert 1961).

Hersey and Blanchard (2002) developed a model that takes into account not the stage of development of the group but the state of readiness of subordinates to determine the type of leadership to be exercised. From this point of view, it is imperative that the manager assess the level of professional maturity of their employees before choosing a leadership style. A situational theory opposes a theory that should transform the organization into the future. It is a theory of transformational leadership

The Theory of Transformational Leadership

According to researchers like Bass (1985), most leaders adopt a transactional or transformational style. Any manager who favors transactional leadership keeps his organization in her path or she is already following, which yields few results because she is attached to the past. On the other hand, those who exercise transformational leadership obtain great results from their subordinates by appealing to their values and their highest ideals. Transformational leaders are able to imagine the future possess a vision and challenge the values of employees. We should ask if there are any other aspects of this leadership.

The negative Leadership

For Bardes and. Piccolo, (2010), the destructive negative behaviors of leaders appear to be the results of leaders' own characteristics such as anger, hostility, selfishness, a powerful ideology, the feeling of superiority or an exaggerated and dysfunctional need of power. Concepts of the same connotation have emerged, including "toxic leaders" (Lipman-Blumen, 2005) and "crazy bosses" (Bing, 1992).

Most research on human resources has so far examined the positive aspects of leadership practices. But the leadership landscape has begun to change. In particular Anglo-Saxon works (Bardes and Piccolo 2010) have challenged the classic positive trend of heroic leadership, to which the authors attribute a rather romantic notion. Other authors (Schyns and Hansbrough 2010) argue for the same idea that leaders can also harm, intentionally or unintentionally

This non-exhaustive literature on leadership theories allows us to expose our research problem.

Structural Reforms

From this point of view of the search for a leadership supporting a durable development for the present generations and future, Morocco among the countries in search of a model of leadership, adopted structural reforms considered leaders in the MENA region (*Malka and Alterman* 2006; European report/ratio 2008). The reforms engaged by Morocco to stimulate the change and the durable development are made up of four categories of reforms: the democratic reform, the economic reform, the social reform and the educational reform. The democratic reform relates to the voluntarism decision of the high authorities to put the country on the track of the participative democracy. The new electoral code, the freedom of the press, conventions on the humans right, the new communal charter, and later the new constitution, constitute institutional democratic reforms, which made of Morocco a country leader in the countries of the Middle East and North Africa (*Malka and Alterman*, 2006). The economic reform refers to liberalization economy, the encouragement with the external investment, the improvement of the attractiveness of the infrastructure of the reception. These reforms were appreciated overall by agencies of international notation (Moroccan Report/ratio of the Ministry for Finance 2008). The social reform aims at the new code of the family, the new code of work, and the effort to lead to Morocco without shantytowns. As regards these social aspects, Morocco is considered by the European and American experts, as pioneers compared to the countries of

comparison of the MENA area (*Malka, 2006; Igalens, Vatteville, 2009*). The educational reform touches planning in teaching, and new law 0100 of 19 May 2000 making it possible the universities to profit from a financial autonomy, teaching and to be able to meet the needs of the market and companies.

At the question if these reforms leaders in the MENA area, make it possible to generate an example of practices of management HR leader for the Moroccan companies, we will try to bring some brief replies in the paragraphs which follow.

The methodology of research

We chose an epistemology interpretative *and* methodological of qualitative research

The **problematic** of our research highlights three forces involved to determine the type of leadership to be exercised. The first strength concerns the influence of structural reforms on the practices of Moroccan firms (Pettigrew, 1995), which could correspond to what Tannenbaum (1973), Dolan and Lamoureux (1990) call in the situational theory of leadership the forces specific to leader. The second force concerns the influence of international management (Burns and Stalker, 1966), which could correspond to the forces of the situation. The third strength concerns the effect of HR management in change-resistant firms (Lewin, 1951), which could correspond to the strengths of subordinates (Tannenbaum 1973, Dolan and Lamoureux, 1990, Hersey and Blanchard, 2002)

The question is whether the reforms can generate a model of leading HR management practices for the Moroccan companies of tomorrow? This paper proposes to answer this question by adopting a methodology of qualitative research based on the collection of the statements of actor-experts. In this perspective, we mobilized three leadership theories: situational leadership, transformational leadership, and negative leadership. **To the research question** that we have shaped after a round-trip in the literature: "How to build leading HRM practices for the Moroccan companies of tomorrow? », we will attempt to provide some elements of response in the following paragraphs

The qualitative methodology developed and praised today in the Anglo-Saxon literature (*Bansal and Corley, 2011*), considers indeed that the only means to answer the questionings of the companies as regards better practices of management, is to speak with managers. Qualitative research thus chosen is centered on semi-directing talks.

The choice of the talks

The selected maintenance which is one of the privileged tools of qualitative research (*Denzil and Lincoln, 1998*) makes it possible to release the most significant variables. Semi-directing maintenance is selected at 2010 and 2011. The interview varies between one hour and one hour thirty minutes, for each person interviewed until saturation. The employees who are selected in the hierarchy of the selected companies are questioned at the hours of suitability of their hierarchical heads in general towards the end of work not to disturb the profitability of the company too much. This adopted suitability makes it possible to the guarantors to effectively contribute to the success of the investigation without possible embarrassment. Semi-directing maintenance thus chose results in a guide of maintenance which we worked out in three points. For considerations of adaptability on the covered subject we are interested only in the third question which concerns our subject in order to answer the put question precisely:

“Structural reform leaders in the MENA area allow them to generate an example of leadership for the Moroccan companies? “

The study of the ground

We indeed chose to diversify the statements of experts to have from the differentiated point of view getting more objectivity and of realism that a reducing homogeneous unilateral approach. .We indeed targeted a diversified population made up of 45 experts in six socio-professional categories (heads of companies, *RHD*, employees, professors of management, public personalities and students in *Master*).The people interviewed of which 25 % of the kind are relatively old between 40 years and 57 years, and profit from a considerable experiment from 20 to 30 years.

Results of the talks

We show the results obtained followed by a discussion.

Results of the expert

By carrying out a synthesis of the answers of all the questioned experts, we noted that the heads of companies are characterized by their tendency towards a significant rationalization from management HR, though a little timid, while the directors of human resources consider

that Morocco does not fit in universalization, but it underwent it. The following *verbatim* confirm it: *"So in Morocco, in spite of the new fair labour standards act, one still has the management of human resources very tiny. One does not change the things into issuing laws, but one changes the things of the interior". "Morocco does not fit in universalization, but it underwent it and adapts"*

For the professors of management the values of the leader who adopt a strategic vision are missing: *"At then with the question of knowing if there is a strategic planning and of leadership, certainly not especially in Morocco, we have a true problem as regards strategic planning"*.

The search of the values of the people is defended by the employees in the following *verbatim*: *«undertaken which will succeed tomorrow is the companies which will respect and develop the human beings". «Good practices of leadership, it is that it is necessary well to manage and then to understand that the employee is not any more one paid, but it belongs to a company ". On their side, the public personalities prefer speak of a contrast between reality and the ambitious one to make great reforms leaders in the MENA area: " To say the truth, we are far from the account, therefore there is a contrast, between reality and the ambitious one to make great reforms". "Leaders are necessary so that when I give an achievable order that others can carry out. I should not give an order or a reform which cannot be achievable". The students in Master recommend to align themselves on the international companies to remain leaders, competitive, and to avoid disappearing: " It is necessary that one change models if not one cannot manage Morocco of the 21e century with a model of management of the nineteen, or eighteenth century ". " Morocco makes efforts leaders, but it is still far from the European or Asian model"*.

By crossing the answers of the people interviewed by categories of guarantors, we note into final that the construction of the practices of an *MRH* leader for the Moroccan companies is made modestly and that the dynamics of the reforms leaders in the MENA area progress at a modest speed. This qualitative research shows that the structural reforms though considered leaders in the MENA area are not translated by the construction of an example of *MRH* leader for the Moroccan companies. We need a discussion to clarify this paradox of Moroccan leadership.

Discussion of Moroccan leadership

It is a question of explaining the paradox according to which the supposed reform leaders in the MENA area did not result in practices of leadership within the Moroccan companies. The explanation of this paradox could be located in the positioning of the reforms and the leadership reported by the literature.

Firstly, the reforms about which it is in reference to the literature, are registered in the posture of the reforms required by the base (Hillman, 2005), or in the posture of the reforms decided by the top (Allan, 2007?; Barrel, 2010), or in the posture of the reforms requested by the base and accepted by the top (Orgogozo and Serieyx, 1989). The posture of the reforms required by the base and accepted by the top is regarded as a better approach defended in the literature and seems to correspond perfectly to the international standards and the principles of durable development. Hassan Tariq (2011) professor of constitutional law in Morocco, considers that Morocco can be arranged in the posture of the reforms decided and offered by the top joining thus their predecessors. (Allan, 2007; Barrel, 2010). In the same direction, the American experts Malka and Alterman (2006) showed it has been a few years that Moroccan monarchy is clearly the most significant engine of the reform in the country, because it fixes the agenda and regulates the rate/rhythm of the reforms.

Secondly Compared to the leadership two types of leaders are quoted by the literature.

First type concerns leaders known as *transformational* or dialecticians (Boyer and Rebiffé 2011) who are interested in comprehension, and knowledge and make it possible to progress towards a leadership built on solid and perennial bases. It is what the report/ratio of Moroccan experts (2005) for Morocco of 2020 calls the scenario of the "desirable Morocco" conditioned by the development of the democracy, the responsibility and the governance. On the manner of directing the countries by certain categories of leaders, Drucker (2004) said in substance: "There are not under-developed countries; there are only under-managed countries". Other researchers (Li, Mobley and Kelly, 2013) prefer speak of world leadership. That leadership *transformational* indeed obtains great results of its subordinates by calling upon their highest values and their ideals. The leaders *transformational* are able to imagine the future to have a vision and challenge the values of the employees. Mintzberg (2008) rejects the type of heroic leader illegitimate imposed, often leading to the disaster. And more recently, Thévenet and Arnaud (2012), reject the leaders perceived like magic individuals and suggest what they call

one "*Management/leadership* divided.

The second type concerns the leaders known as compromise or rhetoricians (*Boyer and Rebiffé* 2011) who define their strategy of company only according to the speech of the best intentions. Any manager who privileges a compromise leadership maintains his organization in the way which it follows already, which gives few results, because he is attached to the past. They are animated by comprehension, knowledge and the truth, but by the context in which they are themselves prisoners and fatally lead their companies to the failure. The Moroccan report/ratio (2005) speaks about scenarios abased on the unequal development of the territory and the insufficiency of the preparation to universalization which lead to Morocco at several speeds. The compromise leader rhetoricians easily lend themselves to make an amalgam between the interest of the company and the personal interest. They are brought under the effect of a prolonged management to make fusion with the company.

Now, w should know if this category of negative compromise leadership corresponds to the Moroccan leadership or to that of certain similar countries of the MENA area. The Moroccan exception in the MENA area explains that the Moroccan leadership is far from being a destroying negative leadership with the image of what certain countries of the MENA area knew. Indeed, the Moroccan leadership does not means comprises in its genesis, and does not know the causes of these destroying negative behaviors like anger, the hostility, selfishness, a strong ideology or an exaggerated *dysfunctional* (Bards and *Piccolo*, 2010).

The Moroccan leadership does not concern what *Lipman-Blumen* (2005) calls "leader poisons", or "crazy *Boss*" (*Bing*, 1992). The Moroccan leadership can be regarded then as an effective situational leadership, (*Tannenbaum and Schmidt*,1973; *Henriet*, 1993) insofar as it took account of the influence of the forces specific to the subordinates (*Hersey and Blanchard*, 2002), having emerged of Arab spring. This reveals that Morocco remains in the macro-economic plan, characterized by a situational leadership confirmed in the MENA area and more and more recently in the areas of West Africa and sub-Saharan. Nevertheless, this leadership, driven by structural reforms, has not yet been translated at the micro-economic level by leading HRM practices in many Moroccan companies, with the exception of the internationalized ones established in the African continent (Maroc Telecom, ONE , Addoha, RAM, BMCE, Attijari Wafaban...).

The Moroccan leadership can then be considered as an effective situational leadership, in that it

has taken into account the influence of the forces proper to the subordinates (Tannenbaum 1973, Dolan and Lamoureux, 1990, Hersey and Blanchard, 2002), having emerged from the Arab Spring. Nevertheless, the Moroccan leadership could still adopt a most effective leadership style if it takes into account the three forces at the same time: the forces specific to subordinates, the forces specific to the situation of international management and globalization and the forces leader-specific here referred to structural reforms.

Admittedly, reforms are essential in Morocco and other countries in which the leader with a high sense of results and a weak concern for the person, has in the managerial grid of Blake and Mouton (1964) a style of leadership (9, 1) controlling and dominating. However, these reforms can not achieve, according to the World Bank (2006), a strong growth, because this one is not necessarily related to the reforms but to the elimination of a certain number of constraints to the growth. It is the style of leader (9,9) seeking in the managerial grid of Blake and Mouton (1964) the desirable and the ideal, which interests the organizational and behavioral strategy. In other words, the Moroccan leadership would be a transformational leadership (Bass, 1985), able to imagine the future to the extent that it would be able to master the art of balance (Robbins and al, 2011) of the three forces involved.

Practical implications

Organizations and leadership leaders must use a situational leadership approach, taking into account the degree of maturity of the followers' skills, before embarking on a transformational leadership perspective that uses followers' ideals.

This document shows indeed that the structural reforms leading in the MENA region did not necessarily translate into leading practices at the level of Moroccan SMEs. The Moroccan leadership remains a situational leadership in the MENA region that has managed to take into account the situation of the followers that emerged from the Arab Spring. The Moroccan leadership has thus created the exception in the Arab world affected by the uprisings of the Arab Spring. But it remains obvious that after this so-called situational stage of the present, the Moroccan leadership can embark on the second stage towards a transformational leadership turned towards the future.

Originality / value

All public and private organizations face the problem of choosing good leadership. This paper helps to identify certain types of leadership, such as charismatic, heroic, situational, transactional or transformational, or negative destructive leadership. The merit of this paper is to have shown that leadership in today's world does not need heroic leadership that goes it alone, but leadership that would be able to take into account first, of all the situation of employee subordinates, in their capacity and skills before embarking on futuristic transformational leadership.

In conclusion, we tried to show in this paper an example of Moroccan leadership in the MENA area. The qualitative study that we led to this subject shows ultimately that the structural reforms though considered leaders in the MENA area, were not translated for the moment by the construction of an example of HRM leader for the Moroccan companies. Nevertheless the example of leadership desired for the developing countries like Morocco is brought to progress slowly worms of the internationalized practices considered rather leaders and better. The situational theory which characterizes today Morocco can indeed lead to a theory of leadership transformational which should transform the organization in the direction of the future.

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INFORMATION ASYMMETRY MECHANISMS IN ALTERNATIVE MICROFINANCE BUSINESS MODELS

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Abstract

The mechanisms used to manage information asymmetry (IA) in alternative (e.g. for v non-profit, group v individual lending) microfinance business models (MFBMs) in a developing economy are investigated. Semi-structured interviews with owners of 36 small and medium sized enterprises¹ and 28 staff members from seven microfinance providers (MFPs) in one of the poorest regions of Indonesia provided the primary data. We find that the seven MFPs operate three alternative MFBMs that make use of 35 IA mechanisms (IAMs) in total. 14 of these IAMs have been previously reported in the literature; whereas the rest are reported in this study for the first time. Moreover, 13 IAMs are shared across all three MFBMs; while the rest are MFBM and MFP specific. The implications for the cost of capital, theory, policy, and practice are discussed along with several viable avenues for further research.

Keywords: *Business Model, Indonesia, Information Asymmetry, Microfinance.*

¹ According to Law No 20 (2008), enterprise size in Indonesia is determined by the value of annual sales as: micro (<IDR300 million/USD21K); small (IDR300million-2.5 billion/USD21-178K); medium (>IDR2.5-50 billion/USD178K-3.5million); and large (>IDR50 billion/>USD3.5million).

Introduction

Small and medium-sized enterprises (SMEs) play a key role in developing economies; e.g. in job and wealth creation as well as innovation (Herr & Nettekoven, 2017). Nonetheless, SMEs face unsurmountable barriers to (affordable) finance (Herr & Nettekoven, 2017).

Microfinance (MF) has been touted as a solution to such difficulties (Armendariz & Morduch, 2010) and has led to a proliferation of MF business models (MFBMs). For example, for profit v non-profit, individual v group-lending MFBMs that aim to overcome the aforementioned difficulties in some of the most remote and poverty-stricken regions of the world economy.

Still, the cost of MF capital appears high; e.g. when compared to high-street banks. Part of this is due to the large information asymmetry (IA)² MF providers (MFPs) are confronted with, in comparison to their high-street counterparts. For example, MFP borrowers usually lack any established credit history (Cassar et al., 2015), documentation (Lieno, 2014), financial transparency (Brent & Addo, 2012), and/or sufficient collateral (Beck & Demirguc-Kunt, 2006).

To deal with these elevated IA levels MFPs have been using a range of mechanisms to manage IA (IAMs). For example, the Grameen Bank operates group lending (GL) and focuses on women borrowers (Giné & Karlan, 2014; Shapiro, 2015). Several IAMs have thus been reported in a number of studies. For example, progressive lending/dynamic incentives, frequent/flexible repayment instalments, non-traditional collateral, relationship lending (Bruns et al., 2008; Sengupta & Aubuchon, 2008). Nonetheless, such studies tend to be case specific and a systematic, holistic, and comparative study of IAMs across a range of MFBMs is yet to emerge. This study aims to fill this gap.

The rest of the paper is organized as follows. In the next section we review the relevant literature. In the methods section, we discuss our research context and why it is particularly pertinent along with our qualitative research design and analysis. In the penultimate section we detail the main findings concerning the IAM constellations identified across different MFBMs, and we conclude by discussing some key areas for further research and the implications of our study.

Literature review

Microfinance aims to assist the poor come out of poverty. Poverty can be described as a resource deficiency; e.g. of income, housing, health, education, knowledge (Toindepi, 2016).

² A situation in which at least one party of a contract (e.g. lender or borrower) lacks crucial information (Akerlof, 1970).

There are 2.7 billion people at the bottom of the income pyramid; i.e. living on less than USD 2.5 a day (Malik, 2014).

Microfinance services for the BOP differ from conventional banking services, because they involve ‘unique’ processes that rely on social relations for serving low-income customers, with limited experience of how to access finance, in large informal economies with weak property rights (Bruton et al., 2011). To service such customers MFPs need to build deep relationships, understand each customer’s unique needs, and design services that meet these needs; e.g. flexible payment schedules, accept broader purposes for loan use, and/or allow longer repayment periods (Hamada, 2010). This has yielded a range of MFBMs that can be grouped in terms of their similarities. For example, similarities in (pecuniary) inputs and outputs (Effiyanti & Tsagdis, 2017). Pecuniary outputs can refer to what an MFP provides to its borrowers and owners as loans and profits respectively; whereas pecuniary inputs can refer to what an MFP receives as donations, loan repayments, interest, and service fees. Moreover, finer MFBM distinctions can be made in terms of similarities in customer segments; i.e. if they are individuals or groups thereof. Putting these distinctions together yields at least four mutually exclusive types of MFBMs. Namely, individual lending for profit (IL-FP), individual lending non-profit (IL-NP), group lending for profit (GL-FP), and group lending non-profit (GL-NP). Still all MFBM types encounter similar IA problems when their MFPs cannot differentiate between ‘high’ and ‘low’ quality prospective borrowers due to the limited information (e.g. in terms of quantity and quality) available to them (Diamond, 1984). This is particularly pertinent, as IA between MFPs and borrowers can alter significantly the optimal loan agreement (Capasso & Mavrotas, 2010). That is, IA influences the size of a loan, its interest rates, maturity and other features in a loan contract (El-Mahdy & Park, 2014). As a result, MFPs tend to lend money with high interest rates to compensate for the riskiness of micro-lending. Although, usury laws in most countries limit the ceiling in the amount of ‘interest’ MFPs³ can charge (Ashta, 2007); the cost of capital for those at the BOP tends to be rather high. This is most unfortunate given their predicament.

As introduced in the previous section several IAMs have been adopted by MFPs so to enhance the signalling (Spence, 1973) and screening (Stiglitz, 1975) of their prospective borrowers. Table 1 lists 14 IAMs reported in the literature as enhancing signalling and screening. Taking group lending (M1L) as an example of an IAM, it enhances a MFP’s enforcement capacity in credit transactions (Stiglitz, 1990) as it reduces IA and manages its effects through joint

³ In some contexts (e.g. Islamic MFPs) ‘interest’ may also or instead take the form of fees; hence its appearance in single quotation marks.

liability, self-selection, and unique operational routines (Marconatto et al., 2016). Furthermore, group lending keeps defaults to a minimum due to peer pressure and social ties among members (Al-Azzam et al., 2012). This is why group lending was elevated to a panacea by Grameen bank; as group lending reduces IA and ultimately the cost of capital. The group coordinators (GCs) and in cases of IL-MFBMs the loan officers (LOs) are pivotal in such activities (Siwale & Ritchie, 2012). The former are involved in monitoring loan repayment and managing the overall stability of the group (Bruton et al., 2011); whereas the latter are key in the IL-process with multiple, ambiguous, and changeable roles (Siwale & Ritchie, 2012).

Code	Descriptor	Studies
M1L	Group lending	Ashta (2007), Godquin (2004), Sengupta & Aubuchon (2008), Shapiro (2015)
M2L	Group lending	Ashta (2007), Sengupta & Aubuchon (2008), Shapiro (2015)
M3L	Dynamic incentives	
M4L	Frequent/flexible repayment	
M5L	Non-traditional collateral	Ashta (2007)
M6L	Focus on women	Moro et al. (2015), Servin et al. (2011)
M7L	Relationship lending	Cosson & Giusta (2004), Marconatto et al (2016)
M8L	Social capital/ties	Uchida et al. (2012)
M9L	Personal interactions	
M10L	Frequent meetings	Kodongo & Kendi (2013)
M11L	Loan guarantee/tor	Uchida et al. (2012)
M12L	Improving information availability	Kodongo & Kendi (2013)
M13L	Co-signatory	Baiden (2011)
M14L	Five Cs of lending	Cosson & Giusta (2004)

Table 1. *IAMs reported in the literature*

Note: M refers to the M (mechanism) in IAM, and L to an IAM reported in the literature.

Methodology

This study developed a qualitative methodology in its implementation of an inductive approach, using an exploratory research design with interviews as the primary data collection method. Our design focused on a single subnational island region because MFBMs and their contexts are rather complex. Our context is also reflective of some of the most remote and poverty-stricken regions in the world economy MFPs have to operate. The primary data was collected from the Lombok island, of the West Nusa Tenggara (WNT) province in Indonesia. At the time of the fieldwork, the WNT province had a population of 4.7 million spread over 19,728.24 km² and a GDP of USD 1.6 million. It is among the poorest provinces of Indonesia with 17.1% of relative poverty⁴ (Statistics Indonesia, 2014). It is comprised by two islands: Lombok and Sumbawa. The Lombok island was selected for the fieldwork as it is the most populous of the two (70% of the provincial population) and because the vast majority of its locations exceed the provincial relative poverty average.

⁴ Relative poverty refers to lack of income or resources to have a livelihood, relative to others in the same society.

The fieldwork was organized in two stages. Stage one was conducted between November and December 2014. It involved data collection from ten MFP staff members and 21 SME owners. It explored the main difficulties of microfinance provision and access as well as how these are overcome. Stage two built on the results of stage one by deepening on IA difficulties and how they are managed. Stage two fieldwork was conducted between August and September 2015. It involved data collection from a different set of 18 MFP staff members and 15 SME owners in the same localities of stage one.

Permission to access the participants was granted by the WNT Ministry of Cooperatives and SMEs, the Environment and Research Agency (ERA), and the business development services (BDS). Participant selection for the SME owners involved a mixture of referrals (e.g. from MFPs and business development services), snowballing as well as direct contacts the native author developed while being embedded in the region. In total 36 participants were interviewed and their characteristics are summarised in Table 2.

SME characteristics		N	%	SME owner characteristics		N	%
Specialisation	Manufacturing	12	33	Age	25 – 34	8	22
	Retail	14	39		35 – 44	9	25
	Hospitality	10	28		45 – 54	14	39
Annual sales (USD 1,000)	0 – 21	18	50		55 – 64	3	8
	22 – 178	18	50		65 – 74	2	6
Size (number of employees)	1 – 4	18	50	Gender	Female	18	50
	5 – 19	17	47		Male	18	50
	20 – 99	1	3	Education ⁵ (highest level of educational attainment)	Did not attend school	2	5
Age (number of years in operation)	1 – 10	21	58		Primary school – Year 9	6	17
	11 – 20	10	28		Year 10 – Year 12	14	39
	21 – 30	3	8		College/University	14	39
	31 – 40	0	0	Microfinance experience (number of MF loans)	1	12	33
	41 – 50	2	6		2	8	22
					3	8	22
					4	8	22

Table 2. Characteristics of participating SMEs and owners thereof

MFPs involved developing a sampling frame based on information provided by the ERA and BDS and the issuing of invitations to the respective MFP senior managers. Seven MFPs agreed to participate; from which 28 staff were interviewed. Their characteristics are summarised in Tables 3a, b. The success and dominant role of the seven MFPs in the region was also triangulated by the SME owners. Semi-structured interviews were used to explore how MFPs, their staff, and SME owners deal with IA. The interviews explored their perspectives, experiences, and stories from being directly involved in all stages and aspects of providing and accessing microfinance (e.g. loan application, evaluation, approval, disbursement, repayment, renewal). Protocols were prepared prior to conducting the interviews, comprising guidelines

⁵ Levels of educational attainment in Indonesia are: a) Primary School (Year 1 to 6); b) Junior High School (Year 7 to 9); c) Senior High School (Year 10 to 12); d) College or University.

and question schedules. The interviews were held in the local language by the native author. Each interview lasted between 60 and 90 minutes, and was recorded, transcribed, and translated into English.

Data analysis utilised a qualitative and directed content analysis approach. The goal of this approach is to “validate or extend conceptually a theoretical framework or theory” (Hsieh & Shannon, 2005:1281). This study followed Creswell's (2013) data analysis spiral.

In the process of coding, the authors determined the initial coding (e.g. codes gleaned from the literature) relating to MFBMs and IAMs. Building on this coding and categorizing, the authors aggregated codes which seemed to belong together (e.g. because they were expressing aspects of the same basic idea) into themes.

MFP Characteristics	IL-FP				IL-NP		GL-FP
	MFP1	MFP2	MFP3	MFP4	MFP5	MFP6	MFP7
Organizational/regulatory form	Commercial bank	Commercial bank	Regional development bank	SOE pawnshop	SOE lending programme	SOE lending programme	Savings & Loans Cooperative
Coverage	National	National	National	Regional	National	Regional	Local
Network size	5,228 offices 2,454 outlets 522 mobile outlets	2,603 micro outlets	8 branch offices 12 sub-branches Two cash offices	12 regional offices	133 offices	26 offices	One main office (no branches)
Number of branches in Lombok island	61 micro offices	48 micro offices	Six branches 12 sub-branches	31 outlets	One office	One office	One office
Loan size (USD) and collateral requirement (Y/N)	100–10,000 (Y)	500 –20,000 (Y)	≤ 2,000 (N) 2,001–5,000 (Y)	250 –5,000 (Y)	100–3,000 (Y)	500 –2,500 (Y)	<100 (N) 100–7,500 (Y)
Interest rate (APR %)	13.20–15	15.00–19.80	10.21	12	6	6	36

Table 3a. *Characteristics of participating MFPS*
Note: SOE stands for State Owned Enterprise.

MFP-staff characteristics				MFP-staff characteristics			
Microfinance Business Model (MFBMs) type	IL-FP	N	%	Age	20 – 29	N	%
	IL-NP	4	14		30 – 39	3	11
	GL-FP	3	11		40 – 49	9	32
	LO/GC	8	29		50 – 59	7	25
Job title*	Back office personnel	3	11	Gender	Female	12	43
	Branch manager	12	43		Male	16	57
	Regional chairperson	5	17	Education (Highest level of educational attainment)	Year 12	1	3.66
	≤5	9	32		Diploma (1 – 3 years)	4	14
Microfinance experience (number of years working in microfinance provision)	6 – 10	7	25		Bachelor degree	21	75
	11 – 15	3	11		Master degree	1	3.66
	16 – 20	6	21		Doctorate	1	3.66
	>20	3	11				

Table 3b. *Characteristics of participating MFP-staff*

Note: * Our MFPS have a rather rigid career path with all staff starting as LOs and working their way up through the aforementioned job titles. Thus, all MFP participants also have the respective lower level work experience.

Findings

We identified three mutually exclusive MFBM types in the fieldwork area: IL-FP, IL-NP, and GL-FP operationalized by the seven MFPs. No MFP was identified in the fieldwork area as operating a GL-NP⁶ business model.

In particular, four MFPs (1-4) adopted an IL-FP BM; two MFPs (5-6) an IL-NP BM; and one MFP (7) a GL-FP BM. In total, we identified 35 IAMs across the three MFBM types (Table 4). 13 IAMs were implemented by all three types of MFBMs and all seven MFPs (M4L, M6L, M7L, M8L, M9L, M11L, M13L, M15, M16, M17, M33, M34, M35). We termed these to be core-IAMs. Seven of these 13 core IAMs, as signified by an “L” in their code names, have been reported in the extant literature (see Table 1).

IAM		IL-FP				IL-NP		GL-FP
Code	Descriptor	MFP1	MFP2	MFP3	MFP4	MFP5	MFP6	MFP7
M1L	Group lending	-	-	-	-	-	-	x
M2L	Dynamic incentives	x	x	-	-	x	x	-
M3L	Frequent/flexible repayment	x	x	-	-	-	-	x
M4L	Non-traditional collateral	x	x	x	x	x	x	x
M5L	Focus on women	-	-	-	-	-	-	x
M6L	Relationship lending	x	x	x	x	x	x	x
M7L	Social capital/ties	x	x	x	x	x	x	x
M8L	Personal interactions	x	x	x	x	x	x	x
M9L	Frequent meetings	x	x	x	x	x	x	x
M10L	Loan guarantee/tor	x	x	x	x	-	-	i
M11L	Improving information availability	x	x	x	x	x	x	x
M12L	Co-signatory	x	x	x	x	x	x	i
M13L	Five Cs of lending	x	x	x	x	x	x	x
M14L	Geographical zoning	x	x	-	x	-	-	i
M15	On the spot survey	x	x	x	x	x	x	x
M16	Broad loan-purposes	x	x	x	x	x	x	x
M17	Residential borrower meetings	x	x	x	x	x	x	x
M18	Reactive marketing	x	x	-	x	x	x	i
M19	Proactive provision	x	x	-	x	x	x	-
M20	Personal networks	x	x	x	x	x	x	i
M21	Referrals	x	x	x	x	x	x	-
M22	Variable loan disbursement	x	x	-	x	-	-	x
M23	Welcoming pool	-	x	-	-	-	-	-
M24	Credit history check	x	x	x	x	-	-	-
M25	Location specific filtering	x	x	-	x	-	-	-
M26	Daily pick-up service	-	x	-	-	-	-	-
M27	Interactive marketing	-	-	-	-	-	-	x
M28	Regular GC meetings	-	-	-	-	-	-	x
M29	AGM with members	-	-	-	-	-	-	x
M30	Proactive marketing	-	-	-	-	x	x	-
M31	One-way messaging	-	-	-	-	-	x	-
M32	SME quarter report	-	-	-	-	x	x	-
M33	LO/GC incentives	x	x	x	x	x	x	x
M34	LO/GC monitoring	x	x	x	x	x	x	x
M35	LO/GC peer-work	x	x	x	x	x	x	x
Total IAMs		25	27	18	23	21	22	20

Table 4. *IAMs, MFBMs, and MFPs*
Notes: x/- indicates presence/absence, i stands for implicit.

⁶ For examples of MFPs operating GL-NP BMs see Accion, Bentley Microfinance Group, and Grameen America.

Furthermore, we found that each MFBM type has between three to six specific IAMs; which we termed to be BM-type-specific. In particular, we identified six IAMs specific to the IL-FP MFBM type (M10L, M14L, M23, M24, M25, M26), five to the GL-FP type (M1L, M5L, M27, M28, M29), and three to the IL-NP type (M30, M31, M32).

In addition, each MFP implemented between two to six IAMs specific to them; which are although encountered across different MFBM-types. Six of these MFP-specific IAMs are encountered both in the IL-FP and IL-NP MFBM IL-FP and GL-FP MFBM types.

Overall, MFPs operating an IL-FP MFBM tend to use the highest number of IAMs. This can be explained to a large extent by the customer segment component of their BM; which comprises highly heterogeneous individuals. These elevate the levels of IA that needs to be managed, to an extent that allows these MFPs to generate profits. Although MFPs operating an IL-NP MFBM also have a similar customer segment component, as their type name suggests, they do not need to achieve similar level of profitability as their IL-FP counterparts. In contradistinction, although the MFP operating the GL MFBM has also to turn a profit, it lends to a small number of homogeneous individuals. That is, MFP7 is unable to create economies of scale and/or diversify its risk of lending due to its customer segment. That is, single location, gender, and economic activity (agriculture).

Surprisingly, one of these IL-FP MFPs (namely: MFP3) makes use of the smallest number of IAMs (18 to be precise) out of all seven MFPs regardless of business model type. This is partly due to its customer segment being its savings customers. Therefore, MFP3 has enough information about its prospective borrowers, which reduces the level IA it has to manage in order to turn a profit. In actual fact, MFP3 implements fewer IAMs than the GL-FP MFP; which theoretically would be predicted to have the least number of IAMs.

The IL-NP MFBM offers the lowest cost of capital (APR), which is determined by the regulatory framework (SOE-legislation). This ameliorates the drive to produce profit over and above their operating costs. The IL-FP MFBM offers the second-best APR as these MFPs serve a much larger (i.e. economies of scale) and more diversified customer segment (compared to the GL-FP MFP), which allow for a better spread of risk. However, even among these four MFPs, MFP3 with a qualitatively different customer segment (i.e. state or private sector employees with savings accounts) is able to charge a much lower flat rate 10.21% APR (i.e. regardless of loan size and duration) and for smaller loans (i.e. below USD 2,000) not to require collateral. In addition, the GL-FP MFP entails the highest APR (36%); in actual fact approximately 2.3 times higher than the second highest, and close to 3.3 times higher than the

best APR in our study. So, clearly, the business model of this particular MFP creates a rather high cost of capital.

Therefore, as seen from the above findings, the customer segment appears to be the key BM component for all MFPs; which (when combined with the regulatory component of their BMs) drives the requisite constellation of IAMs, affecting in turn the MFP operational costs, and ultimately the cost of capital (APR) for borrowers.

Conclusions

Approximately half of the 14 IAMs reported in the literature are core to all three MFBM-types. Nonetheless, we were able to identify almost as many novel core-IAMs; that are reported in this study for the first time. As well as 20 more IAMs that are MFBM-type and/or MFP specific. We also find that the (rather costly to administer) functions served by social collateral can be successfully emulated with non-traditional collateral, loan guarantors, and personal savings among other (lower-cost) IAMs, depending on the particular kind of customer involved. Thus, fitting constellations of signalling and screening mechanisms, to a given customer segment, could reduce IA and significantly lower the cost of capital for borrowers at the BOP. As it is the customer segment component of a MFBM that shapes IA, driving the quantity and quality of the non-core IAMs and ultimately the cost of capital.

Policy and practice should thus focus in reducing the cost of the requisite screening and signalling mechanisms relevant to their given customer segment (e.g. through SME training programmes in signalling, LO professional certification in screening, leveraging central bank debtor history to eligible MFPs).

Further research could identify cost-effective IAM constellations for MFPs servicing BOP customer segments with particular characteristics.

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FROM THE NEED OF SELF-IMPROVEMENT TO COMPANIES' GROWTH

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Abstract

The present paper is the result of several market researches and analysis developed and implemented by “*Bio Romania*”, an Organic Farmers Association that targets on how Romania is currently facing specific issues linked to professions and entrepreneurship development within an economic environment dominated by shortages in the labour-force, skilled and competitive staff. Once identified the limits of the low economic development caused by short labour qualification a research project (RUMA) got the European Union approval and assistance to support workers, businesses and entrepreneurs to facilitate the implementation of different measures to adapt the activities of change in the economic sectors identifiable according to the National Strategy for Competitiveness, and the National Strategy for Research, Development, Innovation and proposed the education way to diminish the gap between individuals' skills development and companies economic profit.

Keywords: *growth, self-improvement, skills, labour-force, entrepreneurship, European Union funding, risk attitudes, success, goals*

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Introduction

Romania, with its around 5 million employees, has an employment rate which currently is, among the lowest in Europe. Most unemployed people are concentrated in the rural areas where the living style and opportunities are limited and the labour force is largely unskilled. Nationally, the labour market has suffered significant transformations requiring labour policy adjustment and economy restructuring because of negative natality and migration of manpower. Furthermore, companies and organisations need the decision-makers support to keep people at work, increase efficiency and professionalization and to invest in human

resources skills and development. Romania neglected dramatically the formal education and health sectors and now faces a significant shortage of human capital (Schmalensee, 1991). This paper presents some of the results of a European project aimed for reduction of inward migration, improvement of work conditions, the sustainability of the already occupied workplaces, poverty reduction and raising social inclusion of vulnerable people. The overall objective concerns the support provided, by best practice, to employees working in the field of management department and human resources departments, to entrepreneurs and small and medium-sized enterprises in Romania, to learn a better the strategic planning in their field of activity.

Objectives and Method

The initial objectives are linked to several actions developed by the Romanian Government and currently implemented in strategies like the “*National Strategy on Social inclusion and Poverty Reduction 2015-2020*” and the “*National Strategy on the inclusion of Romanian citizens belonging to the Roma minority for the period 2014-2020*” (www.mmuncii.ro). One of the big problems is generated by poverty and collateral societal problems leading to an unsustainable form of development heading to extremist positions and opinions. Unsolved, they are transferred from a generation to another (Reianu, 2016), burdening the society across time and space. Consequently, the focus was to set up participative activities for employees inside the program of professional formation, improving skills on a professional and entrepreneurial level, improving the adaptability to change, stimulating and supporting the development of capabilities and own resources and moreover, certification of acquired competences and skills. To keep the step with competitive economies development, Romania highly needs a robust human capital, more specialized and well-trained labour force, which is obtainable only through education, coaching and training. People also learnt the advantages of a flexible work prior to accept the reorientation and professional reconversion. They need to know how to apply and get better paid jobs, how to identify and get prepared for those domains of the future that can guaranty better jobs, better wages and more social satisfaction in their work.

The research holds on target group established by “*Bio Romania*” and limited to 502 people, coming from 3 professional categories:

- 100 people (constituting 20% of the target group) with individual labour contract (part- and full-time) performing in managerial positions at the workplace;

They are supposed to prove good management skills like time management, negotiation or interpersonal skills to run effectively and efficiently their organisation. The ability to organize an activity means plan and respect the available resources, identify the achievable goals and develop strategies. Also, decision-making and problem-solving are some other vital management skills. A good manager must be present and grounded to make right decisions and handle the problems in such a way that it leads to the best solutions. The flow of information in any organization is realized through communication, which represent another crucial skill for a manager to handle. This determines how well employees relate to the manager, how well the tasks are completed and how successful the organisation is.

- 40 people (constituting 8% of the target group) with individual labour contract (part-time or full-time) performing in the human resources department at the workplace; The staffs of Human Resources Departments play a crucial role in the organization as they represent the liaison between employees and the executive management. They are needed to be skilled in human behaviour knowledge, critical and, strategic thinking, good forecasting abilities, influencing activities, multitasking capacity to solve problems. *"The growth of an organization is proportional to the development of the human resources working in it"* (Freeman, 1993).
- 362 people (constituting 72% of the target group) consisting of entrepreneurs managing their own business.

All people chosen to be part of the target groups came from different domains of activities, such as: tourism, ecotourism, information technology and several industries, such as: food and drinks, pharmaceutical, woodworking operations, automotive industry, creative industry and so on. The identification, eligibility and recruiting of the target group has been conducted in the Central Region (consisting of six counties: Brasov, Alba, Covasna, Harghita, Mures, Sibiu) involving different methods of promotion:

- *Online environment* - consists of the project formal site where people all the details they need to completely understand the project, including the contact details.
- *Facebook*, contains short descriptions, advertisements and a link to our direct platform, different promoting platforms and the e-mail.

An *e-mail* message with complete condense information was sent to urban and rural town halls in the Central Region.

- *Recruiting experts*, involving deployments to key locations: Chambers of Commerce, Town Halls, Territorial Labour Inspectorate, tourism and food authorities, agencies and associations, company headquarters.

The experts organized presentations and informational speeches, events and conferences, handed out flyers and informational brochures. The next steps consisted of maintaining a close connection with the interested people in order to avoid abandon due to a series of external factors that may occur (full agenda, loss of interest). Once the recruitment process finalized and all participants registered, each of them attended a conference on specialized topics according to their activity; they followed courses by business area, received the last information according to their interest and upcoming situations, getting upgrading skills and developing abilities.

The courses, defined by high quality of training, provided appropriate solutions to get new abilities and competencies a rapid adaptation to any new task and challenge (Katsikeas *et al*, 2019). The research proved that the stimulation of training ending in a well-prepared, flexible labour force correctly paid should constitute one of Romania's priority objectives", in accordance with the objectives of the EU 2020 Strategy (Tanase, 2013). All participants at the project's activities had the chance of complex feeds-back and their assessment; listen to various subjects concerning their jobs. At the end they received a certification of acquired competence and skills. Furthermore, they attended a session of secondary and horizontal themes, a module of business coaching and some of the participating small and medium-sized enterprises received support and counselling for their business strategic planning. Finally, the result consisted in 50 people certified in human resources, 119 certified as managers and 362 got different certification of specific competencies received during the courses. By this project multiple solutions have been given to people struggling daily with the challenges in their field of activity.

Findings

Human resources play a key role in an organization due to the experience and necessary skills owned to manage the most important and valuable resources. Without a highly trained human resources department, any company fails reaching the high level of efficiency and workforce management. From recruitment to establishing relationships with employees, ensuring the safety, offering benefits and compensations, the human resource employees must help the organization to achieve the success. The trainings based only on realistic identification of the company's needs are crucial for the organisation's health of the organization and cope with the future better. They are meant to help achieving standards, career development, enhanced competencies, and reinforced strength, overcome limitations, increase employees performance

and productivity. 72% of the target group consisted by entrepreneurs managing their own business brought into attention that the entrepreneurship remains the core of the economy when he is able to cope successfully with challenges. Entrepreneurship is a mind-set generating special acting and thinking strategies, to find new ways to solve problems and reframing them to create value. Entrepreneurship is about detecting and holding on new opportunities with the purpose of “*capturing its value*” (Bachenheimer). The competencies needed combine a set of skills and abilities, such as initiative, creativity, problem-solving, the capacity to adapt to change or technical and financial knowledge. All of these can be developed only through entrepreneurial training in order to achieve the behaviour and mind-set of an individual able to develop a new business. Entrepreneurial competencies are mainly important to the business growth and success as they are the main participant to the economic development. Kerr and colleagues (2017) emphasizes the individuality of entrepreneurs and the way they perceive risk taking. Entrepreneurs are considered to be characterized by innovativeness and self-efficacy, as much as by the spirit for attainment or for control. As in the Big Model the entrepreneurs interaction and develop complex relations, explore and share the forecast images of their work, design fictional events using Specific procedures of action, different techniques and games, play multiple roles expressing all components of real exploration (Kerr *et al*, 2017). The courses offered to participants a complete knowledge about the specific steps of the entrepreneurial process: how to venture in an enterprise, how to organize it to run it competitively, how to manage it and how to achieve the goals initially set. Furthermore, the path-blocks' identification, the consideration of alternatives during a management crisis, adapt to consumer's expectations, the quality performance and the speed of change of types and patterns of products and services. Self-improvement proved its importance when linked to age because it makes people go through new experiences and challenges which determine the self-awareness improvement, deeper self-analyse in thoughts and feelings and their higher self-esteem. Encouraging personal growth is always important as a business tool for growing profitability, performance and prestige.

Conclusion

The specialists' group of the project faced challenging experiences and circumstances which determined the participants to proactively learn, grow and develop a personal vision of their future. Some of them discovered about themselves with various hidden talents and abilities, other improved their effectiveness. All of them became motivated and more confident able to

create effective and concrete personal and professional development plans. The participation at all activities implemented was an opportunity to access new information, meet people, interact with the unknown, face the challenges, and help participants to develop. Henceforth, the project meant to increase awareness about the importance of self-improvement in life and at the working place, especially of the workforce responsible within a company to harmonise the needs of the company with the needs of its employees.

Self-improvement should be a constant and dynamic preoccupation driven by the individual and supported by the company. Best companies acknowledge self-improvement by recruiting the best professionals in the first place or promoting the entire acquired set of competences of an employee: skills developed formally at school, individually or by company's help recognising the management competent and inspiring motivators, all professionals ready to take the role's model for other colleagues. Nurturing and encouraging the culture that pursues employees personal growth as part of the business growth is the appropriate way towards a responsible, respectable, loyal and sustainable business model, as the care for the staff self-development lead over time directly to company performance and profitability.

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MAPPING THE CUSTOMERS' BRAIN

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Abstract

Every time we concentrate on a concept for around 50 minutes, the number of connections in our brain doubles by physically reacting to the interaction with the external world. All this information is stored in the neocortex, the *new* and specialised brain, evolutionary speaking, and is linked to the conscious mind, generating simultaneously a feeling or an emotion. Therefore, the body feels what the mind intellectualised. However, the limbic system or the *old*, reptilian brain is transforming an experience into an emotional signature, which can influence the whole decision making process. The link between cognition, emotion and decision making became the object of interest of newer sciences such as neuromarketing born from neuroscience behavioural economics, social psychology and medical technologies and going deeper today to business technology.

Understanding the patterns and reactions formed in the customer's subconscious minds is the key to ruling over the costumers' buying decisions.

Keywords: *brain, neuromarketing, customer, behaviour, habits*

Track: ASE International Online Seminar on Management Trends on Global Research

Businesses

What is neuromarketing and how does it work?

Neuromarketing is a new discipline studying the decisions that customers make and the way their brains respond to branding and advertising. The interest in the field increased when the neuroscientists confirmed that more than 95% of the human decisions are made at unconsciously state of mind level. Furthermore, long term medical studies demonstrated that people base their decisions on emotions (Pradeep, (2010)). Therefore, the strong emotional

connections, such as memories, thoughts or feelings, are extremely important in the marketing process. In other words, the brains of customers are imprinted with the product's identity in a *personalised* way and when the buyer thinks of it, his emotional memory and the thinking parts of his brain are activated at higher rates, making the unconscious mind to control the decision-making process (Weber, 2016). Neuromarketing aims to generate a pleasant, memorable and strongly positive effect on the customer's minds. It focuses of the way they think, feel and take action in order to understand how the unconscious mind can be influenced. This process consists of many stages, and it involves various methodologies,

equipment and techniques as shown in Figure 1:

Neuronal activity		Other techniques
Central Nervous System	Peripheral Nervous System	1. Implicit association test
1. Electroencephalography (EEG)	1. Electrocardiogram (ECG)	2. Eye-tracking
2. Functional magnetic resonance imaging (fMRI)	2. Galvanometer (GSR)	3. Pupillometry
3. Magnetic resonance imaging (MRI)	3. Facial coding	4. Personality assessment
	4. Skin conductance	5. Hypnosis
		6. Behavioural study
		7. Voice analysis

Figure 1.

Neuromarketing techniques based on the neuronal activity measurements or other principle

Source: personal contribution

In the voice analysis process the attention is on the tone of the voice rather than on the words, which is an indicator of the way the customer is actually feeling towards something or someone. The software used was developed originally by the CIA for interrogations and it demonstrated its functionality in any spoken language, because it measured the tone variations, those overall patterns of rhythm or musicality in the voice.

The research Google made (Srinivasan, 2012), to find the appropriate shade of blue for the links we access daily on the internet represents an online experiment conducted in order to produce more money. Knowing that customers tend to make low risk buying decisions and that colours have such a great impact on our emotions and behaviour, Google tested more than 50 shades of blue to find out which one brings more clicks online and indirectly more purchasing income. After attentive study of the customers clicking behaviour when Google finally adopted

the chosen colour, the annual profit increased by 200 million dollars, indicating how much the importance of the choices made of images, colours, font styles adopted within an online page layout in consolidating the customers' trust was underestimated before. Customers' online preferences are culture, age and gender specific, therefore online brands and websites designers should acknowledge them first, in order to take them into account (Pradeep, 2010).

Another lesson of neuromarketing, of how a better customer experience can generate more income, was given by Amazon who improved online navigation speed to make the buyers decide more quickly, relaying on the fact that more a product is desired by a significant number of consumers, more that product will be rated excellent and valuable. On Amazon's website, after selecting a product, the customers can not miss the star rating grade, the best seller number, the customers' reviews number and the answered questions sections. These features were found to have the greater impact on the final purchase choice, long before being aware of the price or the free shipping offer, demonstrating how the invisible social influence impacts on the natural bias of the brain, just because for human beings, decisions involve uncertainties. Brands being a subjective experience demonstrate how a simple advertise exposed on a building, a package, a sound or just a logo can activate a whole set of associated ideas in the brain that trigger desires, needs or goals, all of these based upon the past representations, perspectives and beliefs (Praet, 2012).

Pressing the “buying” button in the brain

Neuromarketing it is used not only to study costumers' behaviour, but also to know how feelings and emotions bias the cognitive pathways influencing the decisional process. Here are some neuromarketing tips for an efficient advertising:

- 1.A concise and straight to the point message has a quicker impact on the brain;
- 2.Emphasize the essential in the starting and ending seconds of the advertise and the message will remain imprinted in the brain;
- 3.Emotions are hard-wired in the brain and have a disruptive effect, which activates the memory processes;
- 4.Set the focus on the customers' needs and use real or determined mental images to stimulate the buyer's mind for a profound impact.

By using biometrics, neurometrics and psychometrics, neuromarketing succeeded like never before to unveil human behaviour. Revealing the human brain in such a detail created the great opportunity to identify the ”buying” button in the customers' minds.

Traditional marketing was based on studying the behaviour demonstrated or explicitly verbalized by the consumer, but often the results were skewed consciously or unconsciously by a variety of factors. In neuromarketing on the other hand, customers are still declaring their preferences, but the nonconscious processes and the measurements of the psychological changes that occur in the body when the question is asked, matter more. The information provided by neuroscientists regarding how a certain response can be obtained by inducing a certain stimulus, offered a totally new insight of the way marketing strategies evolved.

From the modern world to the ancient brain

Evolutionary speaking, the human brain is divided in three parts that allows us to go through three important stages thinking – doing - being:

- *The new brain* or the neocortex is responsible of the rational self and the thinking process. It represents the conscious mind that helps us connect with the three dimensional reality. The forebrain, which is the front part of the brain, represents 40% of the entire brain and it has an executive function. It allows us to have intention, to invent, to concentrate, to pay attention, to decide on what action we shall take or to speculate on new possibilities.
- *The middle brain* is the feeling self and is where memories are stored.
- *The primal, reptilian brain*, known as the instinctual self, is the most impactful on the decision-making process. It is the actual subconscious mind that is totally uncontrollable. This part of the brain is always “ON” and it is responsible of the nervous system and the entire functions of human body, regulating functions such as respiration, digestion, heart rate, hormone and blood sugar levels or temperature (Medina, 2008). The amygdala, a nucleolus almond-shape with major role in memory, decision-making, emotional responses and a great influence on the cortex is located at this level.

North, Hargreaves and McKendrick study (1999) indicates that our choices are very easily and unnoticeable influenced by things we don't even pay attention to, highlighting that our buying decisions can be influenced unconsciously, guided simply by emotions and intuition. The study took place over a two-week period at a wine store in which, on alternate days, the background music was French (accordions) and German (oomph band), aiming to see if this setting would influence the customer's choice of wine selections. They observed that German music determined German wines to outsell the French ones and the opposite effect resulted when French music was playing. The real surprise though came when the customers were asked through a questionnaire about the music in the store and if they were influenced by it

during their wine selection. More than 90% of the shoppers said that they didn't even notice the music. This study represents a very small piece of evidence regarding the real power of neuromarketing and how it can influence human decisions by using the emotions on such a level that the process of awareness does not become active.

The interest for what stimulates the reptilian brain increased tremendously since scientists have discovered that it can be activated in many ways.

- The most important stimulus is by far the emotional one, with the biggest impact on the reptilian brain. The messages displayed on the cigarettes packs aimed, to help people quit smoking by suggesting the effects they are exposed to, represents a good example.
- Another mechanism is based on its self-centred specificity by generating, a state in which the customers identified themselves with the action presented in advertising and commercials. Addressing costumers directly as “you”, in a personalized manner, the message goes straight to their subconscious.
- When all key information is concentrated at the beginning and at the end of a message, this represents a powerful stimulus (Trent, 2012), for the reptilian brain which has a profound tendency to forget everything contained in between.
- The advertising is a lot about seeing and knowing that the optic nerve is located in the reptilian brain and that it is about 50 times faster than the auditory nerve, could help advertising industry to gain more customers each year.
- The contrast between the “before” and “after” state it is another strategy employed in commercials for capillary hair growth or weight loss. This contrast technique impacts directly on the reptilian brain.

The reptilian brain it is very receptive to tangible concepts, it does not understand words, and therefore the intangible ideas are transformed into services or programs.

Because an average individual is being exposed daily to more than 4000 ads, many brands understand this competitive market and search for neuromarketing services, in order to address directly to the reptilian brain of their consumers. Neuromarketers can generate better forms of advertising by taking advantage of the subconscious mind involved in the decision-making process. The fact that people have extremely fast reactions to the external world, measurable in milliseconds, determines an unconscious vulnerability towards emotions and the associability of them to products, services or programs and it is acknowledged that strong emotions form memories. When applying the neuromarketing principles to the online design it

will make a difference in the numbers of customers visiting that online space. For that to happen, the online visit should be easy, simple, intuitive, friendly and it should capture the customers' interest in order for them to remain on the page, not to rapidly switch their focus on other websites. Neuromarketers do take advantage more and more of the automatic biases in the human brain inventing new strategies to directly address the reptilian brain, by limiting the amount of choices customers have at their disposal and inducing the obvious choices, manipulating the order, using the visually biases in the brain and reducing the pain induced by prices.

Conclusion

The improvement of marketing efficacy due to the insights made possible by neuroscience opens up a tremendous amount of opportunities and new points of view regarding mind understanding. The oldest part of the brain holds in fact the essence of persuasion, it loves the familiar and the routines and it is always in the present moment. This is why the scientists in neuromarketing develop not only important strategies and techniques but business technologies to gain access to the instinctual self of the human being. Together they assure the loyalty and the positioning of the brand on the market using the memory and the emotions of the customers.

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THE IMPACT OF THE COMPETITIVE INTELLIGENCE FUNCTION IN THE INDUSTRY 4.0

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Abstract

The current times are marked by a process of transition from digital transformation to digitization in almost all global businesses. The transition to digitalization affects the entire organizational ecosystem by integrating with digital solutions the entire value chain of global business. Industry 4.0 is a relatively new concept that was introduced in 2011 in Hannover, during one of the largest trade shows in the world. Its inauguration represented, in other words, the start of the fourth industrial revolution. The first industrial revolution or Industry 1.0 took place during 1780-1870 and it was marked by the power of steam; the second industrial revolution or Industry 2.0 developed along with chain production and electrical power in the period of time between 1870 and 1950. From the year 1950 until 2010 was the third industrial revolution which involved high levels of automation, digitization and IT. After 2010, our societies have witnessed the fourth industrial revolution. Industry 4.0 represents the smart industry that is characterized by concepts such as Internet of Things, Hyper connectivity, Cyber-Physical Systems or Big Data (Hitpass & Astudillo, 2019).

Keywords: *Competitive Intelligence, Competitive Advantage, Industry 4.0, Digital Economy, Business Strategy*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

Introduction

Industry 4.0 has the main purpose of creating digital production enterprises which, besides being interconnected, they communicate, analyse and use information in order to drive intelligent actions back into the physical world. It leads the physical act of design, manufacture, distribution and performance in a continuous cycle with real-time access to data and information that depends on the exchange of information between the physical and digital worlds. But the essence of Industry 4.0 is actually the leap from digital technologies connected back to action in the physical world. The Industry 4.0 prospers in a connected environment – an integrated

ecosystem where people, data, processes, systems and capital assets can converge to create Cyber-Physical Systems and drive IoT. Such integration of processes and information flow in the era of Industry 4.0 requires a collaborative mode of operation. This electronic collaboration or e-collaboration includes both the exchange of information and resources as well as the creation of common knowledge in order to optimize processes and increase the added value. The dimensions of the electronic collaboration have a positive impact on the competitive priorities and, as a result, “suggest that value creation in supply chain electronic system is contingent on mutual resource synergy and joint collaboration among trading partners” (Alsaad *et al*, 2018).

Competitive Intelligence is a process that involves the collection, processing, analysis and use of information regarding the environment in which the company operates (Adidam *et al*, 2012) and aims to transform this information into valuable intelligence (Kim *et al*, 2015). The expansion of the Competitive Intelligence field in the last decades has started from the need for technological improvements, the reduction of costs and the alignment of the business strategy with the competitive environment (Fleisher, 2004; Cassia & Magno, 2019).

The impact of the Competitive Intelligence Function in the Industry 4.0

The Competitive Intelligence function is a business tool that supports organizations enabling them to increase business performance by improving their knowledge, internal communications and quality strategic plans (Rezaie *et al*, 2011). In addition, due to the formal and systematic development of Competitive Intelligence, managers are able to make better informed decisions about future events (Dishman & Calof, 2008; Yaghmaie & Vanhaverbeke, 2019).

The impact of the Competitive Intelligence function on organizations within Industry 4.0 is significant because at the organizations level it enables decision makers to detect new opportunities, create value and improve performance (Salguero *et al*, 2019). It also gains significance as a process that allows companies to have an advantage in the market - sustainable competitiveness (Hill & Jones, 2009). Also, the Competitive Intelligence function allows managers to understand the competitive forces in order to adapt their strategies to the rapidly changing industry and to develop sustainably (Trong, 2017).

In order to increase the efficiency of operations in the global corporate market and to create the competitive advantage in the era of Industry 4.0, enterprises must begin to identify, recognize and gradually meet the requirements. The first step in this process should be to understand the specifics and needs of the Industry 4.0 age. Among these needs, where the function of Competitive Intelligence can have a significant impact on global companies, one can identify:

- Assessing current needs: to determine when and where automation can help with Industry 4.0 and where it can be worth the wait. The Competitive Intelligence function can help managers consider what technologies are already available to significantly reduce costs and risks and what investments might be worth waiting for later, when technological advances can lead to significant upgrades to current capabilities.
- Develop a talent strategy to meet the new talent needs created by the technologies based on Industry 4.0: Competitive Intelligence can help decision makers continually evaluate the evolving needs of the organization to proactively prepare for the talent needs that may exist in the future, especially those focused on maintaining and managing the assets activated by Industry 4.0 (Vasquez *et al*, 2016).
- Monitoring emerging trends: Competitive Intelligence allows managers to make efficient planning and decision-making in an area that is evolving rapidly over the next decade. The Competitive Intelligence function can examine new opportunities to improve distribution operations by gathering competitive information for benchmark performance and monitoring potential market threats.
- The planning, management, reliability and security of data in an increasingly complex system: Data management systems are a major part of the implementation and operation of Industry 4.0 technologies and should be considered critical to the success of the effort. The ability of management to implement a Competitive Intelligence function within the company to collect, analyse, and protect information is essential to the success of a global business in Industry 4.0.

Recommendations

In the context of Industry 4.0, the competitive environment has become more volatile, uncertain, complex, and ambiguous and the function of Competitive Intelligence has become a necessity. Industry 4.0 refers primarily to digital transformation which allows organizations creating and developing their products, services and processes, whose differentials will be essential to remaining on the marketplace. Digital technologies generate a large amount of data but creating value resulting from the use of data requires further investigation (Bordeleau *et al*, 2018). In order to improve the decision-making process and to better orient the business strategy, the managers and especially the decision makers involved in this Industry 4.0 must know how to access, evaluate and intelligently use data, information and intelligence in the Competitive Intelligence process (Ottonicar & Mosconi, 2018). All information indicates that the benefits created in the era of Industry 4.0 will be not only intangible, but temporary, quickly “outdated”

competitors. Industry 4.0 will be more of a “system” of highly technological and organizationally advanced competitive advantages than a clearly identifiable single activity that distinguishes a particular company (Adamik & Nowicki, 2018).

It is essential for business leaders to proactively evaluate the impact of trends along with the potential benefits of using Industry 4.0 technologies, as this can allow managers to plan effectively to meet future business goals in all areas that will change radically and quickly in the next decade.

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AN INVESTIGATION OF ANCHORING AND MENTAL ACCOUNTING IN REAL ESTATE BUYERS

Abstract

The real estate market is similar to stock markets in one aspect. Financial markets and real estate markets have irrational participants and under incomplete information, these participants get affected by the heuristics also. In our study, we have chosen real estate markets to study the two heuristics/cognitions inter-relation and connection. One is anchoring bias and another is mental accounting. The questionnaire is administered to real estate buyers/potential buyers by using a purposive and snowball sampling method. The logistic regression technique was used to find the connection between anchoring and the mental-accounting bias of the real estate buyers/potential buyers. The results show that the change in probability of happening of anchoring bias can be explained by mental accounting. This showcase the simultaneous existence of these two behavioral biases in home-buyers that validate the view that human mind depends on heuristics/cognitions to maximize their expected utility in an uncertain environment.

Keywords: *anchoring, cognitions, heuristics, mental accounting, real estate buyers.*

Introduction

The real estate sector in India has become a US\$120 billion business in 2017 from US\$14 billion in 2007. The sector has seen a CAGR of 30% over these years owing to the increase in demand and investment from international clients in commercial spaces and the ever-growing size of retail customers. Even the relaxed legal framework has helped the sector to grow (Sahni, 2007). The real estate sector is receiving FDI that has increased the transparency in the dealings and the price discovery has been more efficient as compared to the past, as the developers are now cautiously meeting the due diligence standards in terms of accounting standards and management practices. Restoration of faith has been the outcome and the backlashes, the sector has seen in the form of delayed and stuck projects and significantly fewer returns on investments (in single digits or even negative), has to be dealt with to attract the new buyers to motivate them to purchase.

Purchase decisions of property are often very complex as the information that is needed to support decisions is asymmetrical. This is attributed to the nature of house property as it has its value derived from the land and the construction material used to make it, that are hard to

observe in value terms (Stroebel, 2012). Moreover, the transaction for the house properties does not happen so often and hence the information related to its sale price does not available to the market with ease. This makes buyers rely on the information that is too old or not as relevant. The buyer's purchase decisions are dependent on two factors. One is the macro factors like interest rates, exchange rates, disposable income, economic status, and outlook, etc. that influence buyer's decision to invest in real estate (Wan, 2009) and the others are micro factors that are firms specific and buyers specific. One of the buyer specific micro factors is consumer behavior (Mavrodiy, 2005) that determines how a buyer would react to a situation be it macro or micro. This idea was first given by Simon (1955) about the dependence of the decision-making process on external (environment) and internal (human) factors that lead to a new concept known as limited or bounded rationality. Irrationality is the precursor and a reason behind this behavior as the theory narrated by Kahneman and Tversky (1979), Shefrin and Statman (1994), Shiller (1995) and Shleifer (2000) points out that in the event of uncertainty humans tend to make inconsistent and irrational decisions that translate into less efficient decision making.

For every home buyer, the money that they invest in their house is the biggest portion of their investment in their portfolio of assets. As the stakes are high the perfect judgment is required related to the purchase. In this case, the information asymmetry influences and propagates behavioral anomalies in the home buyer's decision-making process (Anglin and Wiebe, 2013). The behavioral anomalies or heuristics, namely, anchoring bias and mental accounting apart from the other biases have been studied and mentioned by Kahneman and Tversky (1979) in their notable work on behavioral biases and decision making. The focus of this paper is on dwelling the connection or link between anchoring bias, mental accounting and the real estate retail customer's investment decisions. The past studies discuss that anchoring makes the housing customers pay more for their investment and the benefit of the higher price goes to the developer as a seller of the property (Northcraft and Neale, 1987; Ariely, Loewenstein, Prelec, 2003; Simonson & Drolet, 2004). Mental accounting also affects investment decisions in real estate. The home buyer separates the investment in property from the other assets in the portfolio and that creates a bias while selling. Seiler (2012) demonstrated that there is a statistically significant willingness to sell the real estate held as a part of the portfolio if the portfolio value goes up, against the case in which the real estate is held in isolation. Our purpose is to showcase the effect of mental accounting on the buy-side of the transaction done by the real estate investor who wants to keep it in their portfolio of assets.

The price that buyers want to pay for the property depends on its physical attributes and also on the behavioral characteristics of the buyer. The physical attributes are quantifiable and hence can be translated to their monetary value, but behavioral attributes and characters are abstract and hence the difficulties to get the value out of such qualities. Not much research has been done on the behavioral aspects of the real estate retail investors and this study will fill this gap in the literature by giving an understanding of the connection between behavioral biases such as mental accounting and anchoring and the investment decision of the non-commercial property buyers.

Review of Literature

The rule of thumb or heuristics has been used by the person to make their decisions simpler in uncertain and complex situations. The idea of heuristics was first put up by Simon (1955) where he argued about the limited rationality of individuals while taking decisions in an uncertain environment. Later on, this field of bounded or limited rationality was heavily researched to find out how appropriate decisions can be made in a complex environment (Goldstein and Gigerenzer, 2008). Carrying forward the work on behavioral biases Kahneman and Tversky (1974, 79) in their laboratory setup experiment came up with a conclusion that individuals are affected by different biases while taking decisions that compromise the quality of decision making and limits rationality. But this was only the experimental setup that was away from the market dynamics.

Behavioral finance is the study of the impact of heuristics, the cognitive errors in judgment and the emotions on the decision-making process of the individual Barberis and Thaler, (2003). Shiller (1993) connected behavior finance with the explanation of human behavior, Sewell (2005), conceptualizes the behavioral finance theory and found its influence on the market. Not only heuristics but the prospect theory (Kahneman and Tversky, 1979) also explain the irrational behavior of individuals. As per Shiller, 1999 the prospect theory is built on the premise of maximizing a weighted sum of utilities when the weights are not as same as probabilities and utility function is a value function.

Our focus is on anchoring and mental accounting, where anchoring is a major heuristic defined by Kahneman and Tversky, 1979 and mental accounting comes from the prospect theory. Anchoring is the one behavioral bias that has been studied first by Slovic (1967) in which they studied the preference reversals. Tversky and Kahneman (1974) in their work on judgment

under heuristics came up with the concepts of anchoring and adjustment heuristics. In their paper, they demonstrated the bias of individuals towards an initial value and then taking a biased decision to fulfill their goal.

Anchoring bias is studied in the number of the phenomenon by the researchers like by asking the individuals about the freezing point of vodka (Epley and Gilovich, 2001) or annual mean temperature of Germany (Mussweiler and Englich, 2005). All these were research experiments away from the real world. However, real-world notable work has been done on valuation and purchase decision (Mussweiler et al., 2000), and forecasting (Cricher and Gilovich, 2008). There have been studies in real estate also like Beracha (2014) studied the impact of behavioral biases on investment decision of housing buyer and Bokhari (2011) studied how loss aversion and anchoring impacts real estate pricing. Also, Leung (2013) studied the same two biases by taking different data set in a different period. All researches showed that anchoring effects and influences house prices. There is a need felt to study the anchoring into the realm of buyers as well.

Mental accounting is the compartmentalization of the cost and benefits associated with a decision of an Individual in which they differentiate and keep the parts of their consumption and the expenditure in the separate mental accounts that follows heuristics (Thaler, 1985). This bias limits the interchangeability of money and gives rise to the inefficiency in deriving utility from an arbitrage opportunity. For the housing market, if the buyers possess this bias it may lead to an inefficient investment as well as illiquid investment and would limit the buyer to get the benefit from another opportunity. Understanding and finding out the depth of this fallacy in Indian housing customers is therefore important in potential and existing buyers.

Research Gap

In the paper by Pandey (2018) the behavioral biases were investigated. The focus of their paper was on to determine the existence of heuristic biases and the bias drawn from the prospect theory given by Kahneman and Tversky (1979). Our paper goes beyond this literature by investigating the two behavioral biases: anchoring and mental accounting in the home buyers and to establish the connection between them and to find out the reason for this connection. For the study, our sample will be collected from the home buyers or the potential investors/consumer at home or any other property.

Methodology and Data

Sampling

Our target population for the study is the people using real estate as an investment or may use it in the future. Data is collected from the Gurgaon and NCR region. The questionnaire on the email was sent to more than 500 potential respondents in which 105 responded and shared their responses. The data is collected from the salaried person as well as from those who are in business. Half of the respondents were the people into academics, but few of them were also from another profession. The purposive and snowball sampling method was administered on the sample for data collection.

Table-1 shows the demographic profile of the respondents.

		Number Respondents (out of 105)	Percentage
Gender	Male	69	65.7
	Female	56	34.3
Income	Less than Rs.50000	17	16.3
	Rs.50000 to Rs.100000	47	45.2
	Rs.100000 to Rs.200000	23	22.1
	More than Rs.200000	17	16.3
Age	Less than 30 years	13	12.4
	30 to 40 years	54	51.4
	40 to 50 years	27	25.7
	More than 50 years	11	10.5

Marital Status	Married	87	82.9
	Unmarried	18	17.1
Nature of Employment	Business	5	4.8
	Service	53	50.5
	Professional	29	27.6
	Others	18	17.1

Data were collected by using a close-ended and structured questionnaire containing two parts. In the first part, the demographic details of the respondent were collected. In the second part of the questionnaire, the respondents were asked to answer questions on a Likert scale, with 5 indicating a high level of agreement and 1 indicating a low level of agreement. Questionnaires were self-administered by the respondents.

Model

To identify the connect of behavioral biases, anchoring and mental accounting of the buyers in the real estate we have applied logistic regression by taking anchoring as dependent and mental accounting as an independent variable. The logistic regression model is used as anchoring and mental accounting data has only binary outcomes.

The logit model is shown below:

$$\ln(p/1-p) = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n$$

Here p is the probability of an event. The ratio of p by 1-p indicates the odds of the happening of an event.

In this model, any increase in the value of b₁, b₂ (beta coefficient), etc will increase the probability of an increase in the dependent variable under test and vice-versa.

This means if the value of the beta coefficient is more than one then the odds of the happening of an even have increased. If the value of the beta coefficient is less than one then the odds of the happening of an event have decreased.

So in this context logistic regression technique is used to predict the dependent variable when the independent variable is known. It means if the respondent has been affected by mental accounting bias then what will be the probability that he/she will have anchoring bias also in

his/her behavior. The answer lies in the logistic regression. Here the normality of the independent variables in logistic regression is not a constraint to conduct it.

Data Analysis

On running the logistic regression between anchoring as a dependent variable and mental accounting as an independent variable we received these statistics as shown in the Table-2:

Table-2 logistic regression of mental accounting with anchoring bias in home buyers:

Dependent variable: Anchoring bias

Variable	Wald statistic	Significance	Odds (coefficient)
Mental accounting	7.695	0.006**	1.399
Constant	0.166	0.683	0.167

**Significant at 5% level.

Wald test is a way to find out whether the predictor variables in a model are significant. In the out model, Wald statistic (which is also known as Wald chi-squared) is 7.695 and is significant. In the model, the hypothesis is that states:

H1 (alternate): Removing mental accounting as a predictor variable will affect the model fit.

As the error term is 0.006 well below the threshold level of 0.05, we reject the null hypothesis which states that removing mental accounting as a predictor variable will not affect the model fitness and accept the alternate hypothesis. The above analysis shows we accept the importance of mental accounting as a predictor variable and its ability to make the model more fit to carry out a meaningful analysis.

On running logistic regression between anchoring and mental accounting bias we get coefficient of the predictor variable mental accounting in home buyers as 1.399 that signifies a unit change in the predictor variable will increase the odds of having anchoring effect in the home buyers. That means the probability of anchoring effect in home buyers will increase by the factor 1.399.

One means to find out the performance of the logistic regression model is to access its predictive ability. This is measured by comparing its predictions with the observed outcomes in the data sample. The classification table, Table-3, for the calibration and validation samples

of home buyers having anchoring bias provides a measure of discriminative efficiency of the logistic regression model.

Table-3 Classification table of predicted vs. observed outcomes of the logistic regression model for home buyers having anchoring bias:

			Predicted Outcome (Anchoring)		
			With Bias	Without Bias	
Observed Outcome	Calibration Sample	105			
With Bias			80	0	100
Without Bias			25	0	0
				Overall	76.2
Observed Outcome	Validation Sample	105			
With Bias			80	0	100
Without Bias			25	0	0
				Overall	76.2

Table-3 indicates that the logistic regression model classifies the majority of homebuyers in both the samples. Roughly 23.8% (25) of homebuyers in the sample who are predicted to have bias fail to do so in both calibration as well as validation model. Also, it clear from the table-3 that the overall accuracy of the model has been the same for both the models (76.2%) depicting no improvement over the predicted model.

To test the frequency of bias and no-bias statistically different from each other which means to find out whether there is an equal probability of having a bias and no bias we have to test the null hypothesis. The null hypothesis will be:

H₀: the equal probability of bias and no bias as an outcome.

On running the test of significance we get the result as seen on table-4

Table-4 Test of significance for differentiation of outcome

	Base Model		
Variable	Wald Statistic	Significance	Coefficient
Constant	25.77	0.000**	1.163

**Significant at 5% level.

As shown in Table-4 by Wald's test in this case we are rejecting the null hypothesis that there is an equal number of people within sampling variability in the biased vs. non-biased outcomes. Therefore the outcomes are statistically different from each other.

Now to test the overall significance of the model or the predictive capacity of the model we have to run the Omnibus test of significance. The hypothesis will be that there is some predictive power in the model when we run the model with the inclusion of the independent variable which is important for model viability.

Hypothesis: The model has predictive power.

Table-5 Test of predictive power of the model

	Observed Model		
Variable	Chi-Square	Significance	df
Constant	7,581	0.000**	1

**Significant at 5% level.

Table-5 shows that the model is significant with a chi-square statistic of 7.581 (significant at 5%) and one degree of freedom. This simply shows that we reject the null hypothesis and accept the alternative hypothesis that states the model has predictive power. Other estimates are Nagelkarke R-squared which is similar to R-squared in linear regression and is also known as pseudo-R-squared. Its value in our model is 0.105 that shows 10.05% of the variance in

anchoring as a dependent variable is accounted for by the independent variable which is mental accounting bias.

Discussion

This study used logistic regression for the examination of anchoring and mental accounting bias in the home buyers. The study used a questionnaire containing two factors having items to test the behavioral aspects of home buyers. The logistic regression results were able to find out a connection between heuristic bias (anchoring) and the bias that came from the prospect theory (mental accounting). Through our result, we are successful to find out that one bias in the home buyer's behavior can predict the occurrence of another bias. Anchoring bias which is heuristic bias comes from the gut feeling of the individual and is an integral part of the Indian real estate investor (Das and Sharma, 2013). Prospect theory (Kahneman and Tversky, 1979) assumes that the gains and losses are valued differently by the individuals. Mental accounting is an extension of this concept that talks about the compartmentalization of transactions in the human brain as cost and benefits and limits the human ability to make a decision and lessens the chances of deriving benefits of arbitrage.

If we look at anchoring and mental accounting simultaneously in the context of a home buyer and assume that the person is affected by both at the same time then under their definition both the biases are connected. This connection is due to the dependence of each one of them on the utility function of the home buyer that maximizes the value of transaction when it is influenced by both the biases simultaneously. The above-mentioned statement has been proved by our results also as it is shown that any change in mental accounting bias of a home buyer affects the probability of occurrence of anchoring bias also in the individual. This ascertains the presence of both of the biases and their effect on the other which may be due to the home buyers' effort to maximize their utility ends them up in the trap of these two biases as heuristics are frequently used to make successful choices (Mousavi and Gigerenzer 2014). Future work may be drawn from the above findings.

Conclusion

The real game lies in the financial markets (Wood, 1995). But it is not the stock markets only that are affected by the heuristics and other behavioral biases. The real estate markets also tend to get influenced by the irrationality of the human mind and this study has made an effort to draw a line towards connecting two behavioral biases that inflict the process of decision making of the home buyers. This study is unique as it has attempted to connect two behavioral biases

anchoring and mental accounting present in the home buyers. The application of logistic regression on the data collected from the home buyers proved the presence of anchoring and mental accounting bias and further, explained how and why one bias may influence the presence of the other for an individual who wants to maximize his/her value in the transaction. Another set of biases/heuristics like overconfidence, herding behavior, home bias, risk-averseness of the home buyers/investors can be tested with the different data and demographics to improve the facets of connection of the two biases investigated and discussed in this research.

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TESCO'S E-COMMERCE MODEL AND GROWTH STRATEGIES FOR SOUTH KOREA

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ABSTRACT

For TESCO Republic of South Korea is the largest operation outside the UK. The South Korean retail market has achieved fully liberalization and internationalization. Tesco customs a amalgam business model successfully to strive with its rivals in the market. Tesco uses a business model that depends on multi channels. Tesco implements online service based in the current business policy stores. In South Korea, e-commerce has an important position in the overall consumer market. South Korea is number one at mobile phone use diffusion and internet penetration in Asia-pacific. High mobile internet usage is another factor for successful e-commerce in the country. In South Korea Tesco is the second leading grocery retail marketer. A total retail e-commerce sale in South Korea for the year 2018 is \$47.82 billion.

Keywords: Tesco, South Korea, Retail Market, UK, E-commerce

Introduction

Tesco has continued to occupy the first slot in the UK and was ranked fourth in Europe during financial year 2017. According to Preliminary Report 2017/2018, group sales (including VAT) augmented by 2.3% to £51.0bn. At persistent exchange rates, sales improved by 2.8% (including petrol) and 2.3% (excluding petrol). The total international online sales grew by 5.1%. Currently they have over 6966 stores across their businesses worldwide. Tesco's online grocery sales have grown by 5.1% for the fiscal year 2018. Tesco has already had over 320 Grocery Click & Collect locations. Tesco has launched dotcom business in Bangkok, Budapest and Kuala Lumpur. So Unlike some international retailers (Wal-Mart, Carrefour), Tesco South Korea (Homeplus) won back the favor of Koreans by making shopping easier and faster by being innovative, technological but more importantly being one of them.

Background Note

Back in 1919 Jack Cohen founded Tesco PLC as a cluster of stalls. Tesco PLC is a worldwide retailer and its head office is in Cheshunt, Hertfordshire, UK. By 1924 Tesco established itself well and later Cohen acquired a shipment of tea from T. E. Stockwell and joined the initials with two letters of his surname, and the first Tesco store opened in 1929 in Burnt Oak, Middlesex. By 1939 the store's presence was all over the country. It was only in the mid-1990s that the brand expanded into other verticals and locations. In this period, it also enhanced its "value" image to "finest". This set in motion the numbers to rise from 500 to 2500 over the next 15 year period. This enabled Tesco to climb to the third overall position as a retailer behind Walmart and Carrefour. Tesco utilizes more than 520,000 individuals with more than 6,700 outlets in 12 marketplaces and serving a huge number of clients consistently. Tesco stock is listed in the LSE (London Stock Exchange) it is an integral component of the Financial Times Stock Exchange (FTSE) 100 Index. Tesco had almost £18.1 billion market capitalization in beginning at 22nd April 2015, the 28th biggest of any association with a vital position on the LSE.

Globalization of Tesco

Europe

Tesco preferred to expand in geographically close countries such as France and the Republic of Ireland at its early stage of globalization process. Due to its performance in France it sold off its stakes in Ireland in 1986 only to come back in 1997 with the acquisition of Power Supermarkets Ltd. It opened 101 stores in Ireland. The second attempt was much more successful than the first one and Tesco achieved and went on to become the number one grocery retailer in the Republic of Ireland with 142 stores. Tesco also contributed to the Irish economy by exporting Irish food products to its stores in the UK, central Europe and Asia. In a second attempt towards global expansion, Tesco launched its international store in France with the acquisition of medium-sized supermarket chain Cateau in 1992. However, it was not a great success as expected due to the control's restriction and regulations on large size stores. In 1997 Tesco withdrew from France completely. It entered Central Europe via Hungary in 1994 when it bought 26 S-Market stores. First hypermarket was opened at the Polus Centre in Budapest. Tesco opened its first Tesco Extra in Budapest in August 2010. Currently, there are 216 Tesco stores all over the country. In 1996 Tesco first entered Czech market with the acquirement of K-Mart stores, and thereafter acquiring various retail establishments, including under the name Máj which is still working as of today. In 2011 Zabka and Koruna

comfort arrangement stores were also acquired. Koruna stores format changed into Tesco Express configuration, though Zabka stores continued working with that name under a major strategic understanding. This had permitted Tesco to consolidate further. Online basic food item home shopping was introduced in 2012 at Czech Republic.

Poland being a very large and important market in central Europe, Tesco moved in the market with the purchase of 31 Savia stores in 1996. Tesco also opened the first Extra store in Poland in August 2008 at Częstochowa. Poland remained the principle focus in Central Europe where Tesco propagated Clubcard administration. Also, internet shopping was successfully utilized by Polish clients. At present 446 stores with around 30,000 employees serve in excess of 5 million customers.

By acquiring 7 K-Mart department stores Tesco entered Slovak region. Tesco Slovakia focused on natural products. Regardless, in Central Europe the first Tesco Extra opened in Bratislava – Petržalka in April 2010, Slovakia was a major aspect of a trial project for Tesco in the area.

In Slovakia Tesco activates petrol stations and mobile network "Tesco Mobile". Today they work over 130 stores, and utilize about 9,000 people. In 2003, Tesco also entered the Turkish market and opened their first Tesco Kipa store in 2005 Tesco Express arrangement was additionally present in Turkey, each week they serve 1.3 million customers.

Asia

Tesco Lotus is presently second largest international business of Tesco serving more than 11 million customers every week in more than 1,400 stores. Tesco entered Thailand in 1998 and operates through 380 stores named as operation "Tesco Lotus". It claims to assist 20 million clients. Customers also like Tesco Express stores, predominantly located in Thailand's urban communities. Dotcom business was propelled in Bangkok in 2013. This online business enables customers in Bangkok to shop from the convenience of their own home or mobile.

Tesco moved in 1999 into South Korean as "Home Plus" and participated with Samsung, As of now Tesco has 94 per cent of the stake in the undertaking. On 14th May 2008, Tesco agreed to the acquisition 36 supermarkets with a mix of nutritional and non-nutritional foods from E-Land. Tesco works in the hypermarket and its Express format as well as a home delivery shopping service. It is the second biggest retailer in South Korea, just behind Shinsegae Group- E-Mart.

Tesco launched its first store in Malaysia with the inaugural of hypermarket in Puchong, Selangor (May 2002). Tesco Malaysia as of now has 47 stores. As of date, Tesco Malaysia operates Grocery Household Shopping Service, where it delivers supplies requested by means of the Internet to customers, with no minimum amount forced. There will be a Malaysian Ringgit (RM) 10 administration charge for every supply and online clients may pick a convenient schedule opening for 12 hours (10 am to 10 pm) day every day. Payment may be made by check or credit card.

China is clearly a significant development for Tesco. Tesco obtained a partial stake in the Hymall chain, from Ting Hsin in September 2004. The vast majority of Tesco China's shops are established around Shanghai. Though, they intend to expand quickly and in various regions.

Tesco stores in China are situated on the Eastern Seaboard and extend to entire population of above 600 million – greater than the whole of EU. The China market is made up of mainly hypermarkets, although there are also a small number of Express format stores.

Tesco has a wholesale existence in India with office in Bangalore. Tesco in 2008 declared its intention to contribute an underlying £60m (\$115m) towards expansion of business (in Mumbai) by the association of the Tata Group.

USA

Tesco entered the United States with basic food items showcased in 2007 with the inauguration of another series of convenience stores, viz., Fresh and Easy, on the West Coast (California, Arizona and Nevada). The organization set up its U.S. central office in California, Regardless of the way that the orchestrated rate of augmentation was not kept up, all things considered, because of the subsidence, as on August 2011 Fresh and Easy worked 182 stores. Tesco has transferred the Fresh and Easy chain ownership and come out (April 2013).

Korean Retail Market Economy and Retail Industry

Korean retail market was used to be a closed industry to foreign investment and a locally operated industry. Therefore, it was hard to talk about any competition among retailers because of the protectionist policies of South Korean government. This circumstance has changed after mid-1990s when full-scale progression (including implementation of General Agreement on Trade in Services) was brought into the country. One of the remarkable aims

of the liberalization plan was to open doors to foreign investments. Firstly, the process for establishment of foreign subsidiary and entry of foreign direct investment (FDI) were simplified in 1989. As a further step, in 1993 some regulations were made in context of amount and size of foreign retail stores. Therefore, outside organizations were permitted to open max. 20 stores at max size of 3.000 m². However, The South Korean retail market has achieved fully liberalization and internationalization in 1996. Apart from this, the dominance of Chaebols was diminished in the retail market by liberalization of FDI. They either emerged as joint venture with foreign companies or sold their businesses to those international retailers.

Due to its market opening to FDI, Korean retail market has experienced new and modern retail store models. Previously, Korean retail market was dominated mainly by “mom- and-pop stores” and department stores. The traditional “mom-and-pop stores” measure about 10m² in area and have not more than two employees. Retail chains were the unrivaled current retail location models in South Korea and delighted in more prominent than 20 percent yearly deals development until full-scale market opening in 1996. After the market progression, a large portion of the retail chains either lost their intensity or failed.

Today Korean retail market is generally directed by markdown stores, for instance, hypermarkets, supercenters, Membership Wholesaling Clubs and gigantic scale rebate stores. With the emerging of discount stores a new era of competition has started among foreign and local retailers in South Korea. At the same time, overall market size has expanded with the expansion of discount stores.

Major Retailers in South Korea

E-Mart: It is guaranteed and worked by the Shinsegae, the biggest group in South Korea. The primary E-Mart store was opened in November 1993 in Dobong-gu locale of Seoul. The stores are arranged in the neighborhood areas. The organization's augmentation methodology is to change over the old Shinsegae outlets into markdown stores.

Lotte Mart: It is possessed by Lotte gathering, sells an assortment of staple goods, apparel and gadgets. The organization offered superb product and low costs to its clients utilizing the Point of Sale Information framework. Lotte Market offered crisp sustenance, prepared nourishment, consumables, electronic gadgets and dress.

Kim's Club: It is controlled by New Core gathering. They began their assignments in 1995.

Kim's Club centered around giving things in exceptional enthusiasm by Korean customers. It offered a couple of additional organizations like tyke sitting, cooking and home improvement classes and language classes.

Costco: It is US based retailer and started working in Korea in 1994 complete authorizing of Shinsegae retail chains. In 1998 Costco purchased the stores from Shinsegae gathering.

Consumer Behavior in South Korea

Korea has its own characteristic consumer behavior, which is very different than European and American way of shopping. In South Korea, usage of public transportation is very common because of limitation on owning a vehicle. Therefore, they need to have easily accessible shopping malls or stores without travelling far away. Thus, it leads South Koreans to shop more frequently and avoids them from buying in bulk. Therefore, their preference is always for stores which are located nearbAnother point is that the South Korean culture is correlated with the local markets. They shop at stores where they can find local products and they want to realize local products offered in a localized way. Interior appearance of store is one of the most important factors that affect the shopping preference of South Korean shopper. They are very much aesthetic-oriented customers. For South Koreans, store layout is important as much as localization of the store. They like to have shopping experience surrounded by a stylish and good ambience. They are attracted by lively store atmosphere similar to open air market. Korean consumers prefer to procurement goods in a more expedient, spacious and pleasurable environment which afford fine quality products. A South Korean would simply not shop at a store because the store has a displeasing layout and appearance for him. According to *South Korean Times*,, some South Korean ladies do not like the warehouse like atmosphere which the American consumers seem not to mind since the products are still cheap. They choose the department store-like, well-ordered, clean, and erudite atmosphere.

Apart from store layout and localization, fresh food is of prime importance for South Korean consumers. They would like to buy fresh vegetables and fresh food like live sea food such as octopus, lobster, etc. rather than processed products. Moreover, low price is not an attraction for South Korean consumers because they prefer to buy more luxurious products and shop at stores that have eye-catching surrounding.

E-commerce in South Korea

In South Korea, e-commerce has an important position in overall consumer market. It is one

of the most tech savvy populations in the world both when it comes to mobile and internet penetration. According to statistics, South Korea is number one at mobile phone use penetration and internet penetration (80.9%) in Asia-Pacific. 84% of its population (49.8 million) uses internet. This has resulted from:

- Korea has the world's quickest normal internet connection speed
- Free Wi-Fi access almost everywhere in the large cities
- The introduction of 4G Long Term Evolution (LTE)
- Korean government's strong infrastructural support and future plans for better internet connection speed in every household
- Digital literacy education for South Koreans given by the government

Therefore, it is not surprising that e-commerce is growing significantly in South Korea. Apart from those advantages mentioned above, high mobile internet usage is another factor for successful e-commerce in the country. Especially smartphones have become a big and important part of Korean's daily life and figures also prove that one out of five South Korean people uses smartphone. Retailers have also recognized this new emerging trend and they have upgraded their traditional offline shopping service to online shopping, so that consumer can enjoy mobile shopping whenever and wherever they like. Therefore, for the first-time online purchases were made more by using smartphones than using notebooks last year (2012) in South Korea. According to Statistics Korea (KOSTAT) in 2012 total e-commerce grew by 14.5% and digital buyer population reached 23.3 million (more than half of total population).

Tesco's Online Grocery

Tesco is the UK's number one and Europe's number three e-retailer. It has destroyed the stereotyped perspective that customers will not prefer fresh products online due to "touch and feel" shopping habit. In fact, fresh food is ranked at Tesco's top ten most sold products unlike the expectations. The company offers many convenient alternatives to shop at Tesco by using PC and mobile devices apart from only stores. Thus, customers can shop using smartphones or PC whenever and wherever they need with fast and tranquil applications and developed stages.

In May 1984 the company took the first step to sell products electronically in Gates head, England. It is known as the world's leading recorded internet shopping business from the home.

It offered this service to registered members so that they could buy a restricted range of products by a television interface. At that time, this very trivial service had merely 450 users.

Tesco first propelled a grocery household shopping service officially in 1996 and they took advantage of being first-mover in the market. This helped them develop to remain the world's leading and greatest profitable online grocery trader with sales of sound over £2 billion.

Since Tesco initially started grocery household shopping service, the company has not had warehouse picking system, instead used its local stores as warehouse. All deliveries were made from a single Tesco store by picking staff. However, when the customer demand has increased, they have integrated their in-store selection model into dotcom- only supplies. Currently, there are 5 dotcom-only stores in the UK and they fulfill over 80% of orders in London from dotcom-only stores. These Dotcom stores allow UK customers to do their food shopping from their home. They have the same stock layout as Tesco supermarkets. Dotcom-only stores have more than 26,000 product lines. Even freshly baked bread and loaves are available to order online. The only difference is that instead of customers, there is order picking staff at the Dotcom store and they select the ordered products for the online shopper. After preference process, completed order carts are sent to a consolidation buffer consisting of a 3- aisle QUICKSTORE HDS shuttle system. The HDS will release carts to be arranged and loaded in inverse drop order to vans.

The Dotcom stores are opened with the aim of creating more delivery slots and offer more products to its online customers. Products in the dotcom store are selected according to their popularity among customers. This helps online shoppers to buy more, they have freedom of filling their tray as much as they can because they know that they do not have to wait at the cashier or carry shopping bags themselves. This will be done for customer each day by the 24/7 dotcom store personnel.

Beside Dotcom, Tesco has a unique service called “Click and Collect”. Through “Click and Collect”, customers can demand online and then gather their groceries from specifically created shells located in store car parking area. It gives customers the chance to choice products from any of over 45 stores, which is close to their home or workplace.

Tesco has invested £45 million in its e-commerce operations and implemented innovative ideas. Tesco also implemented its e-grocery service successfully outside the UK. It launched

dotcom-only stores in the Republic of Ireland, the Czech Republic, Poland, South Korea, Thailand, Singapore, Slovakia and Hungary. It puts Tesco over the top and today it is the world's largest e-grocery retailer with more than 1 million registered users and 85,000 orders per week. In 2012/13, they had over £3 billion sales online as a whole for the first time.

Entry and Growth Strategies of Tesco in South Korea

Consumers' demand for current spending in South Korea was growing in the early 1990s. The reason was brisk financial development and developing earnings. The state had embraced protectionist arrangements and the exchange part was not uncovered for remote direct speculations.

The South Korean government especially improved the regulations in order to attract foreign direct investment (FDI) later the East Asian Financial Crunch. Foreign corporations were able to custom joint ventures with Korean companies, and also the restrictions connected with sharing holding were eased. The government asked chaebols to limit the number of big business they possessed and accordingly they arrived into joint ventures through foreign companies. Base on this in March 1994, Samsung Corporation detached from Samsung Group (chaebol) and go into into retail business. It opened its first stores (Home plus Taegu, Samsung Plaza Bundang, and Samsung Plaza Seoul) in 1997. However, nothing went as expected and Samsung Corporation falls into a financial crisis. To overpower this battle, Samsung Corporation initiated to rebuild its business and downscaled the association. With Samsung Group looking at for the technique, perceiving that retail business is too flawless to even think about giving up, Samsung Corporation chose to look for remote venture.

In the meantime, after effectively building up Tesco's business in Thailand, It was additionally searching for an accomplice that could give solid nearby foundation just as limit of making cooperative energy for Tesco's territorial system. The two organizations met in April 1999, and Tesco declared that it was shaping a joint endeavor with Samsung so as to create hypermarkets in South Korea. Samsung-Tesco had the choice to get out all commitments and rehire all of 1,137 pros who were put off during 1998 (Korea Times, 24/03/1999). First advantage was monetary. The merger spared Samsung-Tesco from insolvency as well as ensured Samsung-Tesco a resulting venture of \$170 million (KRW200 billion) to overpower the market (Korea Times, 24/03/1999). Second bit of leeway was admittance to the pushed administration capacities and IT innovation to battle with other world class opponents, for example, Wal-store, Carrefour and Costco (Korea

Times,24/03/1999).

Tesco had a controlling stake of 51% in the joint venture at the beginning and acquired another 30% stake later. The company began operating in South Korea under Samsung's existing banner Homeplus. Tesco was also expecting to overcome the obstacles of being a foreign retailer in South Korea by arriving into a joint venture through a entrenched and prevalent local company. By this it was also very easy to be considered as a local Korean company by their consumers and suppliers. As for Samsung it was very sensible to form a joint venture as the company was fronting a financial crisis and failure in its business.

Tesco decided to name the joint venture Samsung-Tesco, although Tesco had a controlling stake. Tesco also chose an executive from Samsung as the CEO of Samsung-Tesco. The employees reacted positively to this attitude of Tesco. According to the Executive Director, Samsung-Tesco Mr, Seul Do-won, "At the time of the negotiations, Samsung anticipated to Tesco that the joint chains be operated exactly like a Korean home-grown retailer.

Tesco's joint endeavor with Samsung empowered a few points of interest for the organization over the other remote retailers in the nation. They had prepared set up stores, a superior comprehension of the neighborhood markets and providers and a capacity to adjust the items to customer needs.

Tesco recruited more native people for its South Korean tasks thinking that especially foreign personnel in higher positions would demotivate the local people.

Additionally, as indicated by David Reid, Deputy Chairman, Tesco, "We ordinarily have possibly about six ostracizes on the operational side in Asian nations. Since we're beginning later than different organizations abroad, we've discovered no deficiency of accomplished neighborhood individuals with retail involvement in Asia. They clearly comprehend the nearby propensities and clients much superior to anything an expat who's flown from the UK.

Samsung-Tesco expanded very fast, and by 2001, the number of stores reached to 14. All these stores generated total sales of £676 million. Tesco propelled online spending service in South Korea in November 2011, due to the widespread internet use in the country. This service of Tesco called e-homeplus and through online shopping Tesco aimed to acquire 70 per cent of the Korean people who had access to the internet.

In the same year, Samsun-Tesco's revenues exceeded that of Carrefour Korea. Tesco's total sales for 2011 were at US\$ 1.47 billion through its 14 stores, while Carrefour achieved total sales of US\$ 1.35 billion with 22 stores. Tesco's market share grew from 7% in 2000 to 13%

in 2001. Tesco turned profitable within two years operations in the country. In 2002, Samsung-Tesco Homeplus propelled its own Clubcard in South Korea, from which the customers could collect point for each shopping from the market. This function attracted 2.5 million subscribers in two years. In the year 2004, Tesco released the Super Express chain of supermarkets for South Korean consumers under the banner Homeplus Superexpress in order to take the advantage of locations that had no hypermarkets.

Exhibit 1: Top 5 Leading Grocery Retailers Market Share, South Korea in 2015.

S.No	Name of the Company	Market Share (%)
1	GS Retail	1.84
2	BGF Retail (CU)	2.04
3	Lotte Shopping (Lotte Mart)	2.28
4	Tesco (Homeplus)	3.46
5	Shinsegae (E-Mart)	4.39

Source: www.statista.com/statistics/661080/south-korea-leading-grocery-retailers

Tesco arose as the second biggest retailer in the country behind Shinsegae's E- Mart (Exhibit 1). Tesco, setting up a joint endeavor with Samsung Group gave them a significant nearby accomplice in a market anywhere other worldwide retailers Tesco fit very well the client administration and quality ideas from Korea with its worldwide calculated and operational applications. Tesco essentially upheld the acts of client center, money related order, coordination's and inventory network the executives, improvement of private name items, and store format. On the other side Samsung provided localization skills and manpower.

Exhibit 2 : Total Retail and Total E-commerce* Sales in South Korea, 2013- 2018

	2013	2014	2015	2016	2017	2018
Total Retail Sales in Billions	\$360.63	\$368.93	\$376.31	\$383.83	\$391.51	\$398.95
% change	2.5%	2.3%	2.0%	2.0%	2.0%	1.9%
Retail E-commerce Sales in Billions	\$29.30	\$33.11	\$36.76	\$40.43	\$44.07	\$47.82

% change	12.6%	13.0%	11.0%	10.0%	9.0%	8.5%
% of total retail sales	8.1%	9.0%	9.8%	10.5%	11.3%	12.0%

Strategic Localization

Samsung-Tesco has become the second largest discount store chain within five years in South Korea. Samsung-Tesco uses the name “Homeplus” for its retail stores, in its place of Samsung-Tesco to focus on the importance of the localization.

The company drives Homeplus as a “value store”, joining the features of together discount outlets and department stores to deal a unique arrangement of together price and quality. This speedy advancement in South Korean marketplace is apparently generally due to its key limitation, which facilitates the association to be outstandingly responsive to neighborhood consumers’ tastes and preferences, and sorts it more engaged than further western foes.

Samsung-Tesco's key confinement generally depends on relations between the numerous components, for example, neighborhood clients, nearby retailers, nearby makers and providers, and remote retailers in the retail area of South Korea. Particularly South Korean clients and neighborhood retailers assumed fundamental jobs in this confinement. Specifically South Korean clients' extensive affectability against outside organizations made Tesco center around limitation.

Also, the shopping behaviors of South Korean consumers have forced foreign dealers to practice localization, just because they are different than most of the other countries. In this nation the clients will in general shop all the more every now and again and purchase less in light of the fact that they want to have day by day new nourishment, for example, meats and vegetables with an elevated expectation. A charming shopping condition and amicable administration are additionally significant intentions to fulfill South Korean clients, who have been acclimated with retail chains. To address the issues of Korean customers, they have continued placing assets into overhauling their store positions, benchmarking beside the broad, light and fresh elegances of the retail chains (Korea Times, 2003). It also provides fresh vegetables and fruits in their stores and allow South Korean customer to enjoy the variety of goods. Homeplus stores also offer various facilities such as beauty salons, educational institutes, restaurants, coffee shops, play areas and art galleries to make available for their customer all at once.

Localization of Product Designs

Samsung-Tesco has purposed the confinement of unmistakable items for the South Korean market. Homeplus sells an assortment of new nourishment as well as garments, home apparatuses, family unit merchandise, dolls, books, and golf things. Since the accomplishment of confinement relies upon understanding nearby markets and clients, the organization has picked certain vital things. The gathering boss states that the full scale number of things we oversee is 34,000 SKU, thus it's challenging to state which things are our guideline things. Be that as it may, we have key things, which we need to increment in future for the South Korean market.

Besides, Samsung-Tesco has effectively and successfully finished the confinement of unquestionable things aimed at the Korean market with the improvement of private brands. The association intends to tackle private brands tolerating that it would improve their business in the country. As demonstrated by the gathering boss, PB (Private Brands) will be assessed at 6 percent this year (2002).

Localization of Sourcing

The South Koreans demand fresh and high-quality goods. Samsung-Tesco aims to provide these requirements to Korean customers through supply chain management. In any case, to satisfy these freshness rules, it is uncommonly principal for Tesco to supply sustenance things direct from adjacent makers and suppliers. Thus, closer interaction with neighborhood producers and providers is inescapable for effective markdown chain organizations (Korea Times, 08/01/2001). Likewise, neighborhood makers and providers are outstandingly in an exceptionally solid position to deal with enormous outside retail chains. Along these lines, remote retail chains must apply more limitation by utilizing nearby supply arranges in South Korea.

Tesco source certain things, for instance, pants, toothpaste, toothbrushes, and cola through overall frameworks, yet the association supplies most things through direct redirects with neighborhood producers in South Korea. It, as a joint-experience association, abuses through Samsung's close-by frameworks. Albeit much crisp nourishments are imported from China (Refer to Exhibit 3: Samsung-Tesco's Top 50 Suppliers), these items are not tracked truly through Samsung-Tesco then rather introduced through the method of Korean traders in abroad countries. The association supports progressively clear securing redirects with close-by makers in South Korea as opposed to concerning overall sourcing. This method of the

association clearly exhibits the retail state of South Korea. This is generally a result of enormous focused makers commanded by chaebols with solid brands that offer a wide scope of items (Refer to Exhibit 4: Samsung-Tesco's Global Suppliers).

Samsung-Tesco has embraced two distinct procedures to make do with these troublesome circumstances. From one perspective, Samsung-Tesco has endeavored to build its private image rate so as to keep makers under tight restraints and increment its market control. The organization has endeavored deliberate endeavors to construct agreeable relations with neighborhood makers, sellers, and providers. It takes grasped "triple win method" which attempts to confirm paybacks for Samsung-Tesco, consumers, and merchants in the district of gaining (Kim, K.C. 2002).

Localization of Employees and Strategic Decision Making

Samsung-Tesco has likewise the point of confinement of its representative so as to make a picture of a privately based retail location. In this system, the association secured for all intents and purposes all delegates locally, including pros and heads, especially from Samsung Corporation. In like manner, CEO of Samsung-Tesco's, Lee Seung-Han, is a past neighborhood laborer from Samsung Corporation.

Samsung-Tesco also pursues a localized strategy with regards to strategic decision making. CEO Lee-Seung Han has been given a clear authorization by Tesco. Samsung-Tesco can settle its own key improvement regarding item goes, advertise specialties, venture arrangements, business strategies and site choices. Specifically, the CEO has featured the significance of nearby human asset the board rehearses since the two clients and laborers in retail business are neighborhood individuals (Korea Times, 08/01/2001). In order to secure close-by specialist commitment to the association, Lee-Seung Han has attempted to make another various leveled culture, which joins the Shinbaram (vitality) "culture of Korea (with a dynamically rational" British business culture (Korea Times, 08/01/2001). (Imply Exhibit 8: Comparison of Shinbaram Culture and Rational Culture).

Tesco's Hybrid Business Model

The hybrid business model focuses on exploiting the competitive gain from the blend of both the web channel and the physical channel. It is likewise essential to comprehend half and half shopper conduct which the assembly of the conventional buyer and digital customer is and how it influences the structure of a cross breed plan of action.

The achievement methodology of cross breed model can be found on account of Tesco. Tesco utilizes a plan of action that incorporates physical and online channels since they understood the advantages from the two channels. Tesco executes online administration dependent on the current business stage of their retail locations. One of the articulations clearly demonstrates their energy about their plan of action:

Building up our online business in the sum of our business parts is a key requirement for us and it exhibits how we are acclimating to our customers' advancing needs. Stores continue sitting at the center of our business, anyway we are aiming to transform into a multi-channel retailer wherever we trade. We have to offer our customers accommodating decisions to shop with us using those paths – stores, PCs and PDAs – which are their step by step lives. Tesco uses hybrid business model successfully to compete with its rivals in the market. The organization keeps its home conveyance activity by abusing existing stores as dispersion focuses as opposed to building another stockroom committed to its online business. The Tesco online order process proceeds as follows: When a customer orders through the web page, order is sent to the server computer of the store nearest the customer's home. The order is assigned to a van that will make the delivery and then send on to a 'picking trolley. Trolleys are furnished with a touch-cushion PC with rack identifier programming that plans effective courses through the store and checked every thing to confirm it is the thing that the client has mentioned. Online orders are filled by Tesco employees called pickers who are assigned to one of six zones, where they fill orders up to six customers at a time. The orders are then assembled in the back of the store and delivered by van. Likewise, the costs of merchandise requested online are equivalent to those sold in physical stores, and in-store limits, advancements and extraordinary offers are additionally accessible to web customers.

Tesco is a successful company in understanding both traditional and technology requirements. Besides of this, Tesco has the advantage of carefully studying customer habits in offline stores and applying them into their e-commerce business successfully. The company is aware that the key of success in online retailing is based on understanding social and cultural dimensions of the consumers. Thus, offline stores help Tesco achieve such dimensions.

Incorporating web based business with a physical channel is a genuine test, however Tesco

is effective by joining its disconnected and online encounters. In other words, it can be said that Tesco has reinvented, and integrated online retailing based on its offline retail business.

“Groceries, Smartphones and the Subway”

Online shopping is nothing new, especially in plugged-in South Korea. But Tesco is going further about it. It is testing out a virtual supermarket in a public place. With the slogan of “to shop with us anywhere, anytime, anyhow”, Samsung-Tesco acquainted an imaginative methodology with online shopping for food. As the number two blocks and-mortar sustenance retailer in South Korea behind E-bazaar, Homeplus needed to be number one, and to do as such without including any new stores.

Tesco found that the Koreans were the second most persevering nation on the planet and didn't have sufficient energy to go shopping for food (past which they additionally discovered that as a country they would in general fear heading off to their neighborhood grocery store chains). In the wake of following inside and out investigations of the South Korean market and purchasing inclinations, Homeplus distinguished time reserve funds and portable trade as fundamental selling focuses. Its idea went well past a normal online basic food item procedure to concentrate on "carrying the store to the general population," by setting up disconnected virtual stores in metro stations and other non-conventional areas like transport covers.

As indicated by their new idea, they chose to make a disconnected virtual store and breath life into it at neighborhood Korean tram stations where individuals had the chance to shop in a hurry. This methodology was made to make this strategy for shopping progressively advantageous for individuals to search for their week by week goods. The essential strategies for shopping by means of these virtual stores were through the purchaser's cell phone. Right off the bat, they put the glass dividers of tram stations with photos of their items; these virtual store presentations looked fundamentally the same as the genuine stores, where items had their own one of a kind QR code. When the purchaser checked the QR code utilizing their PDA the item naturally arrived into their web based shopping basket. When the purchasers looked at and paid for the exchange online their food supplies were conveyed to the client's entryway around the same time.

After the usage of this new idea, the lift for Homeplus' online nearness has been exceptional: In two years (2009-2010), the organization denoted a 76 percent expansion in recently enrolled

customers and a 130 percent expansion in online deals. Home in addition to is currently number one in online basic food item and shutting in quick on E-shop for number one in general.

Tesco Homeplus Virtual Store has been broadly praised for its advanced approach and has been newly been designated by the London Museum for 'Design of the Year', as one of 2011's best digital designs. As a result, Tesco's new virtual store concept blending the traditional shopping experience with the convenience of buying online proved that it worked successfully. To sum up there were two obvious reasons of this success: The first was the smartphone use in South Korea and second was that millions of South Korean takes the subway each day.

Looking Ahead

Tesco is one of the biggest retail chains on the planet, with a nearness crosswise over 12 nations and all out representative quality of more than 500,000 workers. Tesco having over 30% market share is the largest retailer in the UK. With opening its first shop in France in 1992, Tesco has been expanding globally.

Additionally Tesco is the world's biggest retailer in online shopping for food and this is motivating force for their globalization and extension. Tesco has propelled online basic food item benefits in a considerable lot of the nations where it has business.

Tesco acknowledged from its encounters that to prevail in remote markets, it needs to work together uniquely in contrast to the manner in which it is done in the UK. Subsequently, Tesco confined its administrations to various degrees to address the issues of different markets and set up technique as indicated by changing focused conditions in the host advertise.

Samsung-Tesco's Homeplus in South Korea is one of the examples of its constraint accomplishment. Inside the previous decade Samsung-Tesco's has turned out to be one of the market-pioneer in the nation. The organization consolidated its information accessible through Tesco's more extensive worldwide system to accomplish a solid focused position in South Korea.

Homeplus has turned into Tesco's most significant remote auxiliary. An introduction in late 2010 by Tesco's Group Finance Director expressed that Homeplus in Korea is the outline for our other universal markets" and recorded the accompanying focuses: solid neighborhood the executives and corporate culture, a solid property portfolio, a multi-design activity, brought together production network and dispersion, across the board utilization of

Tesco Clubcard, an appreciated brand, utilization of Tesco's worldwide working model, on the web and retailing administrations and network at the core of "what we do". Homeplus has turned into the most complex remote task for Tesco.

Conclusion and Managerial Implications

This paper had been attempted to identify the Tesco's E-Commerce model and growth strategy for South Korea. Tesco has continued to be the largest retailer in the UK and the fourth largest retailer in Europe during the financial year 2017. Korea has its own characteristic consumer behaviour, which is very different than European and American way of shopping. Store layout is important as much as localization of the store. South Koreans like to have shopping experience surrounded by a stylish and good ambience. E-commerce has an important position in overall consumer market in South Korea. It is one of the most tech savvy populations in the world. South Korea is number one at mobile phone used penetration and internet penetration in Asia-Pacific. South Korean retailers have also recognized this new emerging trend and they have upgraded their traditional offline shopping service to online shopping. Tesco implemented its e-grocery service successfully outside the UK. Tesco propelled dotcom online stores in South Korea. The South Korean government had embraced protectionist and the retail area was not open for remote direct speculation. The Tesco began operating in South Korea under Samsung's existing banner Homeplus. Tesco is a second leading grocery retailer's market share in South Korea in 2015. There is a tremendous improvement of total retail and total e-commerce sales in South Korea in 2013-2018. Tesco uses a hybrid business model successfully to compete with its rivals in the market. Tesco uses a business model that integrates physical and online channels. The general results of this paper would give a truly necessary course to the rehearsing supervisors who might massively profit by the results of the investigation with reference to structuring successful retail procedures and web based business and systems for focusing on higher incomes, piece of the overall industry, benefit and client life time esteem. The result of the investigation would give a truly necessary sign to industry and the scholarly community. Given the data, the rehearsing directors may work a successful vital arrangement to suit to the objective purchasers, so as to reach and impact them to purchase various items.

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APPENDIX

Exhibit 3: Top 50 Suppliers of Samsung-Tesco

Unit: 1 million won				
Rank	Company	Sales	Major Items	Location
1	Local	5,944	grain (cereals)	Seoul, Sucho
2	Local	4,833	TV, refrigerator, washing machines, aircon	Seoul, Gangsu
3	Local	4,653	TV, refrigerator, vacuum cleaner, Aircon	Seoul, Gangnam
4	Local	1,622	Imported fruits	Busan, GijangGun
5	Local	1,484	Maxim coffee	Incheon, Buppyeong
6	Local	1,380	Slim Aircon, Kimchi refrigerator	Daegu, Supyungli
7	Local	1,366	Slim Aircon, Kimchi refrigerator	Buchun,
8	Local	1,105	powder milk	Seoul, Junggu
9	Local	1,098	Vegetable and fruit	Sungnam, Bundang
10	Local	1,066	Domestic vegetable and fruit	Gyeongbuk, Sunju
11	Local	1,031	marinated meat	Gyeonggi, Pyungtak
12	Foreign	1,025	toilet paper, tissue, diaper, pads	Incheon, Namdonggu
13	Local	942	edible oil	Seoul, Junggu
14	Local	918	Domestic watermelon	Daegu, Bukgu
15	Local	886	ketchup and mayonnaise	Gyeonggi, Anyang
16	Local	860	Domestic beef	Seoul, Sungdonggu
17	Local	825	Anam TV	Busan, Jingu
18	Local	811	Lotte gum	Seoul, Yeungdengpo
19	Local	799	Sambo computer	Gyeonggi, Ansan
20	Local	795	kitchen stuff	Gyeonggi, Yongin
21	Foreign	794	toilet paper, tissue, diaper, pads	Gyeongnam, Yangsang
22	Local	727	Domestic fruit (tomato, musk)	Gyeongbuk, Yeesung
23	Local	693	LG IBM Computer	Gyeonggi, Asan
24	Local	683	Pork from Jeju	Seoul, Songpa
25	Local	679	Detergent, insecticide, deodorant	Seoul, Gangnam
26	Local	672	Disc	Daegu, Buk Sangyeok
27	Local	649	Chilsung cider, Pepsi cola	Seoul, Sucho
28	Local	640	Choco Pie, Chitos	Seoul, Yongsan
29	Local	639	toilet paper, tissue, diaper, pads	Chungbuk, Cheongwongun
30	Local	622	Samsung Camera, Camcorder	Daegu, Susunggu
31	Local	619	Vegetable and fruit	Gyeongbuk, Gunwigun
32	Local	612	Domestic beef	Gyeonggi, Hwasung
33	Foreign	603	Choice Coffee, Nesquick	Chungbuk, Chongju
34	Local	588	ketchup, mayonnaise, pepper paste	Seoul, Dongdaemoongu
35	Local	578	gas range, gas oven range, toaster	Seoul, Junggu
36	Local	575	Cosmetics	Chungbuk, Chongdoo
37	Local	574	US meat	Seoul, Songpa
38	Local	571	liquor (Jinro, Hite, OB)	Daegu, Bukgu

39	Local	566	liquor (Jinro, Hite, OB)	Busan, Sasanggu
40	Local	565	fresh fish	Gyeongnam, Masan
41	Local	555	Toy	Daegu, Susunggu
42	Local	547	instant noodle, snack	Seoul, Dongjak
43	Foreign	540	Sony Camcorder, TV	Seoul, Yongsan
44	Foreign	535	insecticide, kitchen stuff	Gyeonggi, Asan
45	Foreign	533	shampoo, conditioner, soap	Seoul, Gangnam
46	Local	530	underwear, lingerie	Seoul, Yeungdengpo
47	Local	509	Mando aircon, kimchi refrigerator	Gyeonggi, Yongin
48	Local	505	shampoo, soap, toothbrushes, toothpaste	Seoul, Dongjak
49	Local	498	crown corn chips	Gyeonggi, Anyang
50	Local	479	toilet paper, tissue	Seoul, Yeungdengpo

Source: Samsung-Tesco, Internal data, as of Feb 2002

Exhibit 4: Global Suppliers of Samsung-Tesco

				Unit: 1 million won
Rank	Company	Sales	Major Item	Location
1	Yuhan-Kimberly	1,025	toilet paper, tissue, diaper, pads	Incheon, Namdonggu
2	Yuhan-Kimberly			
2	Busan Center	794	toilet paper, tissue, diaper, pads	Gyeongnam, Yangsang
3	Nestle Korea	603	Choice Coffee, Nesquik	Chungbuk, Chongju
4	Sony Korea	540	Sony Camcorder, TV	Seoul, Yongsan
5	Clorox Korea	535	insecticide, kitchen stuff	Gyeonggi, Asan
6	P&G Korea	533	shampoo, conditioner, soap	Seoul, Gangnam
7	Fuji Film Korea	241	film, disposable cameras, photoprint	Seoul, Geumchungu
8	Nongshim-Kellogg	162	cornfrost, honeychecks	Gyeonggi, Ansong
9	Kodak Korea	114	film, disposable cameras	Gyeonggi, Bucheon
10	Samsonite Korea	68	Bags	Seoul, Gangdonggu
11	Lego Korea	67	Toys	Gyeonggi, Yichongun
12	Osram Korea	46	Light bulbs	Gyeonggi, Ansan
13	Master Foods Korea	45	MM chocolate, Snackers	Seoul, Gangnam
14	General Mills Korea	25	sweetcorn, jumbopop	Seoul, Gangnam
15	Veeta International	20	cheese	Seoul, Dobonggu
16	Heinz Korea	17	Heinz pickle, Heinz ketchup	Incheon, Junggu

Source: Samsung-Tesco, Internal Data, as of Feb 2002

Exhibit 8: Shinbaram Culture and Rational Culture - Comparison

Shinbaram Culture	Rational Culture
<ul style="list-style-type: none"> - Enforcement in activating and supporting the club activity in company - Foster community sentiment through holding soccer league sponsored by Samsung TESCO, Homeplus Singing Contest and others - Staff Mileage system . Granting incentive executing personal praise system - Incentive for long-term service employee . Granting the business opportunity after 	<ul style="list-style-type: none"> - Introduction of advanced working system . Five working day and family vacation system for the first in the industry - Improvement in personnel system - Transference of authority and responsibility . No sign required for document after CEO, team meeting - Changed in reporting and meeting

Source: Suh, Yong-Gu. *Entry and Growth Strategy of Multinational Retailers in Korea: A Case of Samsung-Tesco*. Thailand: Fourth Asia Pacific Retail Conference. Sept. 2007.

THE IMPORTANCE OF SUPPORTING STARTUPS: EXPECTATIONS VERSUS PERCEPTIONS

Abstract

As the number of “garage” startups that became ending very large and influential corporations continues to increase, no one can disregard them anymore. Indeed, startups are increasingly regarded as potential powerful engines of innovation and incredible fast growth, being able to change the way how society and economies operate, as they often coin new visions, coupled with the inception of new technologies. Becoming easily state-of-the-art businesses, the number of startups achieving the unicorn status is not standstill either, adding therefore further interest to this phenomenon.

Nevertheless, managing a startup is often harsh, and the great majority fail soon after being founded. It is very hard for entrepreneurs to achieve success, and the star status achieved by a few of them reveals to be a mirage to barely every startup.

It is therefore natural to recognise the importance of the incubators for these new, fresh, but fragile forms of businesses. Accordingly, this paper has the purpose to try to understand and evaluate the startups’ expectations and what the incubator truthfully offers for their development, as well as to verify whether such expectations match with the reality offered.

Furthermore, it is expected that this paper may have practical and social implications, as it attempts to contribute to the incubators’ strategies and actions, allowing them to analyze externally and internally the needs and motivations of their incubates.

Concurrently, this research presents also a valuable contribution for the startups and for the regions where they are headquartered. This work is actually based on the startups perspective, which will contribute to a more efficient and adapted relationship between startups and incubators, since it emphasizes on what they actually expect and perceive from the incubation process.

Keywords: *Startups, Incubators, Management; Customer Satisfaction; Innovation; Performance; Entrepreneurship, Expectations Management.*

Track No. 15: Entrepreneurship

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Introduction

As the number of “garage” startups that became ending very large and influential corporations continues to increase, no one can disregard them anymore. Indeed, startups are increasingly regarded as potential powerful engines of innovation and incredible fast growth, being able to change the way how society and economies operate, as they often coin new visions, coupled with the inception of new technologies. Becoming easily state-of-the-art businesses, the number of startups achieving the unicorn status is not standstill either, adding therefore further interest to this phenomenon.

Nevertheless, managing a startup is often harsh, and the great majority fail soon after being founded. It is very hard for entrepreneurs to achieve success, and the star status achieved by a few of them reveals to be a mirage to barely every startup.

The life cycle of a company is very volatile and the first years are fundamental for the continuity of the business. Initially these types of companies may find it more difficult to approach their target audience for several reasons. Lack of knowledge on the part of the market, adversity to change by the market, size and novelty are some reasons. This need for support from new companies represents a market opportunity. Although incubators are one of the most relevant and dominant approaches to supporting emerging companies, there are other possible options for an early stage business. Thus the choice to integrate an incubation process reflects the startup's expectation of the value that an incubator can add, since this strategic decision will be decided taking into account the expectations that incubate form on the various options.

It is therefore natural to recognise the importance of the incubators for these new, fresh, but fragile forms of businesses. Accordingly, this paper has the purpose to try to understand and evaluate the startups' expectations and what the incubator truthfully offers for their development, as well as to verify whether such expectations match with the reality offered.

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incubators, since it emphasizes on what they actually expect and perceive from the incubation process.

The intrinsic fragility of startups and the importance of incubators

Besides being considered as a fresh approach to the markets, the startups are also regarded as a tool for job creation and development in the region where they operate, contributing to their growth. For recent years in Portugal, these emerging companies accounted for 6.5% of the business fabric (Magazine, 2016) and 18% of new employment in 2014 (D & B, 2016), yet most of their leaders were undertaking for the first time what underlies the potential lack of knowledge, both at the business model level and at the level of contacts, such as the difficulty in raising financial resources. These difficulties are evidenced by the survival rate of these companies. A third of these companies do not survive the first year of activity and only half of them exceed three years (D & B, 2017c). These values arise due to the inexperience of the entrepreneurs, market dynamics, lack of awareness of the company or even the business idea that, consequently, can make it difficult to obtain financial support and contacts. In resume, it seems very important to reflect on the best technique and method of development of emerging companies since, today, they have a significant weight in our economy.

The relationship between incubators and new companies has been analyzed by several authors (Al-Mubarak and Busler, 2010; Dee, Livesey, Gill, and Minshall, 2011; Mas-Verdú, Soriano, and Tierno, Chinsomboon, 2000; Grimaldi and Grandi, 2005; Mian, 1996; Theodorakopoulos, Kakabadse, and McGowan, 2014). Nevertheless, the results differ, mainly due to the different periods of analysis and the different regions, and as published by Forbes in 2014, “it has not yet been proven that a business will be more successful if it is associated with an incubator” (Forbes, 2014).

However, according to the literature, incubators provide several benefits that favor the creation, growth and stability of new companies such as cheaper rents, support services, location, among others. Nonetheless, in a number of empirical studies on the relationship between an incubator and an incubator (Al-Mubarak and Busler, 2010; Bollingtoft and Ulhoi, 2005; Tötterman and Sten, 2005), these benefits have been analyzed from an incubator perspective, not from the new companies. For the acquisition and organization of information, many studies carry out surveys targeting incubators. It is a useful but limited method since it cannot represent the point of view of the incubated ones, hindering a correct evaluation of the perspective of the new companies (Dee et al, 2011).

It is important to assess the impact of incubators as their role is transversal, allowing, in principle, to suppress market failures, promote regional development, create jobs, and generate opportunities through the exchange and transfer of technology between clients and incubated enterprises. For the local and national community, incubators can still create self-esteem and an entrepreneurial culture. With regard to research institutions and universities, business incubators can help strengthen interaction and promote the commercialization of research (Al-Mubarak and Busler, 2010).

For startups, there is evidence that companies associated with business incubators present better values in terms of sales growth and employability, survival, formation of commercial and technical beneficial relationships (Scillitoe and Chakrabarti, 2010) and increase the likelihood of success (Al-Mubarak and Busler, 2010), by modifying or accelerating the economic development process of startups (Dee et al, 2011).

Prospects for survival and growth of new businesses may depend on the ability to capture external resources. Thus, one of the tasks of incubators is the transition from a resourceless company to a resource-sustainable enterprise (Zhao and Aram, 1995). Recognizing the relationship between an incubator and the startups, it is important to analyze whether the option to integrate the incubation process is the solution expected by the emerging companies for their development (Dee et al, 2011). For Buys and Mbewana (2007), business incubators help new companies to survive and grow during their initial period, however it is recognized that incubators do not always lead to better incubation results (Dee et al, 2011; Buys and Mbewana, 2007) and, given the credit and large investment given to incubators by government, universities, research institutions, there are even those who question what return the startups get (Bergek and Norrman, 2008).

One issue that has arisen is that companies usually have to undergo a careful selection process to be incubated (business plan, financial budget, product rights, etc.) (Schwartz, 2010), in the However, this selection process can only be imposed if the incubators are strong enough to refuse certain applications (Dee et al, 2011), that is, "Harvard students are successful because of what Harvard does for them or because Harvard selects only students who will succeed regardless of what Harvard does for them?" (Bears, 1998, op. cit Hackett and Dilts, 2004, p.65). The selection refers to decisions about which firms to accept and which to reject (Bergek and Norrman, 2008). Selecting firms with high growth potential is an uncertain and imperfect process (Dee et al, 2011), where business incubators point to a specific group of companies (Hackett and Dilts, 2004).

It is important to have a good fit between the services that the incubator is able to provide and the needs of the incubated so that the variability, the sorting and the selection of the incubated do not lead to failure (Hackett and Dilts, 2004; Dee et al., 2011).

Some progress has been made to understand how incubated companies develop within an incubator (Dee et al, 2011) and an increase in the presentation of empirical evaluations demonstrating the efficiency of the incubator may be observed (Schwartz, 2010). Incubator supporters suggest that the process can protect incubators from Porter's five forces, increasing the likelihood of survival in the short term while; other authors claim that the same process may weaken the company's ability to compete and survive when it is finished and to leave the incubator (Dee et al, 2011).

Many of the incubates have negative cash flow during the initial period (Burgel and Murray, 2000) and are faced with a discrepancy between the key resources needed for efficient marketing of their products or services and their resource base (Schwartz, 2010 Burgel and Murray, 2000). New organizations also have to overcome other issues such as market entry, capital increase by skeptical sources and recruitment (Aldrich and Fiol, 1994), greater uncertainty in a competitive environment (Baldwin, Gellatly, and Gaudreault, 2002) and resource constraint by (Yli-Renko, Autio, and Sapienza, 2001).

In this context, in the early years after market entry, new firms face some disadvantages because their customer relationships are not yet formed (Burgel and Murray, 2000). The first effect is dubbed "novelty susceptibility" and describes the high risk of failure because they do not yet have the resources and / or portfolio needed for their survival (Schwartz, 2010). Customer reluctance can affect product performance (Burgel and Murray, 2000). Similar arguments are made by supporters of the hypothesis of the "susceptibility of smallness", where instead of focusing on the age of enterprise; they take into account the impact of organizational size as an alternative explanation for increasing the probability of survival over time (Schwartz, 2010). In addition, new firms need time to gain market legitimacy (Aldrich and Fiol, 1994).

Business incubators can be considered theoretically as an instrument of response to these "susceptibilities" (Schwartz, 2010). However, the relationship between incubators and new organizations is not homogeneous (Al-Mubarak and Busler, 2010) and their variations depend on the "resource-based view", since the distribution of resources directs business incubators to different competitive advantage in creating and developing new companies (M'Chirgui, 2012). There are a variety of services and factors provided by the incubators for their incubators from the initial stage of development of the idea to its growth (M'Chirgui, 2012), which can influence

the performance and growth of startups (Silva, 2015) and their success (Theodorakopoulos et al, 2014).

The key benefits of an incubator vary according to their size (Theodorakopoulos et al, 2014), with external stakeholders including community (both local / national and international), research institutes, government, business (Al-Mubarak and Busler, 2010), with the temporal space (Bergek and Norrman, 2008) and also with the new incubated companies that allow the incubator to transfer, store and channel knowledge to support other incubations in the future (Hackett and Dilts, 2004).

The services offered by the incubator have two functions: to prevent the failure of the new companies and to ensure the success of the companies (Vanderstraeten and Matthyssens, 2012). The more extensive these factors are represented in the incubator, the greater the likelihood of incubation success (Theodorakopoulos et al, 2014).

The incubation program does not provide support only from the enterprise level, such as the provision of a low-cost space, access to physical facilities and facilities, support services (Cornelius and Bhabra-Remedios, 2003), but also from the hard-to-imitate abilities incorporated into the system, helps socially, typically through intra-organizational and extra-organizational connections (Mian 1996, Lane and Lubatkin, 1998). Social capital is one such service (Adlesic and Slavec, 2012). Incubator facilities and resources minimize a number of associated challenges and facilitate networking (McAdam and McAdam, 2008).

Studies suggest that business incubators can actively facilitate and support "networking" among incubator entrepreneurs as well as between these and other external stakeholders, by whom business opportunities are identified and exploited (Theodorakopoulos et al, 2014; Scillitoe and Chakrabarti, 2010).

In addition to social capital, Mian (1996) points to government support and low rental costs, as other factors will have an impact on incubator development. Business incubators are linked to a number of other factors that play a role in incubator development, such as trust (Tötterman and Sten, 2005), resource sharing, laboratories, equipment (Chan and Lau, 2005), space rental (Lose, Tengeh, Maziriri and Madinga, 2016), capital funds, state concessions, incentives, low interest rates, private partnerships (Al-Mubarak and Busler, 2010), coaching, training (Bergek and Norrman, 2008), business support (Cornelius and Bhabra-Remedios, 2003), resource sharing (InfoDev and WorldBank, 2009).

The incubator's contribution for thriving startups

Although not necessarily ensuring the success of the startups, an incubator may provide several relevant services easing their implementation process and providing some help for future growth. Some of such dimensions are now examined.

Space rental

The rental of space consists of renting a physical space with favorable conditions for the incubated ones (Bergek and Norrman, 2008). Incubated companies have several benefits from economies of scale when they lease facilities together and share the resources of the incubator (Bruneel et al, 2012), since rents are one of the largest expenditures of inexperienced companies (Abduh et al, 2007). The rental of a subsidiary space in addition to giving access to infrastructure at a reduced cost (Cornelius and Bhabra-Remedios, 2003) and in flexible terms (leased space can be changed and / or terms of payment negotiated) (Abduh et al. , 2007), also translates into the reduction of general costs such as energy, water and telecommunications (Bruneel et al, 2012). In addition, the incubated do not have to spend time or resources managing complementary services, allowing the total concentration in their activities. Finally, this factor allows incubators to obtain and subsequently share with their incubators certain government benefits (Bruneel et al, 2012).

Financing

The lack of financial capital impairs the development of firms and, consequently, their growth (Baldwin et al., 2002; Zhao and Aram, 1995). Access to finance is a critical point for the development and growth of startups (Silva, 2015), but their access remains one of the great challenges for small companies and many studies suggest that new companies rely on too much source to obtain financial resources to overcome the initial difficulties (Baldwin et al., 2002). Incubators must be able to raise capital and provide risk management and tax management services to these new companies (Buys and Mbewana, 2007). As capital is needed at various stages of the business development process, the incubator must act as an intermediary in order to facilitate interaction between clients and potential investors (Abduh et al, 2007). Incubators help start-ups by providing access to financial support that can be obtained from various sources, including government support, commercial banks and investment firms (Buys and Mbewana, 2007).

Sharing services and resources

The supply of space is fundamental for business incubators and has been identified by the incubators as the factor that most benefits them (Bruneel et al, 2012). The "abundance" of incubator space allows startups to share the facilities and equipment they need but typically cannot afford, neglect, or ignore (Abduh et al., 2007). The sharing of facilities not only goes through the office space, but also through conference rooms, meeting rooms or even more specialized resources such as laboratories or research equipment (OECD, 1997; Grimaldi and Grandi, 2005). All this variety of facilities available for sharing offers distinct advantages, particularly when interacting with the customer (McAdam and McAdam, 2008), but also reduces costs and saves time (Abduh et al, 2007). Another advantage obtained by using the facilities is their environment. Incubators are located where access to science and technology are readily available (Buys and Mbewana, 2007).

Business assistance services

The lack of teams and management capabilities can have a negative influence on the development of startups (Zhao and Aram, 1995) and these generally do not have the necessary management capacity and experience to address and respond to market changes. At the same time they do not have enough knowledge to identify and hire relevant specialties (Bruneel et al, 2012). With this, the success of an incubation may depend on the quality of the management teams operating in the incubator (Buys and Mbewana, 2007).

Incubator support covers a wide range of business expansion services, including support in developing the business plan, strategic plan, product development, sales and marketing advice, government regulation education (Abduh et al, 2007), human resources and accounting, financial, management and legal support (Scillitoe and Chakrabarti, 2010). In addition, incubators benefit from learning elements with active coaching and training (Bruneel et al, 2012; Mian, 1996).

Coaching consists of individual support initiatives determined to accelerate the learning and skills of development processes, usually from a mentor's assignment, for a certain fee or free of charge (Scillitoe and Chakrabarti, 2010) and enables entrepreneurs to maintain the latest advances and developments (McAdam and McAdam, 2008). Training is also often available in business incubators, playing a positive role in the development of their clients (Aerts et al, 2007).

In short, the assistance services try to increase managerial capacities, fill the scarcity of technical knowledge and lack of access to technical assistance (Abduh et al, 2007).

Notoriety and credibility

One of the great benefits of positioning in an incubator is the credibility of the address (McAdam and McAdam, 2008). The lack of a business address at an early stage of business can be a tricky problem if we relate the credibility, professionalism and durability of a company (McAdam and McAdam, 2008). The credibility and visibility of the incubator for the clients can also be transferred from the word-of-mouth communication between individuals that belong to the contacts and networks of the incubators (Abduh et al, 2007).

However, for McAdam and McAdam (2008), as the company grows and "grows older" the concept of incubation may negatively affect the company's credibility as these will be continuously associated with immaturity.

Share capital

"It is difficult to work alone. It is necessary to be in an environment with different people. You have to be able to join a network, so at least you know what is happening "(McAdam and McAdam 2008: 284).

The social context presents entrepreneurs with several constraints, however, it also offers a set of favorable conditions (Aldrich and Fiol, 1994). Social capital is considered an important factor for innovation, organizational advantage and value creation (Adlesic and Slavec, 2012). Tötterman and Sten (2005) even suggest that the development of the social capital of an incubator is a crucial element to incubators.

The concept of social capital has a long history (Adlesic and Slavec, 2012) and was originally used to describe the relational resources obtained from personal connections of a community, but is currently also applied in studies on intra- and inter-organizational relationships (Yli-Renko et al, 2001).

In an incubator, social capital is extremely relevant and can be exploited from trust (Tötterman and Sten, 2005), networking opportunities, contacts, counselling and support by other incubators (Adlesic and Slavec, 2012). The networking factor consists of a set of individual links that together form the structure of a network (Witt, 2004) and offers a variety of advantages to new companies (Larson, 1992).

Partnering with other organizations also offers the opportunity to acquire new knowledge, develop new skills (Yli-Renko et al, 2001) and maximize adaptability to the environment (Larson, 1992). Increasing knowledge and skills from inter-organizational relationships is faster than developing knowledge and skills in the company itself (Bruneel, Yli-Renko and Clarysse, 2010). These relationships include customers, suppliers, investors, governments and

research institutions (Larson, 1992) and provide the company with greater market legitimacy (Aldrich and Fiol, 1994).

The incubator, in addition to external relations, also creates an environment that enables incubators to obtain synergies among themselves, share experience and learn from each other (Abduh et al, 2007). This diversity of internal sources accentuates the acquisition of knowledge (Yli-Renko et al, 2001). It is also useful for building relationships that can be developed in formal or informal partnerships, joint ventures, buyer / seller, service exchanges or products or even simple information (Tötterman and Sten, 2005).

These links bring other benefits such as discussion and problem solving among incubators (McAdam and McAdam, 2008), access to critical functions that are beyond financial capacity (Larson, 1992) and overcoming resource constraints (Zhao and Aram, 1995; Tötterman and Sten, 2005).

Customer satisfaction with the incubating service

Although business incubators are a strategically important program for the growth and development of new businesses in the economy, the topic related to customer satisfaction in relation to incubator support has been very limited (Abduh et al, 2007). The startups can be seen as clients of the incubators (Adlesic and Slavec, 2012) one can use research related to customer satisfaction to evaluate them.

Customer satisfaction is defined as the client's overall assessment of product and / or service performance over the relationship, whether cumulative or transaction-specific (Gustaffsson, Johnson, and Roos, 2006, Anderson, Fornell, and Lehmann, 1994) and is affected by perceived quality, price and expectations (Anderson et al, 1994). Abdicating price value, it can be considered as the discrepancy between the previous expectations and perceived quality after consumption (Chen and Chen, 2010). Satisfaction to be measured needs a current experience of the product or service, but is also based on previous experiences (Anderson et al, 1994).

This satisfaction is determined by the function between the expectations obtained from the beliefs attributed to the service and the perceived quality (confirmation or "disconfirmation" of the expectations) (Bearden and Teel, 1983). According to Abduh et al. (2007), the level of satisfaction depends on the importance and efficiency of the service, and the importance corresponds to the expectations of the customers about the service and the efficiency is the perceived quality and service performance.

Theory of cognitive dissonance

The theory of cognitive dissonance was developed by Festinger in 1957 (Cooper and Fazio, 1984) and occurs when two cognitions of an individual are inconsistent with each other, that is, when their actions do not coincide with their beliefs, opinions or attitudes (Bem, 1967). Dissonance is described as a psychological state of discomfort (Cooper and Fazio, 1984), once the individual experiences the pressure of a motivational state, pressure that he will seek to remove by altering one of the dissonances (Bem, 1967).

Consumer confusion has become even more of an issue as consumers obtain large amounts of information relevant to decision making (Mitchell and Papavassiliou, 1999). This confusion can result in misuse of the product / service that can lead to customer dissatisfaction, loss of loyalty and a break in brand image, and therefore it is vital for companies to have a clear idea not only to not cause confusion but also to help clients to clarify decision options (Mitchell and Papavassiliou, 1999).

"Disconfirmation" is defined as the client's subjective judgments that result from the comparison between expectations and perceptions of perceived performance (Szymanski and Henard, 2001). More specifically, once clients shape their expectations, they eventually compare perceptions of performance with the pre-established level of expectation, with "disconfirmation" occurring when the rating is different from the predetermined expectations (McKinney, Yoon, and Zahedi, 2002).

Paradigm of the "disconfirmation" of expectations

A more formal specification of the importance-performance analysis is the "disconfirmation" paradigm (Ennew et al, 1993). The paradigm of "disconfirmation" of expectations has become an important framework for the analysis of customer satisfaction (Yüksel and Yüksel, 2001). This theory indicates that customer satisfaction has three antecedents, expectations, "disconfirmation" and perceived quality (McKinney et al, 2002) and assumes that customer satisfaction arises from an evaluation process in which expectations created from experiences or previous information and compared with perceptions of service performance (Thompson and Yarnold, 1995; Westbrook and Reilly, 1983). This paradigm implies that customers have a certain expectation with regard to a particular service before its use. After their use the results are compared with the expectations and the "disconfirmation" occurs if there is a difference between the expectations and the perceptions (Yüksel and Yüksel, 2001; McKinney et al., 2002). A client will be satisfied or dissatisfied if the divergence is positive or negative between the expected and the obtained (Wirtza and Batesonb, 1999). Thus, when the performance of a

service is higher than initially expected there is a positive "disconfirmation" that results in satisfaction (Thompson and Yarnold, 1995). On the other hand, when the service is below expectations, there is a negative "disconfirmation" that causes satisfaction (Yüksel and Yüksel, 2001).

In the case of incubators, or in a generally long-term context, satisfaction is measured by a cumulative relationship and this will be the evaluation that will most influence the behavior of the companies since it will have an impact in terms of notoriety and recommendation (Gustaffsson et al, 2006).

One of the purposes of the incubators is to promote the satisfaction of the incubated ones from their services (Adlesic and Slavec, 2012). Incubations are generally dissatisfied with incubator support when the incubation process is predetermined, rather than being re-evaluated as there is a change in business needs (Dee et al, 2011).

Satisfaction is important for the incubated because it reflects a positive result from the expenditure of scarce resources and / or satisfaction of unknown needs (Bearden and Teel, 1983). It is also important for incubators since it will make their clients work better and share positive word of mouth communication (Adlesic and Slavec, 2012).

As the level of satisfaction acquired by incubator services from the perspective of the clients is fundamental to determining the effectiveness and efficiency of the programs, it is vital to reveal the difference between the expectations of the clients and the performance of the services of the incubators (Abduh et al, 2007).

As mentioned above, customer satisfaction and service quality have quality perceived as one of their antecedents (Fornell, Johnson, Anderson, Cha, and Bryant, 1996), and providing a positive perception is essential for the success and survival of a firm in the current competitive environment (Zeithaml, Berry and Parasuraman, 1996), which has been identified as a key factor in gaining competitive advantage (Ennew et al., 1993).

Perceived quality corresponds to a customer's appreciation of overall service performance (Tsotsou, 2005), ie the perceived performance of the incubation program service the (Abduh et al, 2007; Fornell et al., 1996). The perceived quality of the SERVQUAL survey is the difference between the expected service and is reflected in five dimensions: ability to fulfill the promise; responsibility of the service; inspire confidence; empathy and tangibility (Donthu and Yoo, 1998).

Perceived quality is determinant for customer satisfaction and quality of service in general (Cronin, Brady and Hult, 2000). Perceived quality is different from customer satisfaction for a variety of reasons, based on the characteristics of the products or service, controlled to a certain

degree and can be perceived without current consumption / use experience with the possibility of being formed or before or after use (Anderson et al., 1994; Tsotsou, 2005).

The process of quality perception is complicated. It is not only the dimensions of quality that determine whether the quality of service is good or bad (Gronroos, 1988). The impact of perceived quality will always outweigh the impact of expectations, because current experiences tend to be more salient, have more precedents than past experiences, and prevail over any other information (Anderson et al, 1994).

Conclusions

An in depth research was done on the existing literature, regarding initially the startups, the incubators and, later, the relation between them. Due to the relevance of the relationship between these two types of organization, we analyzed the main factors that motivate the startups to be part of the incubation process, such as rental costs, service sharing, negotiation assistance, financing support, social capital and notoriety. Since the purpose of this paper was the study of the expectations and customer service regarding the perceptions of the startups, covering its surroundings as well. In the follow-up, we recognized the main factors that, from the point of view of existing literature, were considered fundamental for the incubation process and its desired success while effectively supporting the startups in their hard quest to thrive and conquer a place on the market.

Albeit not necessarily ensuring the success of the startups, it can be concluded that an incubator may provide several relevant services easing their implementation process and providing some help for future growth of businesses.

Regarding customer satisfaction with the incubating service, despite business incubators are a strategically important partner for the growth and development of new businesses in the economy, the examination of the customer satisfaction in relation to incubator support topic related to has been very limited researched (Abduh et al, 2007). Nevertheless, the startups can be regarded as clients of the incubators (Adlesic and Slavec, 2012) and therefore one can use research related to customer satisfaction to evaluate them.

As recommendation of future investigations one could suggest to obtain information from both startups' and incubators' perspectives, since it is relevant to compare and analyze them both together in order to obtain an even more in depth view of the relationship between them. Finally, the production of practical guide for the incubators could be highly beneficial. That could include an orientation on how incubators could effectively support the startups, from the selection process to the validation of the incubations, mentioning the main needs and

motivations of the incubated ones. Such guide would allow a greater adjustment of incubator support, leading to greater efficiency, increased quality and overall satisfaction.

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THE ISSUE OF VALUATION FOR COMPANIES IN FINANCIAL DISTRESS

Abstract

Corporate bankruptcies are timeless and these types of events, despite often being traumatic, must be regarded as natural, almost as something inevitable as for every living thing. Nevertheless, this phenomenon has its own particularities and literature continues examining the existence of bankruptcies in its wide dimensions, suggesting that the occurrence of crises of various orders, such as economic, social, or armed conflicts, are certainly a major explanation for an increase of this phenomenon.

In the last decades globalization contributed to a more interconnected world. The last international financial crisis showed how the world is connected and how the consequences of this crisis contribute to the increase of bankruptcy of companies in distant geographies. This has affected Portugal as well, across every sector of activity, however, with different levels of impact. Within this context, the government had to revise its policies, legislating to try to reverse the deteriorating business situation.

Taking into account recent data, this research makes an analysis of the insolvency processes that have taken place recently in Portugal, examining concurrently which instruments were used to help these companies to recover and how they were differently affecting the valuation of Portuguese companies in financial distress.

Keywords: *Bankruptcy, Bankruptcy Law, Restructuring, Business failure, Financial distress.*

Track No. 17: Finance

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Introduction

Corporate bankruptcies are timeless and these types of events, despite often being traumatic, must be regarded as natural, almost as something inevitable as for every living thing. Nevertheless, this phenomenon has its own particularities and literature continues examining the existence of bankruptcies in its wide dimensions, suggesting that the occurrence of crises of various orders, such as economic, social, or armed conflicts, are certainly a major explanation for an increase of this phenomenon.

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Taking into account recent data, this research makes an analysis of the insolvency processes that have taken place recently in Portugal, examining concurrently which instruments were used to help these companies to recover and how they were differently affecting the valuation of Portuguese companies in financial distress, following earlier research from several authors as Pereira et al. (2014).

The use of survival analysis methodology

The main application of survival analysis in accounting research has been in the area of bankruptcy prediction and the related literature that employs this statistical technique has increased in recent years.

Lane et al. (1986) were the first to employ the Cox model to predict bank failure, using a sample of 130 banks that failed between January 1978 and June 1984, and another sample 334 non-failed banks. The survival time for each failed bank has been defined as the time (in months) since December 31st, of the year considered for the calculation of financial ratios, to the date of bankruptcy. Their results indicated that the overall accuracy of the Cox model was similar to the one obtained by using the discriminant analysis, being, however, the type I error lower in the Cox model.

Luoma and Laitinen (1991) have also applied the survival analysis in predicting business failure. These authors used a sample of 36 failed companies (24 from industrials and 12

retailing firms) each paired with a not failed company belonging to the same business and of similar size. The results were compared with models developed from discriminant analysis and logistic regression. The percentage of correct classifications was 61.8%, 70.6%, and 72.1%, for survival analysis, discriminant analysis and logistic regression, respectively. The authors explained the lower accuracy of the model based on survival analysis with the different failure processes found in the data.

Another reference work in this area is that of Shumway's (2001). This author draws attention to the need to include multiple observations for each firm by using a discrete time hazard model in the prediction of financial distress and used an accelerated failure time survival analysis model that outperformed the traditional techniques at this field of investigation.

Lee (2014) uses the survival analysis to find the main indicators which can explain the business bankruptcy in Taiwan. The sample used includes companies listed on Taiwan Stock Exchange that examined financial distress between 2003 and 2009 and his study showed that it does not need many ratios to be able to anticipate potential business bankruptcy.

Gémar et al. (2016) use survival analysis techniques in the Spanish hotel industry. They argue that the survival of hotels depends on their size, location, management and launch in a time of prosperity.

The use of this technique can also be seen in studies of Laitinen and Kankaanpää (1999), Kauffman and Wang (2001), Kim and Partington (2014), Gupta (2017) or Gupta et al. (2018).

The Cox proportional hazards model

According to Collet (1994), the current survival time of an individual t can be regarded as the realization of a random variable T , which may assume any given non-negative value. Therefore, T indicates the time to failure of a firm. T is thus associated with survival time and follows a given probability distribution. Being T a continuous probability distribution, and assuming f as the underlying probability density function, the function of distribution is then given by

$$F(t) = P(T < t) = \int_0^t f(u) du . \quad [1]$$

which represents the probability of the survival time being inferior to a given value of t .

The survivor function $S(t)$, is defined as the probability that a firm will survive longer than t times units, being equal or higher than t , and assumes the following notation:

$$S(t) = P(T \geq t) = 1 - F(t). \quad [2]$$

The survival function may therefore represent the probability of the survival time of an individual to exceed a given value of t .

The hazard function describes the evolution over time of the immediate rate of "death" of a firm. To obtain the hazard function, we assume the probability that the random variable associated with a survival time T is in between t and $t + \delta t$, subject to a T value greater than or equal to t , which can be shown as

$$P(t \leq T < t + \delta t | T \geq t). \quad [3]$$

The hazard function $h(t)$ is then the limit of that probability divided by the interval of time δt , with δt tending to zero as we can verify below:

$$h(t) = \lim_{\delta t \rightarrow 0} \left\{ \frac{P(t \leq T < t + \delta t | T \geq t)}{\delta t} \right\}. \quad [4]$$

The hazard $h(t)$ is the probability of failure in the next instant, given that the firm was alive at time t (Lane *et al.*, 1986).

The survival function, $S(t)$, can be obtained from the following equation:

$$S(t) = \exp\{-H(t)\}, \quad [5]$$

where

$$H(t) = \int_0^t h(u) du. \quad [6]$$

The function $H(t)$ is called the cumulative hazard function.

$$H(t) = -\log S(t) \quad [7]$$

One model that we could apply is the proportional hazard model proposed by Cox (1972), which is also known as Cox regression model.

The definition of the model can be made as follows. Assuming that the hazard of "failure" for a given time period depends on the values x_1, x_2, \dots, x_p of p explanatory variables X_1, X_2, \dots, X_p , the set of values of explanatory variables in proportional hazard model will be represented by the vector \mathbf{x} , so $\mathbf{x} = (x_1, x_2, \dots, x_p)'$.

We designate $h_0(t)$ as the hazard function of a company for which the values of all variables that make the vector \mathbf{x} is zero. The function $h_0(t)$ is called baseline hazard function. The hazard function for i companies can then be written as:

$$h_i(t) = \psi(x_i)h_0(t), \quad [8]$$

where $\psi(x_i)$ is the function of the values of the vector of explanatory variables for i companies.

The function $\psi(x_i)$ can be interpreted as the risk over time t for a company whose vector of explanatory variables is \mathbf{x}_i on the risk for a company whose $\mathbf{x}=0$.

Since the relative risk $\psi(x_i)$ can not be negative it should be written as $\exp(\eta_i)$, where η_i is a linear combination of p explanatory variables in \mathbf{x}_i . Therefore,

$$\eta_i = \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_p x_{pi}, \quad [9]$$

which is equivalent to

$$\eta_i = \sum_{j=1}^p \beta_j x_{ji}. \quad [10]$$

where β is the vector of coefficients of the x_1, x_2, \dots, x_p explanatory variables in the model.

The quantity η_i is called the linear component of the model, also known as risk score or prognostic index for i firms. The proportional hazard model can generally be expressed as follows:

$$h_i(t) = \exp(\beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_p x_{pi}) h_0(t). \quad [11]$$

The proposal of a predictive model

Taking into consideration the models offered in the literature, but also by employing a specific set of variables that we find appropriate to test using a survival function, follows here our proposal of a predictive model of corporate failure.

Variables used

In this paper, several economic and financial indicators were used to construct a set of independent variables. Similarly to the procedure used in diverse studies devoted to predicting business failure, the selection of the independent variables was based on its popularity, measured by its use in previous studies.

Table 1 lists the 22 selected indicators that were collected from the balance sheet and from the income statement of the companies included in the sample.

Table 1: Independent variables

X1	(Current assets - Current Liabilities) / Total Liabilities
X2	Current assets / Current liabilities
X3	Equity / Total assets
X4	Equity / Liabilities
X5	Cash-flow / Current liabilities
X6	Cash-flow / Liabilities
X7	Financing charge / Operating gains
X8	Cash / Total assets
X9	Cash / Current liabilities
X10	Bills payable / total assets
X11	Working capital/Total assets
X12	Operating gains / Current assets
X13	Operating gains / Operating Costs
X14	(Net profit before tax + Depreciation expense + Provisions)/ Financing charge
X15	Net profit/Total assets
X16	Net profit/ Equity

X17	Net profit/Liabilities
X18	Net profit / Operating gains
X19	Net profit/ Sales
X20	Sales / Cash
X21	(Net profit before tax + Financing charge) / Sales
X22	Net profit before tax /(Net profit before tax + Financing charge)

The companies' sample

In order to adjust the model, it was necessary to obtain a sample of companies where the event of interest occurred, this is, where there was a closure of activity.

Based on the information provided by insolvency administrators it was possible to obtain a sample of 14 companies, whose survival times were known and that are classified as belonging to the group of failed companies. The survival times for the 14 companies are as follows: 2 companies with 3 months, 1 company with 4 months, 4 companies with 5 months, 2 companies with 6 months, 4 companies with 8 months and 1 company with 10 months.

Concurrently, we obtained a sample of 14 companies that did not failed, this is., with survival times censored from SABI database.

Taking into consideration the survival times, it was possible to split each company into 3 sets of observations, which resulted in a group of failed companies with 42 observations, and a group of companies that did not fail also with 42 observations. Each observation is regarded as a company.

To illustrate this situation, one can consider the data from a company that was active until six months after the latest year for which we have data records. Since we collected data for 3 consecutive years, it is possible to have data for 6, 18 and 30 months prior to the time of business closure. This procedure was repeated for all 28 companies in the test sample.

The selection method of the explanatory variables followed Collett (1994) procedure, and the testing was performed using SPSS software.

The explanatory variables that contributed significantly to the reduction of statistics $-2 \log \hat{L}$, are shown below, in table 2.

Table 2: Variables in the Equation
Variables in the Equation

	B	SE	Wald	df	Sig.	Exp(B)
X1	,452	,199	5,137	1	,002	1,571
X2	-1,269	,335	14,317	1	,000	,281
X5	-,393	,219	3,210	1	,003	,675
X22	,229	,061	13,863	1	,000	1,257

The survival algorithm

In Table 3 are shown the values of the survival function relatively to the average of the variables' values.

Table 3: Survival Function Table

Survival Table				
Time	Baseline Cum Hazard	At mean of covariates		
		Survival	SE	Cum Hazard
3	,018	,994	,006	,006
4	,074	,978	,011	,023
5	,112	,966	,014	,035
6	,192	,943	,019	,059
8	,276	,918	,024	,085
10	,345	,899	,027	,106
15	,373	,891	,028	,115
16	,461	,867	,032	,142
17	,523	,851	,035	,161
18	,653	,818	,039	,201
20	,793	,783	,044	,244
22	,908	,756	,047	,280
27	,997	,735	,051	,307
28	1,291	,672	,058	,398
29	1,506	,629	,063	,464
30	2,016	,537	,067	,621
32	2,685	,437	,069	,828
34	3,275	,364	,069	1,010

The survival analysis provides a quantitative information about the probability of a company to fail at the end of a time period t and not only whether it will, or not, going to fail.

Combining the above information was then possible to develop the algorithm 1 using Matlab, which allows us to produce a company's performance forecast and the survival function value

for the time considered. The time period to be considered for the study is 12 months. The values of the survival function for each firm, was based on the respective figure for the nearest time instant obtained in the survival model developed earlier (10 months). In order to calculate the forecast for each company, it was used a cut-off point of 0.5, i.e., the model consider 1 for a company when the likelihood to survive is greater than 0.5, and 0 otherwise.

Algorithm 1: Survival function and forecast for each company

```
function survival

%estimated values of the coefficients
b1=0.452;
b2=-1.269;
b5=-0.393;
b22=0.229;

%for ten months
H0=0.345;

%read table from excel
T = xlsread('table.xls');

d=size(T,1);

for k=1:d
es(k)=exp(b1*T(k,3)+b2*T(k,4)+b5*T(k,5)+b22*T(k,6));
end

es=es';
H=es*H0;

%survival function
ST=exp(-H);

%forecast (0 or 1)
for k = 1:d
if ST(k)>0.5
    result(k)=1;
else result(k)=0;
end
end

result=result';

for k=1:d
fprintf('Company %g at 10 months: survival function = %g, forecast =
```

```
%g\n',T(k,1),ST(k),result(k));
end

A=[T(:,1) ST(:,1) result(:,1)];
save forecast A -double
```

As we had the information for the last year before the failure of the 72 companies in the sample, we collected from the SABI database another sample of 72 non-failed companies. With the sample of failed companies, we verified that survival function value for the considered time was higher than expected (type I error) in 4 situations. With the sample of non-failed companies, the survival function value was less than expected in 2 cases (type II error). Based on these results the type I error was 5.55% and type II error was 2.86%. An extract of the algorithm output can be seen in figure 1.

```
Command Window
>> survival
Company 6000 at 10 months: survival function = 1.51142e-12, forecast = 0
Company 6003 at 10 months: survival function = 0.417195, forecast = 0
Company 6009 at 10 months: survival function = 0.437352, forecast = 0
Company 6016 at 10 months: survival function = 0.537961, forecast = 1
Company 6002 at 10 months: survival function = 0.0969574, forecast = 0
Company 6015 at 10 months: survival function = 0.568619, forecast = 1
Company 6007 at 10 months: survival function = 0.764383, forecast = 1
Company 6008 at 10 months: survival function = 0.121495, forecast = 0
Company 6014 at 10 months: survival function = 0.241082, forecast = 0
Company 6018 at 10 months: survival function = 0.00191624, forecast = 0
Company 6004 at 10 months: survival function = 0.592384, forecast = 1
Company 6012 at 10 months: survival function = 0.945657, forecast = 1
Company 6017 at 10 months: survival function = 0.786941, forecast = 1
Company 6019 at 10 months: survival function = 0.308932, forecast = 0
```

Figure 1: Partial results of the algorithm 1

Conclusions

One of the purposes of this paper was to design a model for the prediction of business failure within the industry using survival analysis and to compare its predictive ability with other statistical models.

One of the models developed in this paper employs survival time, or the hazard rate, as the dependent variable and assumes that failed and not failed companies come from the same population, considering the second ones as censored observations.

With the intention of making this model generic and applicable to any company, in the sense that one can observe the output expressed as failed or not failed, we performed a transformation of the model output, making the result dichotomy probability, 0 (zero) or 1 (one), this is, the likelihood of fail, or not fail, respectively.

The results show that with the data of each year high percentages of success for the group of non-failed firms continue to be observed, especially for the two following years, regardless the year taken as reference (correctly classifying 439 non-failed firms with a percentage of accuracy of 98.65% in the year prior to failure; and correctly classifying 398 companies in the second year, which corresponds to an accuracy rate of 89.44%).

Concerning failed companies, the hit level is lower, with 135 failed companies correctly classified in the year prior to failure, which translates to a percentage of 94.41%, but there was a significant reduction of hits in the second year, with only 45 companies correctly classified. However, for this group of companies the model's results can be regarded as very much reasonable when the time sequence is not considered. Indeed, according to this assumption, the model correctly estimated that 87.41% and 76.22% of companies would fail during the period considered, with data from the second and third years, respectively.

To conclude one can say that for the group of non-failed companies the models based on discriminant analysis and logit obtained, overall, better results. Nevertheless, the same was not observed for the group of failed companies, if not considering the time sequence.

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CORPORATE PHILANTHROPY AND PATRONAGE: DOES LATIN LITERATURE PAVE THE WAY FOR MANAGERIAL INSIGHTS?

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Keywords: *Patronage, Corporate Philanthropy, Corporate Social Responsibility, Business and the Arts.*

ABSTRACT

The role of patronage has been widely exposed to the studies of different disciplines: here we adopt an interdisciplinary approach, based on managerial studies as well, and we pose the research question of the relationship between patronage, corporate philanthropy and the returns for the donors, taking as a case study the ancient Latin Literature, in particular the Golden Age of Augustus, Maecenas (Augustus' right hand man in civil affairs) and Horace.

The Poet Horace is in fact a noteworthy exemplum, with specific reference to his brilliant *cursus honorum* as a civil servant and to the farm in Sabine passed to him as a gift, of Latin patronage.

In effect, Horace's life has featured a fruitful and multifaceted relationship with power (also for the sake of an economic perspective) nuancedly epitomized by Augustus and more directly by Maecenas.

The iconic traits of the relationship between *ars poetica* and power are well depicted, in particular, in some key lines of his poems: first of all, the explicit acceptance of the gift of the Sabine farm (Satires 2.6.), then the persuasive and persuaded exaltation of the *pax Augusta* which honored Horace of a horn of plenty (Odes 1.17.), and finally the sober demeanor, towards his old age, at that time well aware both of the gifts received and of his talent for transforming them into pieces of immortality (Epistles 1.1).

The case study helps to build the framework of patronage and gift economy as a building agent to corporate philanthropy and corporate social responsibility actions.

More in detail, in the paper we have made use, to reveal the relationship between Horace and power, of the economic approach of patronage and gift economy, as compared to market economy: in this perspective, in other words, the gifts received by Horace have been (more than) returned with his poetic work by the latter, through a dyadic mechanism, complex, non-

linear, in a dynamic and circular relationship of alternation in debt between the patrons and Horace himself.

The results of the paper contain elements of strong novelty: if on the one hand, the outcomes of this paper would help scholars of Latin Literature to better understand the economic phenomena that, at least in part, have inspired and influenced, outlining his human and personal landscape, the life and art of Horace, at the very same time, indeed, noteworthy results emerge from a managerial perspective as well.

Strong is in fact the liaison between patronage, gift economy and corporate philanthropy.

First, as patronage enables, even if in a non-linear and multi-faceted modality, the development of an economic relationship, although not always immediate, between the actors involved, similarly corporate philanthropy induces relationships and connections set at fostering, for the benefit of the donor, positive results, be they economic or meta-economic, instant or later in time. The above is precisely the case of Augustus and Maecenas, who received by Horace, (long) after their gifts, celebration and immortality via his *ars poetica*.

The managerial implications are therefore evident, from the non-profit corporations (engaged from cultural projects to humanitarian efforts) up to some peculiar economic industries – for example, sports industries – where the economic return may not be the central element of the investment.

In this sense, the gift economy stands as a theoretical framework which, widely known in fields of research other than the managerial side, seems suited to it as well.

In particular, as in the gift economy, corporate philanthropy and corporate social responsibility actions express, among the subjects involved, an economic relationship of an elusive kind, punctual neither in time nor in space, but with elements of significant value for both of them: such a pattern of relationship, obviously, places serious intricacies on the conventional mechanisms of the economic analysis of the investments, which is generally constructed on precise, analytical and always measurable data of cash inflows and outflows.

In the case of corporate philanthropy, in fact, the results are not only uncertain but, frequently, challenging to be measured through the usual paradigm of monetarization.

Fruitful venues of future research could be addressed (i) to enlarge the spectrum of economic activities to be disentangled via the framework of gift economy and (ii) to develop in depth case studies involving specific programs of corporate social responsibility actions and philanthropy.

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THERE IS STILL HOPE FOR THE NON-CHARISMATIC: AN ALTERNATIVE MODE OF INTIMACY IN LEADER-FOLLOWER RELATIONSHIPS

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Abstract

“I share joys and sorrows with her. For me, intimacy is to feel like the other person feels whether in joy or sorrow. I identify with my manager, and I feel she identifies with me. I tell her something happy, and I feel she is happy for me. It’s a matter of feeling.” (An employee of a large bank describing her relationship with her direct manager)”

Recent leadership literature is acknowledging that today’s knowledge-based environments may require less individualistic and heroic leadership models and is moving towards more relational and post-heroic concepts of leadership (e.g., Fletcher, 2004), that focus on dynamic, interactive processes of influence and collaborative learning. In accordance with this trend, the current study proposes that intimate leader-follower relationships may significantly impact leadership processes and work outcomes. We focus on the construct of leader-follower intimacy. Workplace intimacy has been defined as: “a relationship or an interaction that takes place in the work context and is characterized by a sense of connectedness related to self-disclosure and the sharing of what is innermost with others, while experiencing a sense of the other as having an empathic perception, a depth of understanding, a real sensitivity to what matters, and a motivation to contribute to mutual well-being and to provide satisfaction” (Kark, 2011).

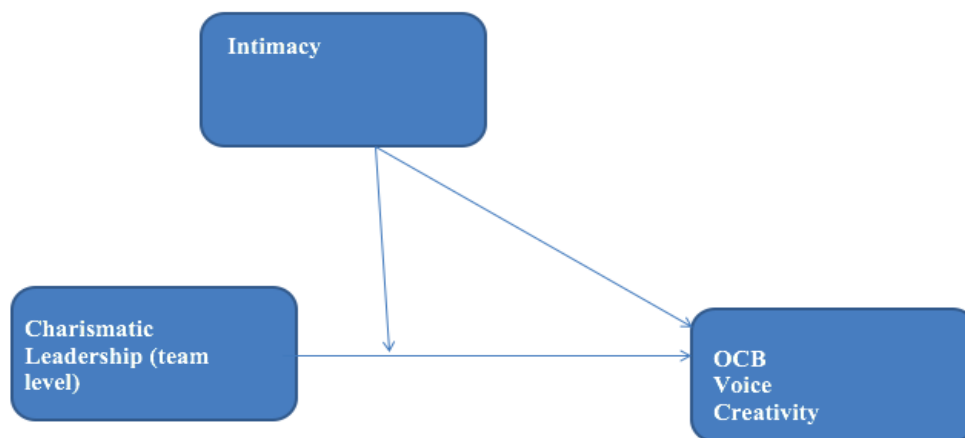
We theorize and show that intimate leader-follower relationships may compensate for lack of more traditional heroic leadership characteristics and behaviors, namely charisma, such that, when a leader lacks charisma high quality relations (e.g. intimate relationships) are likely to substitute the effects leader’s charisma has on follower’s performance (see Figure 1). Data collected from 45 medium level managers and 208 of their employees from a large municipality in Israel showed that charisma and intimate leader-follower relationships substitute each other in predicting in-role (creativity) and extra-role (voice and OCB) performance. These findings are discussed within a positive psychology framework, highlighting the role of relationships in leader-follower connections, and providing hope for

the non-charismatics. We will also provide a wider conceptual lens, exploring the omission of intimacy and close relationships from our current organizational theories and research and discuss the role of close and distant leadership relations, while suggesting future directions for the study of leadership and close relationships.

Keywords (up to 10): *Leadership, Intimacy, OCB, Creativity*

Track No: 35. Organizational Behavior Theories, Cases and Practice

Figure 1: Research Model



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AN UPDATE OF THE WORLDS OF WINE:S THE NEW WORLD AND EMERGING COUNTRIES INFLUENCE

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Abstract

This research differentiates the production, consumption, and export development path of all “worlds of wine” in the last half century. It presents an export analysis of the traditional Old World and New World, offering also a new characterization of the “worlds of wine”, splitting the New World into the Anglo-Saxon New World, the Latin New World, and the Newest New World. Furthermore, the research pays special attention to the paths of export expansion of Developed and Emerging wine producers. The article develops a descriptive statistical characterization of each “worlds of wine’s” industry and market and performs an historical analysis of the export insertion of these “worlds of wine” in the global wine trade. The findings provide lessons for both academics and practitioners of the experiences in the world’s trade of wine, while grouping the “worlds of wine” into this new and updated classification.

Key Words: Wine Exports, Worlds of Wine, Emerging Countries

Track No: 48 (Wine Business)

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INFLUENCING FACTORS OF RURAL CONSUMER-TO-CONSUMER ELECTRONIC COMMERCE IN CHINA

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Key words: *C2C e-commerce, rural e-commerce, purchase decisions, poverty reduction*

ABSTRACT:

So far, poor problems are still a global long period of time, reality and comprehensive question. Even in some developing countries, unbalanced economic development among regions leads to many people still in poverty. Most of poor people live in rural areas and engaged in agricultural products or operation. With the development of Internet, 4G communication technology, smart phone, and modern logistics, e-commerce develop very fast in recent years, and rural e-commerce become an important solution to reduce poverty. A merchant located Mengzi County, a frontier town of china, sold eighty thousand kilograms ginger within 24 hours in Pinduoduo, an e-commerce website, in December 17, 2018.

In recent 10 years, most online sales in china are B2B sale, however since 2015, which is seen as the first year of rural e-commerce, rural e-retail market has a rapid development. In recent 5 years, rural e-retail sales keeps the growth rate of over 30% each year, and sales have reached \$200 billion in 2018. Particularly, C2C e-commerce has been found to be more popular in china, and more than 80% online sales is C2C transaction. Due to the particularity of agricultural products, such as putrescible, not easy to preserve, difficult to quality evaluate, the purpose of this research is to evaluate the factors that affect agricultural products C2C e-commerce.

To ensure the content validity of the scales, we selected items from previous studies and adapted them according to objective reality. We invited 37 merchants to pretest the questionnaire, and after further amendment, we compile formal investigate questionnaire, which contains 13 influencing factors (variation, price, package, quality, customer relations, personalized service, e-commerce operation talents, degree of education, marketing budget, brand promotion, promotion tools, storage location, logistics infrastructure), and 3 evaluation indexes (sales, turnover, profit). we collected 520 valid questionnaires from e-seller on Taobao, which is the largest C2C e-commerce platform in china, via online questionnaires survey, face-to-face interview, and real sales data collection.

Through description analysis, validity and reliability analysis, factor analysis, correlation analysis, regression analysis, mode-based diagnosis, we established regression equation to estimate the influence factor for agricultural products C2C e-commerce. The equation is shown as $Y = -0.257 + 0.877F_1 + 0.291F_2$, which means factor F_1 is the most pronounced factor, which includes e-commerce operation talents, degree of education, marketing budget, promotion tools, storage location, and logistics infrastructure. Another factor F_2 , which includes variation, price, package, quality, and brand promotion, also has a certain influence but not decisive. During face-to-face interview, e-commerce merchants repeatedly emphasized e-commerce operation talents and promotion tools, which partially confirmed our conclusion.

DUAL-EARNER COUPLES' WORK HOUR ARRANGEMENTS AND PREFERENCES FOR REDUCED WORK HOURS - A COMPARATIVE PERSPECTIVE

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Keywords: *Dual-earner couples. Work hours, gender, comparative analysis, overwork, preferences, and overemployment*

Track No: 12

Abstract

Overemployment, or the preference for reduced work hours, is well-known to be associated with various social ramifications, but research on the determinants of workers' preference is scarce. Previous attempts at explaining work hour preferences have thus far focused mainly either on individual characteristics, such as career aspirations and endorsement of traditional gender roles, or on social policies. However, today's "typical" worker (female or male) is a member of a dual-earner household, and therefore a "time squeeze" is experienced as a household phenomenon, involving the conjoint circumstances and perceptions of both partners. This study conceptualizes "time squeeze" at the household level from a comparative perspective. I use the life course perspective, the paradigm of the social construction of gender, and scholarship on welfare policy to examine the relationships between dual-earner couples' work hour arrangements and men's and women's own preferences for reduced work hours, as well as their desire for their spouses' reduced work hours in 20 countries. Using the 2010 European Social Survey, I document a pervasive preference for reduced work hours, which is common to both men and women. Multilevel models indicate that, regardless of actual work hour arrangements, couples generally report preferences for working hours for themselves and their spouses that conform to a modified male breadwinner-female homemaker template. More specifically, the ideal couple-level working time arrangement comprises a husband who holds a full-time job but does not work long hours and a wife working shorter hours, either in a part-time or full-time job. In comparison to couples in social democratic countries, individuals in dual-earner couples in liberal and conservative countries experience greater "time squeeze". I

discuss the implications of these findings on individuals, couples, organizations, gender inequality and social policy.

INFLUENCE TACTICS IN SELF-MANAGED TEAMS: THEIR IMPACT ON TEAM PERFORMANCE OVER TIME

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***Keywords: Influence tactics, Self-managed teams, Team performance, Team development,
Longitudinal,***

Track No: 34, 35, 39

Introduction

Teams have become the primary unit of performance in organizations (Katzenbach & Smith, 2003; Salas, Goodwin, & Burke, 2009). Self-managed teams (SMTs) are a specific form of teams that have the authority and autonomy to organize their work and structure to best accomplish their goals. In SMTs, team members are of equal status, i.e., no single member has formal authority over any other team member, no formal manager is assigned to the team, and team members are highly interdependent (Hackman, 1986; Gerpott, Lehmann-Willenbrock, Voelpel & Van Vugt, 2019). Since SMTs are leaderless, and individual team members have no formal authority to influence the attitudes or behaviors of any other team member (Yukl, Chavez, & Seifert, 2005), team members use other sources of individual power to affect their peers, as for example, influence tactics. Influence tactics refer to the intentional ways in which a team member affect other team members to feel, think or behave in a desired manner (Elron & Vigoda, 2003; Kipnis, Schmidt, & Wilkinson, 1980). Specifically, a team member may influence others by being assertive or using pressure, building coalitions with other team members, bargaining or exchanging resources or benefits, or appealing upward to a higher organizational authority. Team members may also use ingratiation, i.e., influencing by praise or creating a good feeling, or use rational persuasion (Kipnis et al. 1980). In the current study, we suggest that the type of influence tactic that is mostly used by team members and the combination of tactics used by different team members

may have a crucial impact on team performance. Specifically, influence attempts within SMTs, as opposed to dyadic contexts, happen given team level constraints and thus, may be perceived differently by the individual. Additionally, within the team context, each of the team members strives to promote their own attitude or preferred behavior using their own influence tactics, resulting in a specific configuration of tactics used within the team, i.e. team-level influence tactics configuration. Finally, different influence tactics and configurations may have different effects on performance depending on the stage of the team life cycle.

With a longitudinal design and a sample of 75 self-managed teams, the current study examined the relationship between the proportion of team members using each influence tactic to a high degree and team performance at initial versus advanced stages of team development. We also examined the configurations of tactics that are associated with better team performance at initial versus advanced stages of team development. Results of regression and of the fuzzy set of the Qualitative Comparative Analysis (QCA, Ragin, 2000) demonstrated that at initial stages of team performance, a large proportion of team members using assertiveness to a high degree was detrimental to team performance. However, at more advanced stages of team performance, a large proportion of team members using ingratiation to a high degree was detrimental to team performance, while rationality was positively associated with team performance. At initial stages of the team life cycle, when team members struggle to find their place within the team, and interpersonal conflict is characteristic of team behavior, the use of a specific tactic (i.e. assertiveness) further harms the situation, but no specific tactics help the team to better cope with the situation and enhance performance. Yet, at advanced stages of team performance, it was more about a configuration of tactics in the team, which included a high use of rationality and low use of ingratiation that was associated with team performance. At the team development stage where the team is concerned with its performance, rational arguments can enhance team performance if they are not met with a high level of flattery and praise. In sum, by combining the literature on team development and influence tactics, the study suggests that at different stages of team development, different team level influence tactics are related to team performance. This advances the prevalent static focus of the influence tactics literature by developing a temporal account that considers the extent to which influence tactics have an impact on performance, as a dynamic process contingent upon the team life cycle.

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INTERNATIONAL STRATEGIC SOURCING FOR AN U.S. MNC

MAINTAINANCE REPAIR AND OPERATIONS

INTEGRATOR REQUEST FOR PROPOSAL PROCESS

Abstract

Through the years, multiple companies have adopted methods to evaluate their vendors to cut their bottom-line costs. Every company irrespective of their domains are aiming to increase their profitability. This profitability can be increased in two ways, firstly by increasing their sales. This is highly uncertain subject to market fluctuations and entry of endless competitors. Secondly, it is very important for a company needs to optimize its working process.

There are always areas or certain departments in a company that incurs a lot of cost. There are two types of cost that occurs in a company. Direct and Indirect costs. Identifying these areas and providing sourcing and procurement strategies to these companies have become one of the key responsibilities of the consultants working in procurement and supply chain management firms. This paper contains an in-depth study of the various aspects in Strategic Sourcing that includes Request For Proposal (RFP) preparation in alignment with the Business and Operations teams of the company and going out into the market with its business requirements, receiving the bids and the vendor's corresponding proposals, conducting a deeper analysis after receiving the responses, doing an extensive qualitative and quantitative evaluation followed by supplier shortlisting, preparation of negotiation strategy and rounds of negotiation and contract awarding. This is the essence of sustained competitiveness.

Keywords: *Strategic Sourcing, U.S International MNC, Integrator Model*

MRO integrator RFP process:

There are several categories that a company outsources like its logistics, IT, Financials, Energy and Utilities, Maintenance Repair and Operations (MRO) and many more.

Competence in the effective procurement needs a clear understanding of the supplier power for business success. The relationship defines the scope of strategic sourcing for sustained profits.

MRO (Maintenance, Repair and Operations) involves several products and services like mechanical, electrical, chemical, instrumentation, safety equipment used in several sectors like IT, Financial, Chemical and Utilities. (Faes and Matthyssens 2009) showed strategic sourcing adopted models that mapped the product portfolio matrix to the international market

dynamics & the strategic dynamic path related to the international product life cycle in the supply market.

Among the several models, it has been shown (Li and Amini 2012) by case studies that the integrator model is much superior to the single-sourcing model especially for the new product diffusion in international markets as the chances of supply chain disruption is minimized resulting in overall strategic profitability for any manufacturer/service provider.

There are several models that a company chooses to procure its MRO products and services.

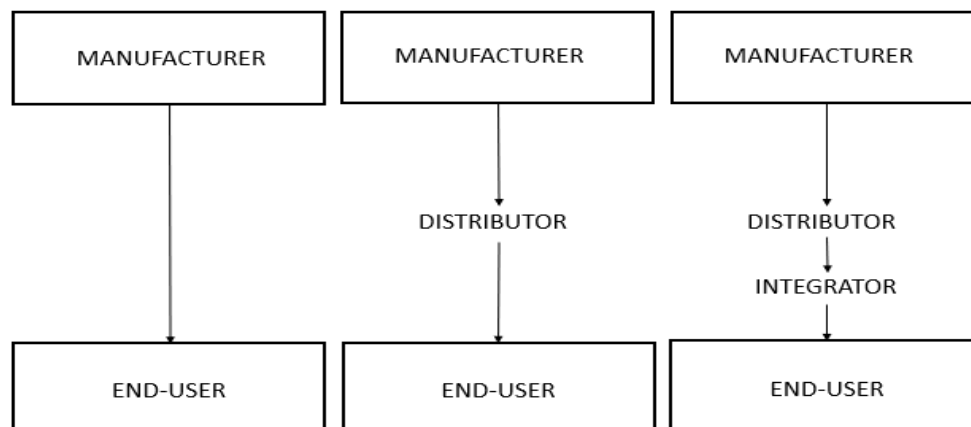
Manufacturer Model: Manufacturer directly quotes the manufacturing cost to the company.

There are no substitutes provided for the items unavailable.

Distributor Model: Distributors have a pool of manufacturers. A substitute for a product can be easily obtained and since the purchases are in bulk, we can expect price discounts.

Integrator Model: Used by companies to procure products as well as storeroom services, an Integrator Model is an ideal model for them. It will not only benefit the company on its product costs but will also have lower costs in its procurement, storeroom and warehouse services.

In North America, an integrator model is highly used by industries.



Models used by a company for procurement

This paper highlights the importance of an RFP scoring matrix in the recruiting process. Here every criteria is given a particular level of importance as a weight percentage. The scoring is done based on the differing operations at multiple locations and many more.

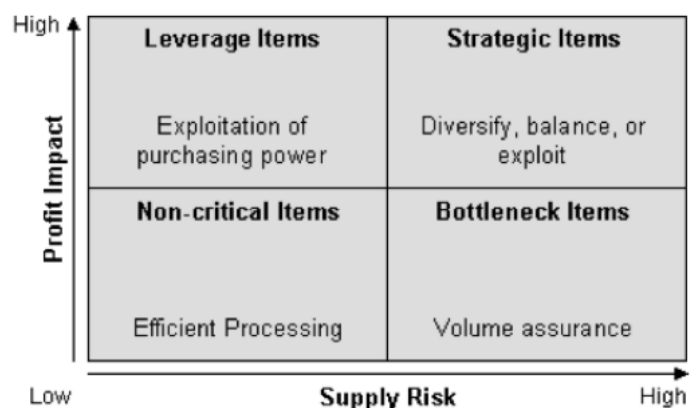
An RFP scoring matrix is prepared considering all the key criteria paramount for the company.

This quantitative analysis then looks at an intensive proposal evaluation that is carried out for all the suppliers, pricing analyzed by comparing it with baseline. A shortlisting of the best suppliers is done by considering the implementation fees, management fees & freight costs.

Innovators often are unable to obtain significant economic returns as a result of imitation from the owners of complementary assets. To provide sustained value it is vital to position the strategic suppliers with their requisite manufacturing and related capabilities. This integration and collaboration has vital implications in international trade policy and domestic economic policies (Teece 1986) Evidence from U.S firms suggest that knowledge strategic sourcing internationally looks at the technical diversity and similarity to negotiate their potential suppliers especially to overcome hurdles of fixed R&D cost. (Chung and Yeaple 2008).

Using a Request for Proposal (RFP) scoring matrix based on Kraljic's purchasing portfolio that looked at the strategic and leverage items in MRO.

The basic assumption is there is a difference in power and interdependence between supplier and buyer resulting in the choice of specific



strategy (Caniëls and Gelderman 2005). Strategic purchasers often use a mix of sourcing levers for the right tactical approach for their organization (Hesping and Schiele 2016). There are no simple standards as it requires critical thinking sophisticated analysis of various factors for a feasible supplier strategy (Gelderman and Van Weele 2003)

The methodology involved 5 integrators and the analysis like 80-20, outlier analysis and its importance based on the constraints faced by them. The negotiation strategy looked at pricing, management fee and OEM and freight costs to finalize the shortlisted suppliers.

In global sourcing handling various factors like finance, quality, risks, performance, partnerships, culture and communications in various trade regulatory environment is vital. Evaluation based on 'what if' scenario planning and negotiations based on company policy results in the profitable success of the multinational firm (Min 1994). The paper could identify a potential integrator that improved speed to market, productivity, effectiveness and cost-saving based on volume fluctuations handled for the client in the US.

The liability of foreignness to compete in the US market was reduced (Elango 2009). Location advantages and increased propensity of manufacturing in the US has encouraged FDI flows using the strategic variables of economies of scale and trade barriers (Hennart and Park 1994). Establishing embedded sourcing tie-up enhances the competitive capabilities as these bridges enhances the opportunities of the company (McEvily and Zaheer 1999).

The strategic tools used enhanced the performance of the global sourcing strategy in addition to the cost-saving methods. The HR process under study can be improved using digital technologies and robotic process automation. This was preliminarily studied in the research however the future needs to be further explored in details.

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DO HIGH-TECH EXITS IMPROVE A COUNTRY'S ECONOMY? THE CASE OF ISRAEL

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Abstract:

Israel's high-tech sector is considered very successful in the world, and one important part of this sector is the exits of start-up companies. A high-tech exit is when a small company develops software, and then the company is sold to a larger company or the company goes public in an IPO. These high-tech exits can generate large profits for investors in the start-up company, the founders of a start-up high-tech company and sometimes even the workers of a high-tech company, but do the exits significantly improve a country's economy? In this paper we will try to answer this question with regard to Israel's high-tech sector. In the paper we present a brief review of the development of Israel's high-tech sector and this review notes that the sector declined during the second *intifada* that began in October 2000. By 2005, the *intifada* had ebbed, and Israel's high-tech sector rebounded. This paper will study the relationship between the number of high-tech exits and the sale values of the high-tech exits with changes in Israel's GDP from 2005 through 2018. The paper presents an econometric test of this possible relationship, and the results of this test is that there seems to be relatively little connection between the high-tech exits and Israel's GDP. The paper ends with a discussion of the results and suggests some reasons why there might be a positive relationship between the high-tech exits and Israel's economy which is not captured by the data in the econometric test.

Keywords: *Israel's GDP, venture capital, start-up companies, software companies*

High-tech exits can generate large profits for investors in a start-up company, the founders of a start-up high-tech company and sometimes even the workers of a high-tech company, but do the exits significantly improve a country's economy? Or, to the phrase the question differently, does the money that investors of high-tech companies, the founders of the high-tech companies and workers of the high-tech company receive from an exit lead an economy to grow more?

In this paper we will examine these questions by focusing on Israel's high-tech sector. Israel's high tech sector is one of the most successful in the world. The Startup Genome site (<https://startupgenome.com>) ranks different areas in the world for best start up locations. In 2012, the Startup Genome site ranked Israel as being the second best location in the world for high tech start-up companies, in 2015 it ranked Israel as being the fifth best location in the world for high tech start-up companies, in 2017 it ranked Israel as being the sixth best location in the world for high tech start-up companies, and in 2019 it ranked Israel as being the sixth or seventh best location in the world for high tech start-up companies. Many of the high-tech start-up companies in Israel have had exits and then we can see what has been the effect of these high-tech exits on Israel's economy. While one effect might be how much taxes Israel's government collects from the exits, this is not the focus of this paper. Instead in this paper the goal is to examine whether the exits lead to or contribute to growth in Israel's economy. In order to answer this question, we shall present an econometric test of the relationship between the high-tech exits and the changes in Israel's GDP. We will start with a brief a historical review of the development of Israel's high-tech sector, and then present data on the number of high-tech exits per year and the sale value of the exits of high-tech start-up companies in Israel. After presenting this review and data, we will show the econometric results, and the paper ends with a discussion of these results.

Review of developments in Israel's high tech sector

A high-tech exit is when a small company develops software to provide solutions to some perceived problem in the world, and then the company is sold to a larger company or the company goes public in an IPO (initial public offering). The first Israeli high-tech startup was founded by Uzia Galil in 1962 when he founded Elron, which initially developed medical technology. In 1969, Elron formed a subsidiary called Elscint, which also made medical technology, and in 1972 Elscint was the first Israeli company to have an IPO on the NASDAQ.

In the 1990s, the high-tech sector throughout the world took off with the development of cellular phones and the internet. In 1996, five Israelis founded the company Mirabilis to help people communicate on the internet through the ICQ messaging program, and the company was sold to America Online in June 1998 for 407 million dollars, which at that time was the highest price paid for an Israeli high tech start-up company. Two years later, in May 2000, Lucent Technologies paid 4.8 billion dollars (based on stock prices at the time of the sale) for Chromatis Networks, which had been founded by two Israelis, Orni Petrushka and

Rafi Gidron, in 1997. A few months later, in October 2000, the second *intifada* broke out in Israel, and this caused Israel's high tech sector and Israel's economy to decline (Schein, 2003).

While it is not clear exactly when the second *intifada* ended, for sure by 2005 it started to ebb, and this led to the return of the growth of the high-tech sector in Israel. In 2005, the *Economist* noted, "This week's initial public offering (IPO) by Saifun, an Israeli chip-design firm, on the NASDAQ exchange was one of the biggest flotations by an Israeli company in America for years." In the ensuing years, there would be a steady stream of exits of Israeli high-tech start-up companies. For example, in 2006, Ehud Shabtai, Amir Shinar and Uri Levine founded Waze to improve the GPS navigational systems available at that time to help people shorten their driving times, and in 2013 the company was sold for almost a billion dollars to Google. Another example is that in 2017, Intel bought the Israeli high-tech start-up company Mobileye, which had been founded in 1999 and makes driver assistance systems, for 15.2 billion USD. This transaction set a record for the largest high-tech exit in Israel's history. Below is a list of the ten largest high-tech exits in Israel.

Company	Buyer	Year founded	Value of sale in USD	Year of sale
Mobileye	Intel	1999	15.2 bn	2017
Mellanox	Nvidia	1999	6.9 bn	2019
NDS	Cisco	1988	5 bn	2012
Chromatis	Lucent	1997	4.8 bn	2000
Orbotech	KLA-Tencor	1981	3.4 bn	2018
Imperva	Thoma Bravo	2002	2.1 bn	2018
Mazor Robotics	Medtronic	2001	1.65 bn	2018
Waze	Google	2006	1.3 bn	2013
NeuroDerm	Mitsubishi Tanabe Pharma	2003	1.1 bn	2017
Trusteer	IBM	2006	1 bn	2013

We now will present data on the overall number of high-tech exits from 2005 through 2018 and the value of these exits. Afterwards, we will present the econometric results on the relationship between the high-tech exits and Israel's GDP.

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GLOBAL OUTREACH FOR INDIAN SMES

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Keywords : International Business, Export Procedures, SMEs, Emerging Economy, Global Market, Internationalization, Strategic Issues, Process Based Restriction

With every passing day the world is shrinking due to better global connectivity. Businesses around the globe are expanding their horizon and advancing their activities to other countries. India is no exception to this global phenomenon. All the emerging economies are trying to gain the king's share in the world of International Business.

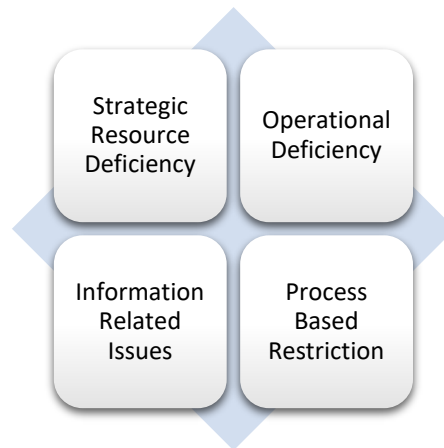
Indian export sector has a vision of hitting the target of \$ 900 million by the year 2020¹. Annual report of Government of India Ministry of Micro, Small and Medium Enterprises (2017-18) states that Micro, Small and Medium Enterprise contributed considerably through organizational developments to enhancing entrepreneurial efforts. MSMEs are expanding their domain across economic industries, creating a variety of products and services to satisfy national and international market requirements.

The report also suggests that there are 633.92 lakh enterprises in this sector, out of which only 4000 are large enterprises. MSME sector accounts for 40% of the total export of the country.

There are four broad categories through which SMEs can get involved in International Business, these are, exports, contractual agreements, production investment and strategic alliances. This research paper will majorly focus on the export process and the various compliance stages, challenges faced by SMEs in these processes, government aid to facilitate the process and recommendation from authors' perspective for reducing challenges and increasing global outreach.

If we analyse the major challenges faced by SMEs in India in their journey towards globalization, it can be categorized into four broad categories.

¹ <https://www.exportersindia.com>



The Research methodology used for the collection of data and analysis comprises of both primary and secondary research.

Primary research was conducted by surveying number of SMEs through an online form where questions were posted related to the correct sequence of the export process, Payment Process, Quality check and to check the awareness of government aids for SMEs for internationalization. Questionnaire is designed to access awareness among SMEs about the export process and Government initiatives available to assist them, and common challenges faced by them.

Secondary research was done through analysing data and information presented in a number of research papers, globally published reports and news articles.

SME sector needs to adapt to Go Global concept as it is no more a choice but a survival tactic to have steady business growth. Internationalization will open up large markets for goods and services, help in mitigating risk, and earning higher profits.

The authors suggest major recommendation such as starting awareness programs about the existence of such initiatives, conducting City level Internationalization Training Programs where SMEs should be informed about the process and the approach, organizing market development assistance schemes where SMEs can easily create a market for their goods and services.

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NEED OF SUSTAINABLE HUMAN RESOURCE MANAGEMENT PRACTICES IN CONSTRUCTION INDUSTRY FOR PROJECT EFFICIENCY AND CLIENT SATISFACTION

Construction industry is a labour intensive industry with a highly dynamic nature, as every project is unique and has different challenges at every stage. Considering the Indian scenario, it is the second largest sector which employs a very large workforce and thus contributes significantly to the socio-economic development of the country. This employment is highly diverse and versatile in nature, including skilled labor, unskilled labor, engineers, architects, consultant etc. Although, construction sector uses relatively more manpower in its business activities as compared to other industries and human resources are acknowledged as one of its most vital resources, the management of human resources in this sector is still inadequate and unsatisfactory (Raiden & Dainty 2006). The industry concurrently faces a lot of challenges in terms of cost and schedule overruns, productivity, quality and efficiency issues etc. There is a need for implementation of sustainable Human Resource Management practices in this sector, to achieve a balanced growth in profitability, project efficiency and long-term client satisfaction.

Sustainable HRM is concerned with the use of conventional HRM practices in such a way so as to utilize and develop human and social capital within the organization. This approach explicitly recognizes the impact people management policies have, on both human and financial outcomes. An emphasis of Sustainable Human Resource Management is preserving the productivity and retention of employees so that the firm can achieve organizational goals (Ehnert I. & Harry W., 2012), and hence, a sustainability approach seems to offer a valid solution to the various challenges of construction industry.

The main objective of the study is to formulate antecedents of sustainable human resource management practices in construction industry and develop the dimensions of sustainable HRM in construction. The aim is also to find out the impact of sustainable HRM on project efficiency and customer satisfaction. Based on the sustainable HRM factors derived from literature review and considering the objectives of the study, a combination of, questionnaire survey and expert interviews were used as research methods for carrying out this study. A questionnaire survey using the five point Likert scale was developed and floated to middle and top management employees from planning and execution teams of large scale construction organizations in India and 50 valid responses were received at the first stage. Apart from this,

expert interviews were conducted with 15 construction professionals. The data thus received was analyzed using SPSS. Using the factor analysis, the sustainable HRM practices factors were grouped into six main categories, i.e. 1.Career Development, 2.Work-Life Balance, 3.Incentives and Appraisal, 4.Job Satisfaction and Motivation, 5.Domain Knowledge and Value Creation, 6.Leadership Communication and Belongingness Initiatives. These six categories further had total 20 major sub factors. The questions were grouped into two main sections: i) questions related to employee perceptions about sustainable HRM practices and their importance in project efficiency and client satisfaction, ii) questions related to current status of implementation of sustainable HRM practices in their respective organizations. The results reveal that better work environment, rewards and incentives, belongingness initiatives were rated as higher (Mean score more than 4) in the first section, suggesting that this motivates or engages employees more; whereas in the second section of implementation questions, absence of effective appraisal mechanisms, employee feedback and job security were rated as the lowest (Mean score around 3) asserting the absence of these factors in the surveyed organizations.

This study based on the results proposes a framework of sustainable HRM practices for construction sector organizations in order to improve the existing HRM policies and attain the aforesaid sustainable HRM goals. The sustainable HRM framework would enable organizations to retain high potential employees and also help them to attract new talent by achieving the brand status of employer of the choice. Apart from this, more importantly it will help them to attain profitability, project efficiency and long-term client satisfaction.

This is a working paper and in the future scope of the study, the data would be further analyzed using increased sample size and dividing them into categories like age, experience and the nature of the organization. Also, the proposed model would be validated through expert interviews.

Keywords : Sustainable Human Resource Management, , Construction Industry, Project Efficiency, Client Satisfaction

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ONLINE SHOPPING BEHAVIOR OF MILLENNIALS: ANALYZING EFFECT OF BEHAVIORAL AND DEMOGRAPHIC CHARACTERISTICS

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Keywords: Online Shopping, Millennials, Behavioral and Demographic Characteristics

INTRODUCTION

According to the Deloitte and Retailers Association of India (RAI) report (2018), India is home to the largest millennial population in the world. Further as per the report, born between 1980s and 2000, Indian Millennials are at over 440 million and account for 34 percent of the total national population. In fact, the online retail market in India which was at 3 percent in the year 2017 and is expected to occupy 7 percent share of the total Indian retail market by year 2021, is majorly driven by the millennials shift of purchasing preferences from traditional retail to online shopping channels (Deloitte and RAI report, 2018). Thus, as millennials emerge as the key drivers of online retail market's growth, in India, it is important to study the online shopping behavior of millennials.

The extant literature in context to online shopping behavior of millennials revealed various themes including: profiles and preferences (Loubeau et al., 2011); generation X versus generation Y (Dhanapal et al., 2015; Lissitsa and Kol, 2016); how millennials decide what to buy (Hall et al., 2017); online fashion shopping (Ladhari et al., 2019) and so on. However, it was observed that there were very few studies from Indian millennials' online shopping perspective. Hence it is essential to expand the existing literature in the area of online shopping behaviour targeting millennials. Thus, the main purpose of this study is to empirically examine the effect of millennials' behavioral and demographic characteristics on their attitude towards online shopping behavior. In this study, theory of planned behavior (TPB) framework (Ajzen, 1991) is used as a base model, for theoretical grounding.

RESEARCH METHODOLOGY

A structured questionnaire was physically administered to the college going millennials throughout Mumbai, India. Customer intercept survey method was followed to collect the data which resulted into more than one thousand completed questionnaires. Multivariate data analysis techniques were used to test the hypotheses.

CONCLUSION

Out of the eleven behavioral and ten demographic characteristics examined in this study, some of them namely: accommodation type, online shopping frequency, loyalty status, shopping for friends were observed to have a positive effect on millennials' attitude towards online shopping behavior.

MANAGERIAL IMPLICATIONS

As millennials' form the key target segment in context to online retail market, the results of this study will help the online retail marketers in building effective marketing strategies in order to sustain themselves in this highly competitive market.

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RELATIONSHIP BETWEEN GOLD PRICE AND STOCK MARKETS – A COMPARATIVE ANALYSIS OF SELECT ECONOMIES

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Keywords (up to 10): Gold price; Stock markets; Correlation and Multiple Regression ; Jarque-Bera test; Augmented Dickey-Fuller test; Johnson Co-integration test; Granger Causality test.

Track No: 13 Economics

Abstract

The study in the field of financial markets across the globe with respect to comprehensive gamut of macro-economic factors and financial variables is a widely research topic to be written about by many researchers in the past couple of years. Past pragmatic research divulge that as soon as financial de-regulation process occurs in a country; the stock market indices become responsive to both internal and outward factors to the country and one such factor is Gold Price. The gold market is global and is traded across in all time zones. Gold is an exceptionally liquid but also a sparse asset. It has the under stated roles to play in a portfolio. It provides long term- returns and boosts overall performance of a portfolio. A considerable economic literature has been devoted to explore the long-term impact of gold prices on macroeconomic variables. A number of country specific studies have examined the relationship between gold prices and stock market indexes.

This research attempts to understand the relation of gold prices with stock indices of various developed and developing economies. The study also helps in understanding and establishing whether the relation of the gold prices with the indices in the long run or not. This study

analyses 10 years (2007 -2018) data of gold prices and Stock Indices collected for the countries under study i.e. USA, Japan, UK, Canada, India, Indonesia, Thailand and South Africa. The information obtained from various appropriate databases including World Gold Council (WGC) database and Investing.com.

From the Trend Line indicating annual price movement in last 10 years in JPY From the Line Graphs, we observe that in 2008-09, the stock market price return was very high in comparison to Gold price of USA stock market. Further in 2009-11 gold price and stock price returns were same. But In 2011-13, gold price returns were high. Again after 2013, stock price returns were high for US market. For the Countries Japan, India, Indonesia and Thailand, Gold price returns are very high in comparison to Stock price returns whereas the countries UK, Canada and South Africa have very high stock price returns. Average Gold price returns of the South Africa are very high (0.88%) followed by India (0.797%). United Kingdom average stock price returns are very low (.057%). Next, we had applied the Jarque-Bera test to check the normality. We found that Gold Price returns series for the Canada, India, Thailand Indonesia, and South Africa are not normally distributed but for UK and US Gold Price returns series are normally distributed. On the other side, stock price returns series are not normally distributed for all the countries. Augmented Dickey-Fuller test has been applied on all the series, we found that Gold price return series and stock price return series of all the countries under this study are stationary at first level. The correlation between stock price return series and gold price return series for all the countries are low degree negative correlation except for Japan. Japan stock price returns and gold price returns have very low degree positive relationship. Since all the series are stationary at first level co-integration test could be employed between the gold price series and stock price series of all the countries. In order to find a lag length between stock price return and gold price return series, we used the Akaike information criteria to determine the appropriate lags. Between Gold price return and stock price return the optimal lag length for Canada, Indonesia and Thailand was found 8, 4, and 3 respectively. Whereas for other countries the optimal lag length for both the market was found 1. Further the outcomes of the Johnson Co-integration method reveals that there is evidence for co-integrating vectors between the stock market series and gold price series for all the countries. Hence, we have established that there is long haul association within equity returns of gold prices and stock prices of all the countries in the considered time period. Next, we employed the pairwise test of Granger Causality to know the identification of causality and direction between the pair of variables. The results exhibited the unidirectional causality between Gold price returns and stock price

returns for the Canada, India, Indonesia, Japan and South Africa at 5% significance level. For UK and US gold and stock market have no long term relationship.

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KEY INFLUENCERS DRIVING LUXURY EXPERIENCE FOR INDIAN MILLENNIALS – IT’S ALL BECAUSE I AM WORTHY OF IT!

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Keywords: *Luxury market, Theory of planned behavior, Drivers of purchase intention, Preference of product categories, Millennial consumers, Emerging markets*

Track No: 29 (Marketing)

“I think best in a hot bath, with my head tilted back and my feet up high.” These are the words of the famous English novelist, Elizabeth Jane Howard when asked to comment on the word luxury. While the term luxury has different connotations for different people, associations of premium pricing, high quality, rarity, craftsmanship, exclusivity and heritage (Heine, 2010, Phau and Prendergast, 2000) and intangible benefits like symbolic needs and social status (Wiedmann et al., 2007) define it. The definition of luxury has moved beyond handbags, furs and premium hotels and is no longer restricted to an exclusive set of consumers. The millennial consumers (individuals born between 1980 and 1995, (Howe & Strauss, 2000) show distinct characteristics from the other cohorts and are being studied by marketers since traditional selling points no longer work with this group. As a group, millennial are less interested in what others do and are more likely to be associated with brands which they perceive as authentic and purposeful (Primo, 2018) . A proliferation of luxury brands across hotels, malls and online sites over the last decade (Narang, 2011, Kapoor 2010) coupled with a millennial cohort wanting to experience the latest in fashion, technology and travel due to Netflix and Amazon Prime is resulting in growing interest in luxury brands. Thus, it becomes imperative to identify the significant factors that will influence millennial consumer’s intention to purchase luxury products and services in emerging economies like India. Most of the previous studies have focused on developed countries with fewer studies focusing on emerging economies and that too millennial consumer. Existing frameworks like theory of planned behavior (Ajzen, 1991), or Dubois & Laurent’s (1994) cognitive and affective dimensions to understand disposition towards luxury products have been studied.

However the authors believe that the millennial consumers are very different from the previous generations and hence their underlying motivations and behaviors could be driven by factors not previously studied especially in the context of luxury goods. Hence this study focuses on extending the theory of planned behavior.

The present study was conducted in two phases. In the first phase the authors conducted qualitative research among 25 owners of luxury products. Using TPB (Ajzen, 1991) as an underlying framework for the discussion guide, the study unraveled new constructs namely self-reward, knowledge of product and self-identity. These constructs were then incorporated in the existing TPB framework to develop a new model which was then tested and validated on a sample size of 175 using a quantitative study. The respondents were in the age group of 20-35 years and showed an intention to purchase/experience a luxury good or service in the next one year. A Confirmatory Factor Analysis (CFA) using AMOS 20 was conducted to test the validity of the six constructs (existing constructs attitude, subjective norms, perceived behavioral control from TPB and new constructs self-identity, knowledge and self-reward). The final CFA model demonstrated an acceptable overall fit with following indices ($\chi^2/df = 1.88$; $\chi^2/df \leq 2.0$ (or 3.0 or even 5.0) considered acceptable, CFI= 0.903, CFI>0.9 considered average, >0.95 considered good, GFI = 0.88; GFI >0.90 considered good, RMSEA = 0.07; RMSEA \leq 0.08 considered good) (Hair,1998). A structural model with the six exogenous constructs and one endogenous construct (intention to purchase luxury product/service) revealed that knowledge about luxury products, self-reward for accomplishments and perceived behavioral control were the significant factors that drive intention to purchase luxury products/service while self-identity, attitude and subjective norms are insignificant. This research highlights that millennial in emerging economies do not crave to impress others or alleviate their status by associating themselves with luxury brands. Rather their reason for purchasing luxury brands is more as a reward for their hard work. Luxury brands must depart from their traditional selling points of celebrities and status appeal and incorporate recognition for job done well and self-reward as part of their overall communication strategy.

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“CHALLENGES FACED BY BUSINESS SCHOOL STUDENTS IN IMPLEMENTING BUSINESS THEORIES PRACTICED GLOBALLY IN THEIR RESPECTIVE DOMAINS”

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Track no: 5 Conflict Management, 6 - Communication and 29 – Learning and Teaching

Keywords: Learning, Conflict, Workplace, Teaching, Application

Abstract:

In India, management students learn various business theories practiced globally. They use them at their workplaces and in managing big projects. However, they are faced with certain challenges in executing the theoretical ideas. There are likely scenarios of conflict between teams in implementing the concepts learned. The researcher conceptualized the research while teaching Strategic Management at various business schools. The students were asked to share their work experiences and the strengths, weaknesses, opportunities and threats they faced at their respective workplaces. Based on feedback from the students, the investigator conceived to conduct a research on the topic, “Challenges faced by Business School students in implementing business theories practiced globally in their respective domains”. Subsequently, an intervention was planned with a pre-test conducted including self made tools i.e. games and activities, as a teaching methodology. These were targeted for understanding the conflicts faced by the students, in their communication with their colleagues and the pre-test confirmed the same. The researcher used applications of the two theories viz, “SWOC Analysis, by Albert Humphrey and PEST Analysis, by Francis Aguilar”, which resulted in data collection. After intervention, the post tests results highlighted the effects of the intervention. The interpretation was done with the help of appropriate data analysis tools, using statistical methods that derived whether the objective of the study conducted was achieved. The conclusions portrayed the effect of the interventions on management of conflicts vis-à-vis communication.

WE HAVE A RESONATING STORY TO TELL: ANALYZING ALUMNI (PAST CUSTOMERS) AS ADVOCATES OF HIGHER EDUCATION BRANDS THROUGH THEIR LIVED EXPERIENCES

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***Keywords: Alumni as Past Customers, Brand Resonance, Brand Storytelling, Lived
Experiences***

Track No: 29 (Marketing)

Extended abstract

Higher education brands are no longer immune to competitive forces and market dynamics thereby making it imperative for universities to focus on developing sustainable branding strategies (Chapleo, 2015; Pinar et.al, 2011). Having a differentiated higher education brand helps attract the best talent from the pool of academicians and prospective students (Chapleo,2010 ; Pinar et al.,2011). While it is seen that most of the universities focus their attention on prospective candidates (customers), alumni (past customers) who have undergone the education journey are equally important stakeholders for developing the educational brand. The brand resonance model states that brand building can be achieved through two routes: rational route, which leads from brand performance to consumer judgments, and emotional route, which relates brand imagery to consumer feelings (Keller,2005). Studies have proved that emotional route to brand building can be further strengthened using story telling approach as opposed to merely stating facts and figures (Sammer 2015). One aspect of storytelling could be the sharing of lived experiences of alumni (past customers). The best stories would come only if the alumni have strong resonance and are willing to come back and share their obstacles, struggles and success at their alma mater.

Hence the present study focused on analyzing which factors drive resonance among alumni motivating them to share positive experiences regarding their alma mater. Keller's CBBE model was used to adapt the brand resonance model for the education sector. The outcome variable for the study was *"I feel motivated to share my lived experiences at my Alma Mater whenever I get the opportunity"*. A combination of judgment sampling and convenience sampling was used whereby alumni who were actively involved in the ongoing alumni activities were initially contacted and through them other alumni were contacted. The final sample size was 324. The 19 items that measured behavioral loyalty, attitudinal attachment, sense of community and active engagement were tested through AMOS 20 for Confirmatory Factor Analysis (CFA). The final CFA model demonstrated an acceptable overall fit with following indices ($\chi^2/df = 2.47$; $\chi^2/df \leq 2.0$ (or 3.0 or even 5.0) considered acceptable, CFI= 0.92, CFI>0.9 considered average, >0.95 considered good, GFI = 0.90; GFI >0.90 considered good, RMSEA = 0.052; RMSEA \leq 0.068 considered good) (Hair et.al (1998). A structural equation model with the four exogenous constructs and one endogenous construct (sharing of lived experiences) was conducted. Behavioral loyalty was an insignificant factor of resonance, however this was not surprising since loyalty is defined as willingness to rebuy or repatronise and in the context of education brands, once the education journey is complete, chances of coming back to the alma mater is rare. Sense of community was also an insignificant factor in driving resonance indicating that while alumni may be connected through virtual communities, this connection is more superficial and in no way results in long term connection with the alma mater. Attitudinal attachment was a significant factor which suggests that only when alumni view the alma mater as something 'special' does it result in their willingness to share lived experiences. The seeds of attachment begin from the first day of the education process itself. While attachment is an independent concept, it has a high correlation with satisfaction, commitment and trust (Thomson, 2006; Mugge et.al 2010) and education brands should ensure that there is no gap in the service expectation and delivery during the education process else it would result in distrust thereby reducing attachment. Active engagement is the main driver of sharing of experiences and most definitions include a psychological element that goes beyond consumption and purchase (Brodie et.al, 2013; Hollebeek's 2011) resulting in intense participation. Engagement behaviors among alumni is not driven by the alumni community, rather consistent service delivery across various interactions before, during and post completion of education creates attachment resulting in higher participation of all aspects of the alma mater.

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RELATIONSHIP OF COMMUNICATION STYLES AND TEAM TASK ROLES

Teams are made up of individuals who have a shared goal, a common objective, or similar mission and they work together to achieve it (Hackman, 1987) and for this they engage in behaviors aimed towards contributing to and fulfilling their team's task responsibilities. As each team member contributes to team work for the process of team building, an investigation and identification of behaviors contributing to team effectiveness. is an important one. The concept of Team Roles is integral to getting the team building process right. Behavior of the team members that is observed in a team generally has a tendency to fall into clear and discernible patterns. Each team member displays a blend of role preferences rather than a clear and distinct team role type. An awareness of such dynamics is useful for organisations for team building for fulfilling various tasks and goals. Communication styles of team members contribute of effective teamwork and communication is the foundation of team collaboration as team members need to constantly interact and exchange information for completing their tasks in their own unique style of communication. The present study investigates the relationship of communication styles of Team members with the Team task roles adopted by them. The study attempts to understand the nature of an individual 's communication styles that influence or are influenced by the task roles that team members adopt

Theoretical background

Team Task Roles

A team role is goal and situation specific behaviour displayed by a person (Stewart et al.,1999, 2005) and link individual team member characteristics and team effectiveness. Research has studied the relation of individual personality and individual's adoption of informal roles (Blumberg, 2001; Stewart et al., 2005, Mumford et al., 2008) and characteristic displays of thought and behavior (Funder, 2001) and this is an efficient way to predict which team role an individual is likely to adopt. The Mumford et al. (2006) taxonomy incorporates all the roles detailed in the different taxonomies published earlier and identified ten distinct roles and organised them into three classifications that are task, social, and boundary-spanning.

Task roles in teams contribute carrying out the team work to fulfil team's objective (Mumford et al, 2006) and include Creator, Critic, Contractor, Contributor, Completer roles that display behaviors related to realisation of the team's task objectives. The creator proposes original

and/or innovative solutions with a fresh perspective to team's task-related activities and problems. The role of the critic covers behaviors involving questioning and commenting the way team is handling task responsibilities and coordinating and organizing information for meeting objectives. The contractor role displays organization and coordination related behaviour for team activities. The contributor brings in unique information or expertise while the completer ensures that the team task responsibilities are completed.

Communication Styles

As Communication styles are an expression of one's personality, they play an important role in personal relations (De Vries et al, 2009). Communication style refers to a "meta-message" that is a way of reflecting on how individuals convey and interpret a verbal message (Gudykunst et al, 1988). The communication styles of individual team members may be uniquely associated with their personalities and different communication style models have been developed and presented by different studies (Mitchel's and Winick's Colour Model, 2006; DeBakey's Adaptive Matrice, 2007; De Vries et al. (2009). The Lexical approach followed by De Vries et al. (2009) helps to identify the content and the different dimensions in communication styles and the unique way in which each individual sends paraverbal, nonverbal and verbal signals in social interactions. Communication style is a "characteristic way a person sends verbal, paraverbal, and nonverbal signals in social interactions" (De Vries, Bakker-Pieper, et al., 2009,)

Purpose – The present study involves the individual communication styles of team members and Team Task roles adopted by them while handling team responsibilities. This study's aim is to investigate the relationship between Communication Styles and Team task Roles of team members.

The research question that guided our research was: -

- What is the relationship between communication styles and team task roles in work teams?

The variables under study are:

Team Task Roles which include the roles adopted by the team members while discharging their team task responsibilities. Each role displays distinct characteristic behaviours.

- Creator is defined as one who creates, inspires and acts as a visionary in team tasks.
- Critic is the team member who continuously analyses and questions and seeks perfection

- Contractor is a focused energetic and persistent team member
- Contributor is a skilled specialist expert prone to self-promotion
- Completer is one who is a conscientious, responsible, meticulous finisher of team tasks

Communication Styles is the manner of giving and receiving information in a unique individual way in different situations.

- *Expressive* includes expressiveness and the facets of this style are dominant, humorous, informal and talkative
- *Precise* is how precisely one communicates and the facets are thoughtful, concise, structured, substantive.
- *Verbally Aggressive* relates to verbal aggressiveness in communication and includes facets such as authoritarian, angry, harsh and supportive.
- *Questioning* **includes** to how much questioning one is with facets like argumentative, philosophical, unconventional and inquisitive.
- *Emotional* includes use of emotional style with facets like worrisome, defensive, tense, and sentimental.
- *Impression Focused* includes facets of charm, inscrutability, concealing behavior and flattering communication styles to make an impression ad/or manipulating impressions.

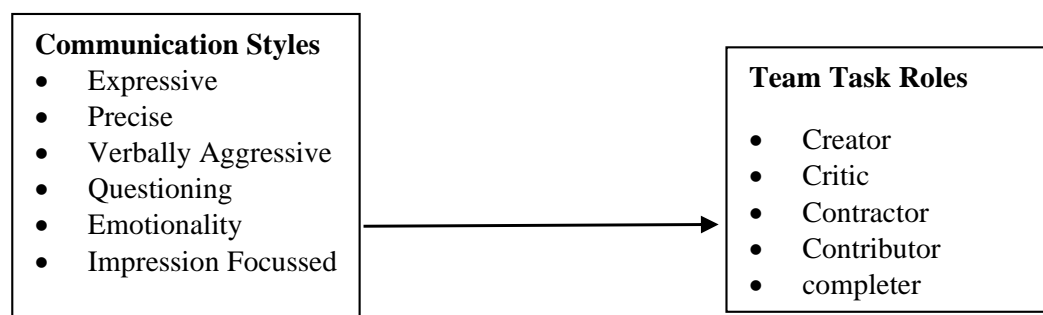
Proposition

- Communication style of team members will influence the team task role adopted by the Team members.

Hypotheses

- Ho There is no relationship between Communication Style and Team Task Role
- H1 The Communication Style will influence Team Task Role

Research Model (Figure 1)



Methodology

The researchers attempted to see if certain different communication styles were adopted by managers in different Team Task Roles. The researchers measured task roles and team member communication styles through a self-report questionnaire. Data was captured from managers working in various teams in different organizations and industry sectors. Individual Team member role behaviour was measured by Team Task Role (TTR) scale (Karve et al , Unpublished) along with the dimensions of communication styles as outlined by the *Communication Styles Inventory* (CSI), (De Vries et al, 2009) which distinguishes between six communication behavior dimensions of Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness. The researchers used a six-point Likert type scale (with 1 = strongly disagree and 6 = strongly agree) as it normally gives a higher discrimination and reliability values as compared to Likert's scale 5 points (Chomeya, 2010).

To investigate the relationship between two quantitative variables the most commonly used techniques are Correlation and linear regression, that indicate both the direction and strength of relationship. The team task roles (Creator, Critic, contractor, contributor and completer) were studied with relation to the six communication styles (expressiveness, preciseness, verbally expressive, questioning, emotional and impression focussed) displayed by the managers to understand which communication style was most likely to be associated with which task roles. The data was analysed to understand the relationship between team task roles and communication styles by using appropriate statistical tools like SPSS.

Analysis and Results

In this paper the researchers have done correlation and intercorrelation analysis within and between variables. All communication styles and team task roles show a significant relationship in the correlation. The regression analysis shows R^2 value with all team task roles as dependent variable (creator (.565***), critic (.556***), contactor (.531***), contributor (.458***)) and completer (.467***)) and indicates that all team task roles are influenced by all six communication styles i.e. expressiveness, preciseness, verbal aggressiveness, questioningness, emotionality and impression focussed.

Conclusions and contributions

These results indicate that in different team task roles while handling task responsibilities it is important for team members to have expressive, precise, emotional or questioning communication style as it more effective while handling task responsibilities. Team members with communication styles that are verbally aggressive and /or with impression focussed show inverse relation to all team task roles indicating with verbally aggressive and impression manipulative communication styles team work is not successful in interdependent task situations.

There can be many practical applications of the understanding from results of this study particularly for team member selection, team formation and employee development. Organizations could focus on developing such performing behaviors through training interventions that may be associated with effective communication styles and team task roles to ensure high team effectiveness.

Suggestions and Future Directions

Further research may look at other team roles like boundary and social roles and observe the communication styles with these roles taken by team members while handling different team tasks. Further research may also try and observe the role of the different task types with all ten team roles.

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SOCIAL MEDIA ADVERTISING: CONSUMER PERCEPTION AND ETHICAL ISSUES

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Keywords: Online Marketing, Social Media, Personalized Ads, Consumer Behaviour, Ethics

Track Number: 30

ABSTRACT

The paradigm shift from offline to online retailing totally changed the way marketers and advertisers understand consumers and their purchasing behaviour. About 39.1% of the total global advertisement revenue is derived from the use of digital technologies as recorded in 2017. It is forecasted that this figure would be as high as 49.6% of the total advertisement spend in the year 2021 (Mpinganjira and Maduku, 2018). The digital advertising market in India is expected to touch USD 25,500 crore by 2020, at a compounded annual growth rate (CAGR) of 33.5% [1].

Marketers have been utilizing social media for enhanced customer reach by developing targeted advertisements based on the psychometric profiling of the users. Hypertargeting is achievable by employing analysis of the psychometric profiling under the pretext of utilizing “information” provided by the users, though it seems, that “misinformation” too is valuable for curation of such advertisements (Bay, 2018). Thus, trivial information of the customers obtained under privacy control by leading social media websites/applications, are employed to segment consumers and display them with the most relatable ads. This intrusion of privacy of the customer raises serious questions regarding the ethicality of this integrated marketing model.

The prime objective of this paper is to understand how customers perceive these personalized ads on different social media platforms (Facebook and Instagram). The paper further analyses the ethicality of these personalized ads. An online survey tool was employed to gather information from 200 respondents in India.

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EXPLORING THE EFFECTS OF BORDER FUNCTION:EVIDENCE FROM THE CHINA-ASEAN BORDER

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Keywords: Cross-border destination, Tourist flow, Social network, Border Function, Chian-ASEAN.

Track No: 22

ABSTRACT

Cross-border Tourist Destination (CBTD) are often characterized as an important role in diplomatic promotion and non-governmental relations between neighboring countries. While the impact of tourist flow of cross-border regions on CBTD have recently attracted attention, the potential contribution of tourism and its mobility to promoting cross-border social development has been ignored. This paper examines the role of tourist flow and social network evolution in the context of destination development in China-ASEAN border areas, and extant attempt to investigate the reason for border function changes are dominated by a focus on the adequacy or otherwise, of diplomatic relationships that are usually deemed crucial to achieving successful cross-border cooperation. The survey of CBTD in China-ASEAN border areas shows that the main driving factors for border function changing from imperforation to semi-closed status, and further to opening up to outside include diplomatic relations, trade relations, cross-border tourism activities and community contacts. The diplomatic relationship between two countries are the main factors leading to imperforation. However, one major finding is that Cross-border Tourism Flow(CBTF) and Social Network(SN) are the main factors to promote the opening of CBTD. The blocked tourism

flow strengthens the function of border closure, and the expansion of the spatial scope of border tourism activities to the hinterland of both sides is the main force of the function of border opening. Insights for tourist attractions and infrastructure involved in cross-border destination development and management are provided in the discussion, and the paper highlights the possible impact of CBTD cooperation on the China-ASEAN Free Trade Area(CAFTA).

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THE INFLUENCE OF DIGITAL TECHNOLOGIES IN GLOBAL BUSINESS FUTURE: THE QUATERNARY AND QUINARY ECONOMIC SECTORS

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Keywords: *Quaternary, Quinary, Economic Sector, Three-Sector Model, New Economic Sectors Digital, Technology, New Economy, Digital Economy*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

Abstract

Digital technologies fundamentally change all sectors of the economy through the innovation opportunities they offer in terms of product, process and business model innovation. Traditional economic sectors such as agriculture, industry and retail are profoundly changed and accelerated by new technologies that use data as a resource for innovation. The sector-specific dynamics are determined by the differences in opportunities that these technologies offer for innovation and by the differences between the types of data needed for innovation and the conditions for the adoption of digital technology (Paunov and Planes-Satorra, 2019).

The sectors of the economy developed statically, in a geographically limited perspective until the beginning of the 1950s, when the society advanced to the third industrial revolution – Industry 3.0. Since the early 1960s, the three-model economic sectors have been criticized as too limited. Therefore, in 1961, Jean Gottmann proposed for the first time the division of the tertiary sector by subdividing it into tertiary and quaternary sectors. In 1961, Gottmann described the “quaternary occupations” as those providing services that require research, such as “analysis, judgment, briefly, brain and responsibility” and “what might be called the quaternary forms of economic activity; managerial and artistic functions, government, education, research and brokerage of all kinds of goods, services and securities” (Gottmann, 1961). In 1969, Deane suggested adding a new sector of the economy, the Quinary sector

(Kellerman, 1985). As a result, the late 1960s brought together a new discussion in the field: the "Q-Sectors" of the economy.

In 1977, Abler, Adams and Gould expanded the scope of the Quaternary sector to "information activities". Abler and Adams (1977) pointed out that information production and service activities should be regarded as quaternary rather than secondary or tertiary sector. Abler and Adams (1977) defined the quinary sector as consisting of establishments that engage in control activities, the production and processing of information and non-routine decision-making. Government is the main quinary industry, but it exists both in the private sector, through corporations, and in the voluntary sector, through NGOs and Think-Thanks. This approach creates a completely different classification system in which information is used for production, transaction and consumption. It is also selected as a separate sector, consisting of channel goods and information itself. The rapid development of this sector and its dominance in developed economies requires its separate study, although its increasing interrelationships with all other sectors make it difficult to completely separate it (Kellerman, 1985).

Digital technologies allow the improvement of traditional products and business models, but especially the development of completely new digital products and business models. The characteristics of digital technologies suggest similarities in new trends in innovation in sectors, similar to other general-purpose technologies (GPTs) of the past, such as steam engine, electricity and internet (David, 1990). While end products in primary sectors, such as food or mining are unchanged, the media or music has completely changed the offer during the recent decades. Similarly, while the automotive sector has automated important parts of its production processes, others such as agriculture are less advanced (Paunov and Planes-Satorra, 2019). They represent opportunities for further research.

The final products in the primary sectors remained unchanged but thanks to the development of digital technologies, new products and industries based on information and knowledge emerged that are included in new economic sectors, the "Q Sectors" of the economy: The Quaternary and Quinary economic sectors.

Keywords: Quaternary, Quinary, Economic Sector, Three-Sector Model, New Economic Sectors, Q Sectors, Innovation, Technology, New Economy, Digital Economy

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THE ROLE OF BUSINESS DIPLOMACY IN DEFINING THE MILLENNIAL GENERATION'S LEADERSHIP STYLE

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Keywords: *Generation Y, echo boomers, business diplomacy, competitive advantage, modern leadership, national economic interest*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

Abstract

The business diplomacy is part of foreign policy; its motivational benchmark resides in the national economic interest. The scientific substance, acquired during the construction of international relations policies, is related to the legal opportunities of international cooperation: national companies' consolidation, increased exportations, foreign investments and active participation in the international organizations' activities, value-based directed in development management. In order to achieve its objectives of promoting national economic interests and security, through performance and competitiveness, the business diplomacy is influenced, additionally to the extension of relations and the intelligent use of resources, by the value of human capital used in getting the advantages over trading partners.

In the situation of excessive migration, modeled by the demographic structure dominated by the aging population, it is important that the young generations decide remaining to live and work at home to dedicate themselves to activities sustaining development and societal changes. This perspective of solving the structural problems - migration, poverty, disease, underdevelopment, climate, environment, ecology, falls on the young generations' shoulders.

The object of the present research is shaped by the way the Generation Y is able to support and drive the business diplomacy for building the economic growth within a social economy. They are people born between 1981-1996, known as *Generation Y* or *Echo Boomers*, and have a special place in the present research as their behavioral characteristic are crucial for the sound development of the society. Tolerating and confident, they handle an increased use of communication technologies, media and digital; matured under the liberal approach of politics and economy, they are concerned by the high unemployment rates and the long-term

economic prejudices generated by inadequate public policies for young people, representing a true force capable of establishing the new socio-economic interactions and contribute to the country sustainable development through intelligent decisions.

The analysis carries out their capability and capacity to sustain the future of the Romanian economy characterized today by a statistically confirmed functional illiteracy at 44%, of an external migration that makes every day 6 people to leave the country, family, social position, and even the profession for which they were trained dreaming of a better life in developed countries.

The conclusion shows that the today businesses advance the politics, by successfully competing for a larger market and offering special opportunities to those who decide to use the competitive educational and the professional advantages, staying in the country to establish a lifestyle based on braiding the personal interests with those of the community and society, accepting the use of European funding support for innovative ideas of business, using the public policies and economic facilities, there where they are present. The temptation is for leaders and managers to be forceful in accomplishing their business objectives without regard to cultural and individual differences and fight for legal change in the entrepreneurs and companies benefit. Avoiding arrogance in business and using a gentle and kind, expeditious and profitable management style, based on high integrity, trust, and honesty remains the best solution.

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ABOUT HOW DISRUPTIVE INNOVATION CAN SUSTAIN THE HUMAN RESOURCES' SECTOR DIGITIZATION

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Abstract

It is known that innovative technological developments generate operational and procedural improvements, contribute to the production of high quality products with reduced costs and to better financial results. This requires companies to focus on developing research and product development based on modern, flexible, visionary business strategies. There are several ways to achieve it: use innovation to get high level knowledge for better final results, join international sound competition to open the window to company's visibility, put intelligently in practice the results for greater profits, impact the economic partners through and knowledge transfer, increase quality and societal satisfaction by intelligent solutions.

Well understood and correctly implemented, technological innovations have a strategic importance because they are applied in any field and allow the systemic regeneration of any sector, department or company.

The existence of corporations is not developed outside the development of innovative research programs with rapid applicability in practice.

The natural resources are changing, so the human beings. Therefore, the human resources departments (HRD) have to face the challenges of innovative technologies to deal with major disruption of the market and remain relevant. As emerging sectors of the company, HRD have an adding value-based role defined by all their activities: hiring, training, coaching, payroll, finding solutions for staffs problems linked to other authorities and managing leadership when business environment is more than competitive, dealing with daily hectic existential issues in which the growing importance of HRD is obvious.

Thus, the impact of ICT disruptions at work highly influences the workplaces climate from small misunderstood decision to data-based performing processes.

To address the challenge, the modernisation of HRD is crucial. In Romania, at the public authorities level work almost 20% of the total workforce, of which 22% are established in the capital of the country. No competition, no tests of admission on the job, no other criteria to profoundly and correctly establish the winners. Politically arrived in different jobs most of them do not know how to use the computer, don't understand a document written in a foreign

languages or do not have the basic competences, abilities or capabilities to enter in the business' details. They arrived the politically, and to stay to serve corrupted persons.

This research focuses on a survey analysing the impact of the disruptive innovative technologies against the negative consequences at institution level caused by of HRD staffs' abusive behaviour in understanding and processing legal documents, their total lack of professional or motivational upgrade. While innovative change implementation is extremely fast at technological and operational level, the HRD keeps the transformation at a slow step. A revision of the HRD structural logistics based on added value to increase institutions or companies profit is required. The revision should be centred on: aligning HRD role and operational system to the business' outcome, in line with all the other department, directions and divisions; requiring flexibility, vision and versatility in their legal approach of event, facts, documents and persons; leveraging on technology to increase effectiveness and performance, evaluate expertise and replace the old inadequate habits.

Keywords: *disruptive innovation, human resources, digitization, sustainable development,*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

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INTEGRATION OF SMART DEVELOPMENTS FOR HEALTHIER LIFESTYLES

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Abstract

The idea of developing a sustainable lifestyle (Amraotkar, 2019) flows with the need of a healthier and better one. The society's development plays the consequences given by people's inclination not to appreciate enough their body, life and environment where they live and work. In terms of integrating smart developments, the focus goes on combining activities to promote the change and sustain the need of adaptation to the realistic situation of today's phenomena (Catlin *et al.*, 2008). The present paper's focuses on the analysis of the educational, health and cultural development and their protection within contextual integration as addressed by Berkman sates (1983). The place of analysis is the Romanian rural area, inactive economically but highly valued historically; there adequate strategies implemented could create local rewards and opportunities for the coming years. As Cojuhari shows (2014), the imperishable social-economic progress of the Romanian villages is determined by the requirement of the immutable restoration of the foundations of the fields for the concern of social services. The paper, developed on questionnaire survey, includes statistical data reflecting the socio-economic sides analysed. The results show that both economy and community life of the realm could be improved if sound principles, framed and institutionally presented are well implemented and monitored both at management and behavioural levels down to the simple man. The application of smart integrations for healthier lifestyles combines the activities of promoting a healthier lifestyle creating a smart adaptation need to the situation of today's things and phenomena for a healthier life (Robinson, 2014).

Keywords: *smart development, integration, culture, education, social, economic effects, healthy lifestyle*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

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THE ROLE OF DIGITIZATION IN THE LEADERSHIP'S METAMORPHOSE THROUGH DISRUPTIVE INNOVATION

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Abstract

The digital disruptions attract scientists and practitioners' interest and catch the companies' attention because of the challenges brought and causing severe systemic effects in industries and markets. ICT development and digitization, standardisation and automation represent the transforming support for markets and industries development and for labour force transformation. They create a new road map for all resources' use, contributing either to a sound development or to the general destruction. We present here few characteristics of the digitisation in managing the leadership of companies, no matter their size: The emerging digital technologies already started the big transformation of the world and their impact increases in magnitude every moment, in all economic and social fields of activity. Their drive inputs and uses information, change interactions, develop communication bringing to the market new resources, tools, changing the way of thinking; the new resources used influence the human being through high pressure, polarized temperature, unknown forces, permanent stress requiring unprecedented exertions.

New strategies are needed to be crafted and new roles in managing leadership, invented. The underscore of opportunities put at risk the digitization opportunities, delay the decision-making process and can manage to losses and failures. To avoid disruption, the right timing has to become priority. This is the time to hire the best executive, train and monitor staffs, create hard working teams able to innovate by working within the frame proving honesty, trust, confidence, able to assume effective organisation. The diversity is desired inside calculated patterns so that outcomes could be monitored and fed-back. There are alternatives: build, rent or acquire digital capabilities using the new types of services provided. The networks become a vehicle by which economic advancement is accessible to small and big companies. Inside the network the combinatorial innovation is simpler to be applied, the costs are chip and the outcome more profitable. Inside the network impossible could become possible and the management could always discover more perspectives. The recruiting activities could be permanent if this increase the company value and empower the executive

board. Digitisation assists the monitor progress as now it is possible to use as many indicators as are necessary to discover to way to go on with. Decision can be taken faster, more democratically, under committees care. The digitization provides companies with more educative tools as no shortage of information is possible if company is connected online, to internet, to different data ware. As a conclusion, the digitization open the door to a new world offering to us provocative solutions that require profound changes to implement in all companies, changes that go to the core of any business. Acting in the right direction will help profit and good assets to join the team.

Key words: *digitisation, leadership, disruptive innovation*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

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WHY IS MEDICAL DOCTORS TRAINING IMPORTANT IN HEALTHCARE LEADERSHIP?

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Keywords: *public health system, medical institution manager, leadership training Programs*

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Abstract

The health systems vary from state to state through the socio-economic parameters, the resources allocated and the conditions provided in health units to employees and patients. This reflects into the quality of the medical record, the performance indices, the means of investigation and diagnosis and the degree of satisfaction of both work and treatment despite the unique and fundamental purpose of providing care and treating patients in the best way. Doctors have always played a vital role in increasing the performance of health systems. In Romania we have a national health insurance system, which is undergoing continuous reform in recent years, a reform that is often inefficient and doomed to failure (Vlădescu *et al.*, 2016). When a comparison was made between two different health systems, Canada, having a health system similar to our country and the Netherlands, where there is a social insurance system of etatist type, a socialist system dominant today even in western countries, the conclusions regarding involving and leading physicians are different, although both systems face the same political problems and challenges (Denis and van Gestel, 2016). In health system from Canada, better collaboration between government and physicians is reported after health officials promoted a policy involving more medical doctors in clinical and administrative management beyond their basic social duty to do, to treat people. In the Dutch medical system, however, health policies do not include the vision of physicians, they are not in line with their expectations, so further efforts are needed to bend the values and beliefs of physicians in order to gain active involvement of doctors in medical management, which will lead to an increase in the performance indices of medical institutions (Denis and van Gestel, 2016).

The doctor has many responsibilities within the institution where he works and towards the civil society, represented by the patients who arrive in his office. What makes the difference

between doctors is medical professionalism, the sum of a set of values and behaviors that underpin the confidence that is offered to them. The researchers considered that medical professionalism is defined by leadership ability, continuing medical education, self-critical spirit, career, research and relationship skills. In order to achieve medical professionalism, a political health and cultural environment of the society that is suitable for a quality medical act is required (Duran *et al.*, 2019). The conditions of medical practice are in many cases the impediment to professional healthcare, which is most often restricted to the patient.

Medicine universities in Romania, as well as abroad, are beginning to understand the role of leadership training programs, but it remains in research what are the characteristics that make these programs effective and to what extent the present courses have an effectiveness, demonstrable at the level of health institution in the future, as opposed to mere impressions of the students who follow them (Maddalena, 2016). It is critical to form a leader's thinking and a leader's personality. First and foremost, a manager of a medical institution must objectively evaluate the pluses and deficits of the institution he runs, to know the skills of the employees who can be promoted, to have a proactive thinking, to be open, empathetic, to have a effective communication, to be capable in making decisions and prioritize, objectively evaluate their performance, be able to make the transition from thinking "task" to thinking "performance".

The basics of effective leadership are: developing a work environment based on trust, closeness to people and open communication; adopting the belief that the best motivation is self-motivation; employee involvement in problem solving and planning improvement; listening to employees and recognizing their merits; setting clear objectives; reorganizing the activity to allow a greater degree of efficiency of the activity; creating a network of partners and seeking investors to ensure high performance technology; accessing funds available from the competent authorities to support the activity at a high level; the use of mistakes as a learning opportunity and not least the encouragement of continuing medical education. In such a climate and with proper management, the employees will become productive, the health unit will reach remarkable performance indices, the civil society will increase their confidence in the medical act.

Currently, data in health units in Romania show that performance and success is achieved where the medical staff is highly qualified and the medical activity of superior quality (Coculescu *et al.*, 2016). In order to reach such results it is important for a manager of a medical institution to create practical conditions for performing the medical act, to create an optimal climate for the employees and not least to offer the beneficiaries, that is to the patients, quality

medical services and to provide them highly qualified medical personnel, high-performance equipment and state-of-the-art treatments.

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CHALLENGES AND STRATEGIES IN THE MANAGEMENT OF THE ROMANIAN MEDICAL SYSTEM

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Keywords: *health system, avoidable deaths, resources' distribution, plan of management*

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Abstract

The Romanian health system is a social insurance-based one which has remained largely centralized despite few decentralization efforts. It is still facing major problems that have resulted in a situation of historical crisis in the health field, a collapse that requires a firm, reliable and long-term approach from the officials and the government of the country (Vlădescu *et al.*, 2016). Among the most important causes leading to the present collapse are: the underfinanced budget allocated to the health sector, the unbalanced distribution of resources, the political instability due to the lack of professionalism in coordinating the major economic sector of the economy.

The current expenditures allocated to the healthcare system went below to all European Union's countries level, both in terms of the amount allocated per capita as a consumer of medical services (EUR 1029, EU average 2884), and as percentage of GDP allocated to the health field (5%, EU average 9.8%), mainly publicly funded.

The resources in the health system, although minimal, are often distributed disproportionately, without supportive validation of the decision-makers' choice in "slicing the pie". The lack of a prioritization mechanism makes difficult and challenging for the State to cover the concentrated needs of the population, especially in the public hospitals of the big cities and to keep financing the underused and underfunded primary healthcare, supporting the general practitioners overwhelmed by an impressive number of patients and a bureaucratic system which leave them no time to educate patients about prevention or to design screening programs for the population. Consequently, in Europe, the most preventable deaths due to treatable causes are in Romania (women diseases rank the top positions) followed by Latvia and Lithuania. The determinants of avoidable deaths could be due to: a) the primary prevention - the lifestyle factors (alcohol and tobacco consumption, sexually transmitted diseases and

others); b) secondary prevention - through early detection and treatment, e.g.: lack of screening programs in the population for breast or skin cancer); c) medical care and treatment (e.g.: nosocomial infections, conditions requiring antibiotic treatment, surgical interventions, adequate care in hospitals, etc.). In all these aspects, Romania underperformed compared to the European Union average. These outcomes are the image of a completely disorganized healthcare system, lacking effective and efficient health policies, in a perpetual incoherent “reform”, without a solid framework for achieving key performance indicators.

Over the last decade the Romanian health sector found itself under the coordination of 15 ministers of health and 10 presidents of the national insurance fund. The lack of a multi-annual plan of development and reform fed the political instability and continuously undermined the health transformation. Without a master plan of sustainable development, the successive political changes generated fragmented alterations in the health strategy and management plans, destabilizing the general vision and staffs' reform, with severe consequences at society level. Under systemic deficiencies and major constraints, the decisions-making mechanism was activated only in emergencies; hence short-term solutions were those constantly privileged. A tangible long-term plan for managing the health care system always failed (Lyons *et al.*, 2018). After January 2007, when Romania joined the European Union, its health system faced an accelerated mass exodus of medical highly trained professionals, looking for better conditions of living and working. Thus, Romania remained with the smallest number of doctors and nurses allocated per capita, compared to the European Union average. The medical staffs chose the emigration due to working conditions, overwork and insufficient incomes (Duran *et al.*, 2019). In 2018, in an attempt to find a solution to the health workforce shortfall and curb the medical staffs' migration, the Government adopted an ordinance approving salaries' increase for medical staffs. However, the working conditions remained the same, the lack of vital equipment and medicines persisted, the remaining staffs got overloaded at work while trying to cover the deficit (Duran *et al.*, 2019).

Major regional, ethnic and income related differences in accessing the health services are still challenging and put patients' lives at risk when they need long distances transport for adequate care. Analysis laboratories, dental offices or pharmacies often lack in rural areas. Health services are addressing to the entire population, unlike other types of services; therefore is vital that authorities acknowledge the value of people's health for both the present and the future generations, from productivity perspective and economic gain. Always low in budget, the health system needs adequate resources allocations to sustain the increasing efforts to provide

medical and healthcare services of high quality, correct diagnosis and proper medical approaches (Scintee and Ciutan, 2017).

The design of a long-term management reform meant to provide a greater accessibility of health services combined with an efficient distribution of resources, a sound control of health costs relies on introducing incentive payments based on reaching the performance indicators, promoting a quality culture doubled by employees' motivation to increase patients' satisfaction through intensive national screening campaigns to prevent deaths from treatable causes. Authorities should learn the value of private and public partnerships and implement them to improve the access to high-quality medical services and to offer better health coverage to the Romanian population.

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GLOBAL ENERGY MARKET: ECONOMIC DEVELOPMENTS AND SOCIAL LIMITS

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Abstract

Renewable energy is expected to play an outstanding role in the future development of societies, in increasing people's living standards and capacity to work under less stress. These new forms of energy are linked to development, growth, environmental behaviour, progress and joy.

A presentation of economic developments and social limits are presented here, linked to spatial and evolutive comparisons, statistic economic data and societal unsatisfactory constraints.

Keywords: *energy, renewables, robust development, sustainable growth, environmental behaviour, profit and progress*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

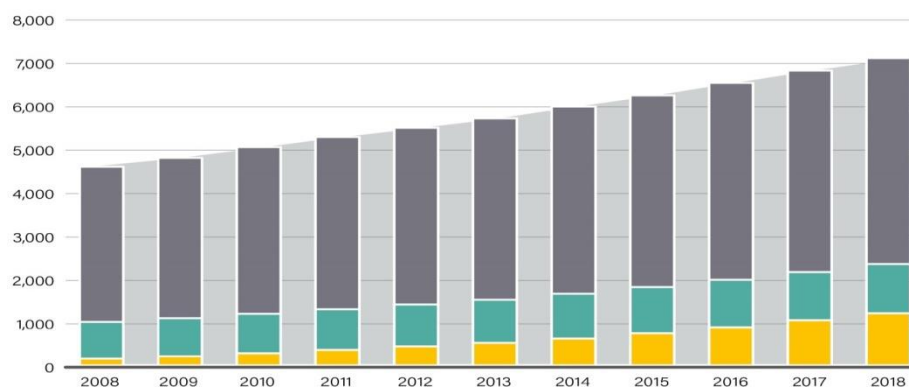
Introduction

The strategic concept on sustainable development has become a priority in the interpretation of progress. Recent developments revolve around coherent models of development with consequences for the environment and quality of life. These become strategic tools and are adopted, through public policies for awareness, recognition and general implementation in the economy and society.

In the field of energy, sustainable development is closely linked to innovative process applied to vision, policies, management and operational protocols development. When the technological results become visible, their dynamics influence the implementation, through scientific innovation and robustness, facilitating the convergence on the market of the needs with the services offered by companies. The result stands for economic profit and general satisfaction - for individuals, companies, society. However, new technologies and advantageous offerings are often limited in their application, by poor communication, poor

understanding of time advantages and inadequate dissemination of new concepts, often misunderstanding the results, their logic or technology. This is caused by the lack of recognition at first sight of the advantages and the responsible acceptance of the renewable energy consumption. Thus, legal problems of denomination, trading, use of patterns or accessibility appear. The heating sector is the handiest example that demonstrates how slow the absorption of advanced technologies is, when it comes to energy efficiency.

The contribution to building a sustainable future in renewable energy means accepting the idea of using renewable energy and a system that includes all the renewable energy technologies that can be used in any sector of activity that develops by using green energy. This allows for the creative and right decisions that support the economic development and assist the increase of satisfaction in the use of renewable sources - starting from the current convincing and qualitative information regarding the current economic-environmental situation of the energy landscape. In other words, it is necessary to recognize, support and transmit relevant experiences and success stories for a general mobilization of all political, economic, science or society players where the notorious results in the field have been obtained. Making these achievements available to decision makers, from outside the energy world, helps to understand the relevant concerns of each sector, creates additional functional opportunities drawing the attention to the fact that the goals of the most important international agreement on sustainable development (the Paris Agreement) are far away from being achieved. It draws attention to the fact that the concern of local or regional administrations for establishing innovative mechanisms to increase the use of renewable sources for obtaining the energy needed by communities has become more visible. Renewable energy technologies are supported, directly and indirectly, through policies aimed at climate change mitigation and adaptation to environmental requirements.



Legend
Sources of renewable energy
Hydro energy
Wind energy, solar photovoltaic, geothermal

Figure 1. Capacity to generate energy power globally by source (in GW) - REN 21 (2019)

Thus, the research purpose, to review the main scientific events in the renewable energy sector helps to better understand the economic objectives and the social satisfactions offered by the new forms of energy. They show that a sustainable society is the result of all players' work to the economic development and the limits and constraints of society and institutions have to be corrected through innovative activities and technologies giving to them a societal encounter of international recognition.

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THE HALAL FOOD AS AN INCENTIVE OF THE NATIONAL ECONOMIC DEVELOPMENT

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Abstract

The halal industry represents an everyday increasing sector of the food and beverages market. Once known and linked to the religious habits, it is now of great interest at the global level, given the huge advantages offered to industry and distribution development on one side and to individuals' ethics on the other side. The analyze of current situation and the forecast of future opportunities shows, in the present research, the potential role this sector could have in the future, in the markets' economic development, emphasizing both the social ethical behaviors and the healthy consumption.

Keywords: *halal food, halal industry, consumer, Muslim, Islamic economy, halal market*

Track: ASE International Online Seminar on Management Trends on Global Research
Businesses

Introduction

One of the leading sector in the global food industry, the halal market grew to an almost 20% of the world's food production during the last years. The increasing globalization process determined, in time, a need of the Islamic food economy for a greater diversity of products that had to be aligned with the faith necessities of the Muslim religion. Halal food production has to respect a set of specific principles, standards and rules regarding cleanliness, health and quality that determined companies to position themselves towards these requirements and to become part of this emerging process, by respecting the accepted a restricted list of ingredients and packing stringencies of products. As the halal market represents a new potential paradigm in the business area, this domain has become big enough to get predictions amounting 2.2 billion \$ by 2030 (ITC, 2015). The halal food industry recognizes and represents the Islamic consumers' cultural values.

Halal food industry is growing faster than other food products mainly because of the Islamic religion expansion that generates larger demands on the market. Even more, many non-Muslims started embracing the halal foods for their healthy values and safety benefits. In this context, it is easy to notice that the halal foods consumption's increase goes along the higher interest of people in other cultures and habits, determining new opportunities in food market quality and growth. For example, even if there are almost 2 million Muslims in the United Kingdom, the buyers of halal meat rise up to more than 5.8 million. Figures highlight the growing awareness of customers regarding the qualities of the products they choose. The people of Islamic religion, consumers of halal products, represent today almost 23% of the world population. Every year, the halal foods become more available being easy provided by both the little stores or groceries of neighborhood and the super and hypermarkets chains that allocate special places for these products. Thus the halal foods become part of peoples' diet, assisting industries to increase their productivity and profit. According to our calculations, the table below shows the countries with outstanding halal import-export activity and the turnover's figure as table 1:

Importers of halal food	Imports Value bln Euros	Exporters of halal food	Exports Value bln Euros
Indonesia	153	Brazil	1.1
Turkey	109	India	0.5
Pakistan	100	Australia	0.5
Egypt	73	France	0.2
Bangladesh	64	China	0.15
Iran	12.3	Sudan	0.13
Saudia	10.5	Netherlands	0.12

Table 1 The main importers and exporters of halal food in 2017

Global multinationals like Carrefour, American Food Group, Unilever, One World Food entered in the halal business by certifying some of their product lines. According to our calculations, Nestle, became one of the most significant food producers in this field, with an annual turnover of around 4.8 billion Euros. The growth of certified halal food products determines many benefits in the production and marketing process which helps not only the consumers or the producers, but also the economic system. This means new jobs, an increased

cash flow market and developed exportations of fashion. Given the appreciation of the Muslim food, Brazil, China, USA started to massively to produce and export halal products. New Zealand, India and Australia increase also their preoccupation for halal food production and distribution while Egypt and Saudia import meat from non-Muslim areas. The Organization of Islamic Cooperation claimed that in France more than 80% of the Muslims consume halal meat each day. The same happens in the USA where 75% of Islamic people make identical choices. In the Islamic economies, the biggest and various segment is represented by the halal food which, during the last years has spread beyond the meat-based products to snacks, candies, packaged food, children's cuisine, dairy products, soft drinks and even supplements.

This expansion created a perfect environment for investments and financing programs that facilitated the emergence of the concept of branding in the halal food industry, an important opportunity to address to a larger scale of consumers. Hosting a large community of more than 327 million Muslim people (GVR, 2018a), Middle East and Asia Pacific areas are the most influential and forceful markets in the halal industry with revenues of several hundred euros - 180 billion Euros in Asia Pacific according to GVRb (2018).

The halal food is also strongly linked to the natural and organic movement, keeping the advantages of their lower costs in comparison with the others. This helps gaining buyers and increases the sales volume, market share and revenues. Other advantages are linked to halal dining places of which number increases permanently as show the Statista international scores and indices. According to Statista (2019), the ranking score of the main international markets for halal food products and beverages in 2017 is the following: UAE 91, Malaysia 81, Oman 62, Jordan 60, Brunei 58, Pakistan 58, Sudan 55, Qatar 49, Indonesia 48, Saudi Arabia 48, Bahrain 45, Turkey 44, Kuwait 42, Iran 36, and Bangladesh 35.

The Halal Food Indicator (HFI) evaluates the health of the countries according to the health protection's degree of the consumers of halal food and beverages. Data found is related to the certification requirements and the state of regulation of the domain in each country. According to Innova Market Research about 35,000 products were launched in 2018 in the international markets of which few examples are presented: about 14,000 in Asia, 8000 in Western Europe, 5000 in North America, 3800 in Latin America, 2000 in Eastern Europe and 3000 in Middle East, Africa and Australia and New Zealand. Once certified, these products will conquer even more shares of the global market. By comparison the halal market forecast look as the following

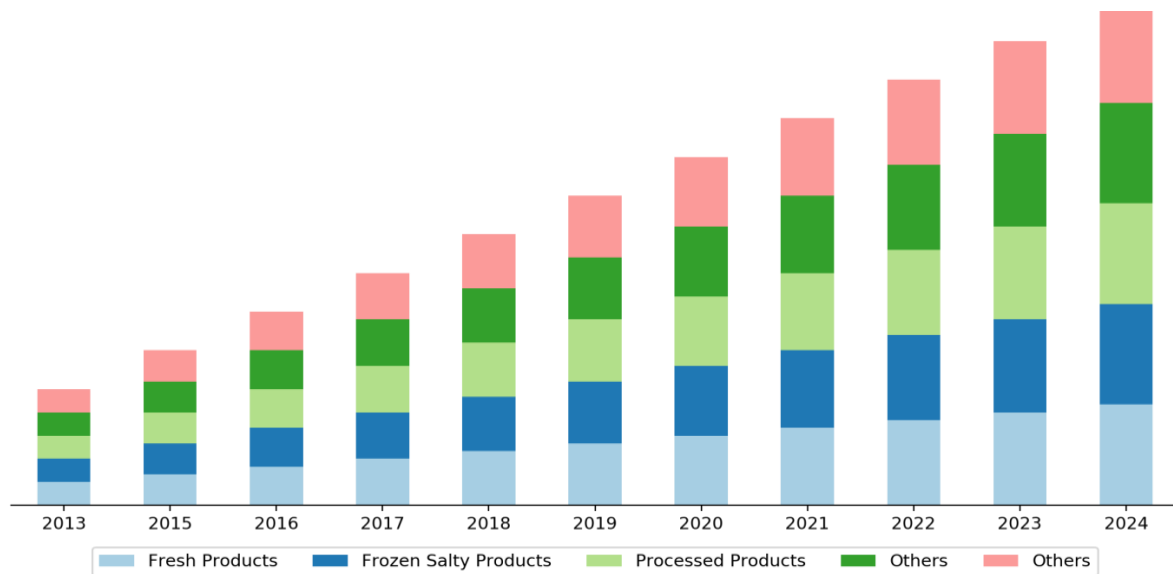


Figure 1. Global halal food forecast from 2013-2025

The validity and reliability of the Halal Awareness and Halal Practice represent important tools consisting of several stages through which the halal food is assisted to penetrate more market and embrace a larger number of consumers: handling managers, control of facilities supply and equipment, food composition, sanitation and waste disposal administration, and storage system. The prospections show that the halal market have potential everywhere no matter the religion, given the food qualities and care for preparation and selling process. Both convergent validity and discriminant validity represent beneficial tools for the use and certification for halal food services anywhere in the world.

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THE RISK MANAGEMENT' ECONOMIC IMPACT IN THE LIGHT OF THE TECHNOLOGICAL DEVELOPMENT

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Keywords: *risk management, economic impact, technological development*

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Businesses

Abstract

The organizations' interest is to avoid the failure and collapse by keeping up with technological development. The process goes along with sound decisions and planning to save time and money. The calculation and use of risk management economic impact is important in keeping up with technological development. Previous researches outlined how to achieve competition in organizations while here the focus is on the economic impact of risk management to reduce organization's problems so it can keep pace with technological development. Therefore, the objective is to find scientific ways to dealing with risks in technological development implementation.

The use of descriptive analytical methodology scientifically shows how risk management affects the technological development based on a wide documentation. Findings doesn't show statistically significant relationship either between risk management and keeping up with technological development or between applying risk management steps and keeping up with economic development. The results are expected to help increasing the organizations' ability to deal with risks of technological development, to train the employees to deal with it and raise in managers' awareness the importance of their organization so reducing unemployment and improving economic stability. The conclusion is that the application of risk management steps in the light of technological development reduces all secondary potential risks.

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A COMPARATIVE ANALYSIS ON THE HYBRID SYSTEMS' ROLE IN THE USE OF SOLAR AND BIOMASS ENERGY FOR COMMUNITY- BASED THERMAL ENERGY PRODUCTION

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Abstract

In Europe about 55% of the population lives in areas where heating systems could be implemented - hybrid, wind, solar to be used at community level. To be largely used, certain heating systems require new specific solutions and care technologies to influencing the community decision to generalize the use of heating systems based on renewable sources. The European Union Directives on renewable energy (D28/2009/EU), on the energy efficiency (D27/2012/EU) together with that on the energy performance of buildings (D31/2010/EU) activate new sets of measures for supporting the renewable energy sources' use and to increasing energy performance. The analysis of the literature on the existing systems based on renewable sources for the production of energy in communities makes a comparison of advantages and disadvantages underlining the need and tendency to use solar and biomass energy to balance the heating expenses with results obtained.

Findings show that in Europe, the number of community-based systems using hybrid systems is present, with tendencies to increase the capacities installed. To perform for a better life requires a community heating based-system. The models could vary, depending on the advantages or limitations depending on national or local particularities, climatic or economic development or social behavior. The research develops a comparative analysis on the main hybrid heating systems implemented at community level in countries like France, Germany, Sweden, Denmark and Romania underlining their power advantages and the limits of their use. The solar collectors are mostly used in Denmark while the Austrians use mostly the wood biomass conversion systems.

Keywords: *heating hybrid system, solar energy, biomass energy,*

Track: ASE International Online Seminar on Management Trends on Global Research Businesses

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WHEN BOREDOM CREEPS IN KNOWLEDGE WORK – INFLUENCE OF BOREDOM ON JOB CRAFTING AND WORK ENGAGEMENT

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Keywords: *Knowledge Work, Boredom Proneness, Job Boredom, Job Crafting, Work Engagement*

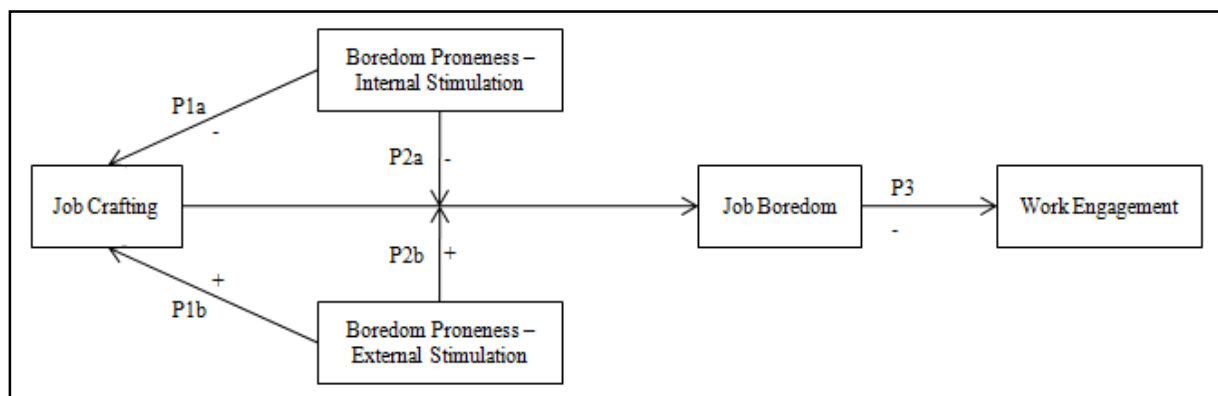
Track No: 35 (Organizational Behavior)

Abstract

Boredom is a highly pervasive phenomenon and has a crippling impact on individual and organizational outcomes (Loukidou, Loan-Clarke and Daniels, 2009). This purpose of this article is to develop a testable model of the role of boredom in the relationship between job crafting and work engagement in the context of knowledge work. Though knowledge work is typically viewed as characterized by creativity, complexity, variety, discretion and autonomy, boredom inevitably creeps in (Kärreman and Alvesson, 2004; Costas and Kärreman, 2015). In contrast to bureaucratic and industrial jobs, knowledge work is likely to provide a wider scope to the employees for job crafting. Employees may use job crafting to address job boredom and improve work engagement (Harju, Hakanen and Schaufeli, 2016). Job crafting and job boredom are likely to be influenced by boredom proneness of the individual. Boredom proneness has two dimensions - internal stimulation (BP-Int), where the employee perceives inability to generate interesting activities, and external stimulation (BP-Ext), where the employee perceives the work environment as low on stimulation and thus has need for variety and change (Vodanovich, Wallace and Kass, 2005). An employee with high BP-Int is less likely to self-initiate changes to make the work interesting. Thus, it is predicted that BP-Int is negatively related to job crafting (*Proposition P1a*). Further, it is predicted to negatively moderate the relationship between job crafting and job boredom (*Proposition P2a*), because in case of high BP-Int the perceived source of lack of stimulation is internal, whereas the changes related to job crafting are extrinsic in nature. On the other hand, an employee with high BP-Ext seeks stimulation from the external environment, and hence is more likely to initiate changes in the work to bring the stimulation to an optimal level. So, it is predicted that BP-Ext is positively related to job crafting (*Proposition P1b*). In addition, BP-Ext is predicted to positively moderate the relationship between job crafting and job boredom, because in case of high BP-Ext the individual seek stimulation from

extrinsic sources and job crafting is related to initiating extrinsic changes (*Proposition P2b*). Job crafting is used by employees as a mechanism to increase work engagement (Bakker, Tims and Derks, 2012). I propose that job boredom plays a mediating role in this relationship. Job-crafting attempts to bring about changes in the job in accordance with one's preferences, abilities and needs, so it has a negative impact on the job boredom of the individual (Harju, Hakanen and Schaufeli, 2016). When job boredom is low, the employee is more likely to optimally use their capabilities, and purposefully involve in the work activities (Loukidou, Loan-Clarke and Daniels, 2009; Eastwood *et al.*, 2012). Hence, it is predicted that job boredom will have a negative relationship with work engagement (*Proposition P3*). Thus, job boredom mediates the relationship between job crafting and work engagement, such that job crafting is negatively related to job boredom, and job boredom is negatively related to work engagement. This model is needed because recent evidence suggests that workplace boredom also afflicts knowledge workers. The model not only brings the state and trait aspects of boredom together, but also emphasizes on the influence of this pervasive phenomenon in shaping the work behaviors of employees.

Figure 1: Theoretical Model



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A STUDY ON THE DYNAMICS OF THE FASHION RETAIL INDUSTRY: THE EMERGENCE OF ELECTRONIC COMMERCE IN INDIA

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Abstract

The main aim of this paper is to examine whether consumers feel that e-commerce provides superior performance by benefiting from enhanced technology facilities when compared to traditional retail, from the perspective of Indian consumers. Accordingly, this paper identifies some of the issues faced by the fashion retail business in India, such as the challenges faced by traditional retail, as theoretically discussed in Porter's five forces, with the necessary adaptation to the modern retail and communication framework. Many technologies are nowadays available for the fashion retail industry, allowing to improve strategies and customer satisfaction. These fashion retail trends can be theorised and used to conduct a broad market research. In this paper a set of hypotheses were constructed to examine, by the means of a survey, the perception and reasoning towards traditional retail and e-commerce services. Indian customers' attraction to this more modern technological approach was evaluated, including perceptions' examination on virtual try-out and online try-out technologies. Data was collected and treated in order to assess behaviourism, functionalism, and experimental ideas to make data-centred decisions.

In this research we found that traditional retail and e-commerce are independent of each other, but are gradually merging. A most important factor for future fashion industry is that consumers are increasingly willing to adopt interactive technologies.

Keywords: Fashion retail, E-commerce, Multifunctional mirrors, Virtual try-out, Online try-out, Traditional retail, India

Track No. 14: Emerging Markets

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TOURISTS' ACTIVITIES - THE ANALYSIS OF VARIETY IN TOURISTS- ACTIVITY PATTERNS

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Keywords: *Tourism, tourists behavior, activity patterns, variety, behavior-based segmentation, fuzzy clustering*

Track No.: 22 Tourism and Hospitality

Abstract:

This research is about variety in tourists' activities. Based on a large dataset of skiers' daily trips, we investigate tourists' activity patterns. We measure variety in their sequence of activities and relate these measures to each other. Then, we cluster those sequences together into prototypes ("medoids") and compare them.

Therefore, we provide a framework and a methodology that can be applied to the analysis of patterns of activities. In addition, a few conclusions can be drawn from the analysis, relevant to the specific setting.

Introduction

In their trips, tourists engage in a host of different activities, before during and after the trip. Recently, the attention of practitioners and academics has turned to the analysis of activity patterns, based on "path data", describing the positions of consumers in space and time and their movements within the environment (Hui *et al*, 2009). Among the key issues traditionally addressed in this field is variety, a concept that has generated a rich stream of research (Inman, 2001). Empirical evidence suggests that consumers are often motivated by a positive bias towards variety and that variety is an important driver of consumer behaviour. Likewise, variety plays an important role in tourism and in shaping tourist experience (Antón *et al*, 2018).

Research objective and methodology

We aim at a better understanding of tourists' patterns of activities, by analyzing variety in these activities. Therefore, first of all, we assess variety in individual sequences of activities, by

calculating measures such as the number of activities performed or performed at least once; the Shannon entropy index; the amount of switching across activities.

Second, by building on Levenshtein distance, we “fuzzy” cluster the sequences with Fuzzy C-Medoids algorithms that extract “medoids” or observed prototypes of these sequences (D’Urso and Massari, 2013).

1. The research setting

We study skiers’ consumption behavior, by analyzing daily ski trips, i.e. the sequence of ski lift chosen by skiers in their daily trips. Data for our analysis are drawn from the Dolomiti Superski dataset, which reports ordered sequence of seasonal Radio-Frequency Identification (RFID) cards swiping, or “bips” as coded in the dataset. Each record of the database identify the lift visited by a skier. Given this data, we can reconstruct the daily path of each skier for a long time period, and we sample 330 skiers observed during a week vacation.

Results

We provide, first of all, the distribution of indices on the whole sample as well as their scatterplot matrix and the correlations between those indices.

Second, by applying the L-FCMd clustering algorithm to our data, we find evidence of fourteen representative skiers (medoids) and assess the main features of medoids.

Finally, we report the scatterplot matrix and the correlation matrix for the four indices described, computed only on the medoids.

As a first remark, the strongest correlation is detected between the switching index and entropy, both at the whole sample and at the medoids level. Also, switching index and entropy are highly correlated with the number of unique lifts. There is no significant relationship (at least linear) between the total number of lifts used and the three indices associated with variety in behavior.

Conclusions

A few interesting conclusions can be drawn from our analysis.

First of all, usage-rate is not related to variety in activity patterns, in any of its forms; heavy and light users do not differ in the heterogeneity of their behavior.

Second, indicators of variety (n.unique lift, entropy, switching) are related to each other, to a significant degree; variety is indeed a multi-dimensional concept, where different dimensions are intertwined to a large extent.

Third, the most significant relation links amount of switching and entropy, because the higher the diversity in skiers’ choice the higher the switching across options (lifts).

Finally, tourists' activity patterns are heterogeneous and the market is split across a large number of segments.

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