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ARTICLES

CASE STUDIES

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EFFECT OF DEMOGRAPHICS ON CUSTOMER SATISFACTION IN HEALTH INSURANCE SERVICES IN INDIA

Monica Bhatia*, Sachin Mittal**

Health insurance, being a customer-oriented industry levels out the risk in the financial service sector. With the advancement in technology, customers of today are more aware and demanding. Today, where several companies operate and try to gain the same customer, customer satisfaction is considered to be the success essence. In India, customers in the sector of health insurance are in a strong bargaining position due to the increase in the number of health insurance companies as a result of the entry of private players. The present study is an endeavour to understand the impact of demographic variables of age and income on customer satisfaction in health insurance services. A structured questionnaire on a seven point Likert Scale was used to collect the data. The sample size of 513 respondents was taken for the study. The data collected was analysed using two-way ANOVA. The results of the study showed that age does not affect customer satisfaction in health insurance services although income has a significant impact on the same. However, age and income both work independent to each other and no interactive effect was found to affect customer satisfaction in health insurance services in India.

***Keywords** : Health Insurance, Customer Satisfaction, Age, Income, Interaction Effect.*

INTRODUCTION

Health Insurance

The insurance sector along with sectors like banking and security trading is a part of the financial services sector. Insurance is one of the major contributors to the economic development of any country as it helps in leveling the risks. Like all other insurance, health insurance also works on the concept of pooling of risk arising from the same cause. Health insurance is where a person or a group of persons purchase health coverage by paying a premium; which is a fee paid to buy a policy. In broader terms, it is an arrangement that helps in deferring, delaying, reducing or completely eliminating the expenses that an individual may have to incur otherwise for health care. Health insurance is one of the measures of social security through which members of the community are guaranteed benefits of maintenance of health and medical care when they fall sick.(Vishwanathan, 1996).

The health of citizens is a top priority for any nation. Nations with healthy people grow economically as there is less poverty and low mortality rate. The success of many countries is related to their special efforts of covering the citizens under health insurance that protects them from unforeseen health hazards. In India, as in many other countries with low per capita, the burden to pay for medical treatment highly affects the people. The government should educate the citizens about the rising cost of the medical treatments and the importance of health insurance which covers them from this financial burden. Authorities and regulators should work on the guidelines and allow only the right players to enter and remain in the market so that people are safe and secured. The health insurance companies should develop the products considering the needs of the customers, thereby, encouraging them to purchase health insurance plans. The combined effort of all bodies is sure to bring some improvement.

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Although, India's health insurance sector underwent tremendous growth in last few decades with the entry of various players and also with various schemes initiated by central and state government. Various studies implied that the insurance market lacks transparency and is unregulated as the incidences were prevalent where customers were being cheated on the basis like insufficient information, not receiving the mentioned claim amount or third party administrators deducting the approved amount with no reasons.

Under such a scenario, customers look forward to have a regulated insurance program to meet their needs which along with hospitalization, includes out-patient and domiciliary care. The government should come up with policies that provide such benefits at an affordable cost. Such plans are provided by the private players but at a cost, that normal middle-class Indian family cannot afford. The majority of Indians still don't opt for the health insurance policy to finance their medical expenses but pay on their own. This results in poor quality healthcare or financial hardships. The high cost of medical treatment puts an individual in financial stress and affects the quality of life. The cause of concern is that if the same continues, a person will not be able to pay for the medical expenditure in the future. In turn, the efforts of a medical service provider will be worthless. Thus, there is a need to increase health insurance penetration for which medical service providers and insurance companies play a vital role. It is only then possible for the people of the country to avail quality healthcare services without any financial pressure.

Customer Satisfaction

The advancement in information technology has made the world a "global village" where people across the globe are closely connected. People are aware of the products and services across all continents which makes it easier for them to compare and decide the product or service that best matches their needs in terms of cost, functionality and expectations. The customers of today are more aware and more demanding and want both quality and quantity in products and services. To stay in the market, companies should focus more on customer relationship marketing than traditional functional marketing. It is, therefore, important to understand customers and what affects customers' satisfaction so that the strategies formed are in the best interest of the customers and also the company.

Many definitions of customers are given by various authors and they defined customer as anyone who receives the results of the work and makes a judgment about the services provided. Others define customers as the party to whom the goods/services are supplied/rendered by the provider. However, the former definition goes better for the customers of the service sector. According to Gronroos (1990), the concept of customer satisfaction has been an area of major attention due to the shift to relationship marketing from transactional marketing. In the area of consumer research and marketing research, 'customer satisfaction' has been one of the most debated subjects. It depends on perceived performance and relates it to the customers' expectations from the product or service. This means that if performance is less than the expectations, it leads to dissatisfaction. Satisfaction is seen if the performance of the product or service meets expectations and if the performance of the product or service exceeds the expectations, the customer will be highly satisfied (Kotler and Armstrong, 2006).

The present era of marketing emphasizes that the satisfaction of the customer is a prominent and inevitable concept for future profitability and sustainability of any organization. According to Liu and Yen (2010) customer satisfaction is customers getting higher benefits than the cost of product or service. Havra (1995) stated that satisfaction of customers is important to the expanse that it is considered as a key element in the marketing strategies by service institutions.

Customer Satisfaction in Health Insurance Services

Health insurance, being a completely customer oriented industry depends on customers for its survival. Guoet. al. (2008) stated that customer is the focus and the differentiating factor is customer service. The insurance company can differentiate itself from its competitors by providing better customer service than others. In the competitive era, where a number of companies operate and try to gain the same customer, customer satisfaction is the success essence. The service providers who establish higher service quality gain higher customer satisfaction and further achieve sustainable competitive advantage. Researchers have indicated that attracting a new customer is almost five times costlier than retaining the existing ones. Health insurance companies should keep measuring customers' expectations to serve them well. With a higher level of understanding of customers' perceptions, health insurance companies can determine stronger actions required to meet the expectations of customers. This way, customers can be easily satisfied. Customer satisfaction has a great significance towards the future of a company and is also a basis for securing a higher market position.

In India, customers in the health insurance sector possess a strong bargaining position. Therefore, health insurance companies should provide better services to keep customers loyal. If a service failure occurs, it leads to a destroyed relationship between the company and customers, which in turn leading to dissatisfaction. Such customers are more likely to share their negative experiences with others, thereby, degrading the image of the company. Thus, the satisfaction of customers is important in today's competitive environment as it greatly influences the repurchase decision and is a common factor for customers' intention to switch.

REVIEW OF LITERATURE

Felix (2017) recommended that to enhance customer satisfaction, maintaining error-free records, handling customer problems constantly, providing a prompt response in solving customer problems, and also understanding the needs of customers are the prerequisites. Yadav and Sudhakar (2017), in their study, found tax benefits, awareness, financial security, lifestyle and risk cover as factors that influence the purchase decision. Nair (2017), in his study, revealed that age, gender, income, education, and marital status had a significant association towards customer satisfaction with service quality in public sector general insurance companies, but occupation did not. However, in the private sector, general insurance companies, income, age and marital status were found to affect customer satisfaction with service quality significantly but gender, education and occupation had no significant impact.

Garg (2013) implied that health insurance companies should provide facilities for health check-ups free of cost at fixed intervals. These features may be provided as extra benefits on coverage and payment of extra premium. Further, the documentation process should also be error-free and simple. Especially, the public sector should work in this direction. Joo (2013) studied "Analysis of Financial Stability of Indian Non-Life Insurance Companies" and implied that the insurance sector all over the world has gone through a tremendous transformation after liberalization. In India, the penetration and density of insurance are low in comparison to various other countries. This allows the foreign companies to set foot in the Indian insurance market and tap the large untapped masses mainly by joint ventures with local companies. The Indian insurance market has been facing a lot of pressure globally from multinational insurance companies.

Kavitha et. al. (2012) studied customers' attitude towards general insurance and highlighted that India is becoming an attractive market for insurance with relatively youthful population. The study aimed to examine the customers' attitude towards general insurance and found that different customers have different expectations from general insurance companies. Kedare (2012) identified that premium payment has been the most important factor affecting the choice of health insurance plan. Households with higher income have higher probability of buying health insurance. Less income groups, on the other hand, may not opt for health insurance plan. Also, hospital network and coverage of services are important in making healthcare plan choice. Therefore, insurance companies should provide larger hospital network and services to completely satisfy the customers. Further, the study noted that the accessibility and image of the company also influence the customer's decision.

According to Mojaraddiet. al. (2008) customers' expectations, views and resource access have a positive influence on their attitude. The study implied that optimum attitude towards the company can be met through meeting customers' expectations and making good use of mass media, specifically radio. Rahimi (2007) stated that customer satisfaction causes customer loyalty and further customer retention which is important for business as well as customers. Good customer relationship management reduces marketing costs, increases retention rate and increases positive word of mouth.

Rajesham and Rajender (2005) noted that Indian insurance companies should provide policies including multi-benefits such as tax benefits and customer services through smart marketing and aggressive distribution with flexibility and transparency to increase insurance business volume. Bhat and Reuben (2001) stated that health insurance is a financial mechanism that protects individuals and groups or households from the expenses of healthcare that may be incurred because of unexpected illness or injury. Here, the insurer agrees to guarantee the insured, against the loss by specified contingency and provides financial coverage. For this, the person taking insurance agrees to pay a price known as premium. Day and Crask (2000) argued that if customer satisfaction is a consequence, then what causes this should also be studied and discussed. Consumers consider the likelihood of product functionality, sense of self-efficacy, approval of others and the time, money and effort in making a particular choice as important factors.

As per Jackson (1993) selling insurance is selling an idea with intangible substance. Customer satisfaction comes through comparing expectations with the experience of service. This satisfaction is critical for repeat business. Building trust, understanding customers' wants, discovering expectations and responding effectively are the keys to customer satisfaction. The study suggested that the customer should not be left alone at any stage; the insurer must go the extra mile by providing extra services like filling up claims forms, follow up on claims and keeping in touch with customers throughout the claim process. According to Sherden (1992) both health insurance and life insurance markets are characterized by acute competition for market share. Maintaining existing customers has many economic advantages for insurance companies. The cost incurred in retaining a customer is about one-fifth of the cost which is incurred in acquiring a new customer. With increasing competition, insurance companies drive for seeking profitability. For this, one of the easiest means is customer retention. The management must opt-out of the "traditional 'quality' or 'price' is everything" approach and pursue the integrated and comprehensive approaches for improving customer retention.

OBJECTIVES

- To study the effect of age on customer satisfaction towards health insurance services in India.
- To study the effect of income on customer satisfaction towards health insurance services in India.
- To study the interactive effect of age and income on customer satisfaction towards health insurance services in India.

HYPOTHESES

H_{01}: There is no significant difference between the young age group and the old age group in terms of customer satisfaction in health insurance services in India.

H_{02}: There is no significant difference between various income groups in terms of customer satisfaction in health insurance services in India.

H_{03}: There is no significant interactive effect of age and income on customer satisfaction in health insurance services in India.

H_{04}: There is no significant difference between the low-income group and the middle-income group in terms of customer satisfaction in health insurance services in India.

H_{05}: There is no significant difference between the low-income group and high-income group in terms of customer satisfaction in health insurance services in India.

H_{06}: There is no significant difference between the middle-income group and high-income group in terms of customer satisfaction in health insurance services in India.

METHODOLOGY

The Study: The study is exploratory in nature and aimed to study the effect the demographic variables on customer satisfaction in health insurance services in India. For the study, the independent variable of age and income were used. Variable of age was divided into Young Age Group (35 years of age and under) and Old Age Group (Above 35 years of age). Variable of income had three levels**,** Low Income Group (Less than Rs. 50,000 p.m.), Middle Income Group (Rs. 50,000 – Rs. 1,00,000 p.m.) and High Income Group (More than Rs. 1,00,000 p.m.). Dependent variable for the study was customer satisfaction.

The Sample: For the study, data was collected from 513 respondents who were all covered under health insurance. Among the 513 respondents, 203 respondents, which was 40 percent of the sample, was under the lower income group, 171 respondents, which was 33 percent of the sample, was falling under the middle-income group and 139 respondents which comprised 27 percent of the sample size, was under high-income group. Out of these 513 respondents, 284 were of 35 years and younger which means that 55 percent of the sample belonged to the young age group. 229 respondents which was 45 percent of the sample size belonged to the old age group. The entire data was collected from the major cities of India through a non-probability sampling technique.

Tools for Data Collection: Both primary and secondary data was gathered for the study. Primary data was collected through a standardized scale developed with the help of a well-structured questionnaire specially developed for the study. The questionnaire comprised of two parts: personal information and questions related to customer satisfaction. The second part consisted of 36 items that measured responses on a 7 point Likert scale. Secondary data was also collected to support the results and findings of the study. It comprised of research papers, journals, articles and online reports and other literature available related to the research purpose.

Tools for Data Analysis: The purpose of the study was to analyse the impact of age and income on customer satisfaction. Mean and ANOVA were used to analyse the collected data.

RESULT AND DISCUSSION

Various literature have indicated that age and income are important demographic variables that may affect the purchase decision of an individual regarding health insurance. The purpose of this study is to analyse the impact of these variables on customer satisfaction and whether they are independent of each other to the satisfaction levels of customers in health insurance services in India.

From Table 1, the significant value for age is 0.131 with F value of 2.284 which is higher than 0.05. This implies that age does not affect customer satisfaction significantly in health insurance services in India. Thus, the null hypothesis "There is no significant difference between the young age group and old age group in terms of customer satisfaction significantly in health insurance services in India" is not rejected.

This implies that the perception of individuals of all ages towards the satisfaction level in health insurance services in India is the same. This can be because, in today's technologically advanced world, every person has access to several options and carry almost the same level of expectations. Aaltonen (2004) revealed that age was not a significant demographic in the loyalty model and rejected the hypothesis that older customers would likely to be more loyal than young satisfied customers.

Table 1 further shows the significant value for income as 0.008 which is lower than 0.05 and thus implies that income has a significant effect on customer satisfaction in health insurance services in India. Therefore, the null hypothesis; "There is no significant difference between various income groups in terms of customer satisfaction in health insurance services in India" stands rejected.

As income has been divided into three levels, post hoc analysis was applied to further assess the levels of satisfaction of different income groups.

Table 2 shows the mean perception score for the low-income group as 190.31 which is lower than the middle-income group (196.82). Table 3 further gives a significant value as 0.033 which shows that there is a significant difference between low-income group and middle-income group concerning customer satisfaction in health insurance services in India. Thus, the null hypothesis; "There is no significant difference between the low-income group and middle-income group on customer satisfaction in health insurance services in India" gets rejected.

The mean perception score of the low-income group is 190.31 (Table 2) which is lower than the high-income group score (196.74). This implies that the low-income group and high-income group differ significantly from each other in terms of customer satisfaction in health insurance services in India. Thus, the null hypothesis; "There is no significant difference between the low-income group and high-income group in terms of customer satisfaction in health insurance services in India" is rejected.

The mean score of the middle-income group (196.82) and the high-income group (196.74) seem almost similar (Table 2). Table 3 also gives a significant value of 0.982 which states that there is no significant difference between the middle-income group and high-income group in terms of customer satisfaction in health insurance services in India. Hence, the null hypothesis: "There is no significant difference between the middle-income group and high-income group in terms of customer satisfaction in health insurance services in India" is not rejected.

The analysis reveals that low-income group has the lowest perception towards customer satisfaction and it differs significantly with the middle-income group and high-income group. This can be because people with low income are satisfied with the basic services they receive whereas, middle and high-income groups people expect more in terms of benefits like tax, riders, coverage etc. as they can pay an extra amount to get the added benefits which provide higher satisfaction. Various studies have shown that income as a demographic variable affects the satisfaction of customers. Deshpande and Deshpande (2014) aimed at studying the factors influencing customer satisfaction with healthcare and stated annual income significantly affected the satisfaction with healthcare. Nair (2017) studied the effects of demographics on customer satisfaction of health insurance policyholders. It was revealed that in both the public sector and private sector general insurance companies, income was found to have a significant effect on customer satisfaction with service quality. Razakiet. al. (2016) found a significant difference between low-income customers and high-income customers on the correlation of customer satisfaction and customer loyalty.

As far as the dependence of age and income on each other for customer satisfaction is analysed and the F value of 2.635 is not significant at 0.073. Therefore, the null hypothesis: "There is no significant interactive effect of age and income on customer satisfaction in health insurance services in India" is not rejected. This implies that age and income are independent of each other towards customer satisfaction in health insurance services in India and do not operate together to affect the perception of customers towards their level of satisfaction in health insurance services in India.

CONCLUSION

Customer satisfaction is imperative for the success of any organization. Health insurance companies being in the service sector have to maintain the satisfaction of customers in today's globally competitive market. The study aimed to examine the impact of age and income on customer satisfaction. The findings revealed that age has no significant impact on the perceptions of customers regarding their satisfaction with health insurance services in India. However, income was found to have a significant effect. Among all the income groups, the middle-income group had the highest mean perception score, followed by the high-income group and low-income group.It was observed that the low-income group people significantly differ with middle and high-income group people in terms of their perception towards the satisfaction in health insurance services. As the income increases, people have more number of options to choose from and, therefore, form their expectations. Studies suggest that as income rises, the use of technology also increases further connecting the people around the world. This enables them to gain information across the globe for their need and they form natural expectations. Sometimes, these expectations are more than what a company can offer at a time. Although they are ready to pay an extra amount for the additional services, the higher income groups give more importance to overall satisfaction than the low-income group who may be satisfied with the essential features of services.

In this global economic world, insurance needs to become more diverse than ever before. Each individual has a different need for a health insurance plan which is based on income, family, several dependents and other factors that may be considered important. Thus, the health insurance companies should focus on the customers and focus on their satisfaction to stay in the market and work successfully.It is suggested that health insurance companies should focus on providing quality services to keep the satisfaction of customers high. This includes providing individual attention to customers, handling customers' complaints and giving timely and proper response. This helps in better understanding of their needs and keeps them satisfied. Management of the health insurance companies should run regular research activities and keep the profile of customers updated to find the expectations of the customers about various service aspects. As expectations and satisfaction levels are not static figures, timely research would help in analysing the changing demands. The study will be beneficial for the researchers, customers, organizations and even the regulators to gain a better understanding of the current level of satisfaction of customers concerning age and income and make further strategies that become useful to them and also the economy as a whole.

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ANNEXURES

Table 1: Tests Between-Subjects Effects

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	11863.465[a]	5	2372.693	2.755	.018
Intercept	18075015.748	1	18075015.748	20984.911	.000
Age	1967.399	1	1967.399	2.284	.131
Income	8340.977	2	4170.489	4.842	.008
Age * Income	4539.985	2	2269.993	2.635	.073
Error	436696.305	507	861.334		
Total	19800862.000	513			
Corrected Total	448559.770	512			

a. R Squared = .026 (Adjusted R Squared = .017)

Table 2: Descriptive Statistics

Age	Income	Mean	Std. Deviation	N
<35 years	<Rs.50,000pm	194.1095	28.36337	137
	Rs.50,000-100,000pm	195.4941	30.47349	85
	>Rs.1,00,000pm	198.4677	23.98204	62
	Total	195.4754	28.09052	284
>35 years	<Rs.50,000pm	182.4242	31.46234	66
	Rs.50,000-100,000pm	198.1395	31.11011	86

	>Rs.1,00,000pm	195.3636	29.82180	77
	Total	192.6769	31.36221	229
Total	<Rs.50,000pm	190.3103	29.83730	203
	Rs.50,000-100,000pm	196.8246	30.73327	171
	>Rs.1,00,000pm	196.7482	27.32045	139
	Total	194.2261	29.59887	513

Table 3: Multiple Comparisons

LSD

(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<Rs.50,000pm	Rs.50,000-100,000pm	-6.5142*	3.04632	.033	-12.4992	-.5293
	>Rs.1,00,000pm	-6.4379*	3.23105	.047	-12.7857	-.0900
Rs.50,000-100,000pm	<Rs.50,000pm	6.5142*	3.04632	.033	.5293	12.4992
	>Rs.1,00,000pm	.0764	3.35167	.982	-6.5085	6.6612
>Rs.1,00,000pm	<Rs.50,000pm	6.4379*	3.23105	.047	.0900	12.7857
	Rs.50,000-100,000pm	-.0764	3.35167	.982	-6.6612	6.5085

Based on observed means.

The error term is Mean Square(Error) = 861.334.

* The mean difference is significant at the .05 level.

EMPLOYEES' PSYCHOLOGICAL WELL-BEING AND SERVANT LEADERSHIP: AN EXPLORATORY STUDY

Suman Pathak*, Rajesh Jangalwa**

Servant leadership and its outcomes have been of recent interest, ever since Greenleaf's contribution to the theories of leadership. This research study has investigated how the practice of servant leadership relates to employees' psychological well-being at the workplace. For the purpose, a survey was conducted by using the Barbuto and Wheeler (2006) Servant Leadership Questionnaire and for the psychological well-being, Oxford Happiness Questionnaire of Argyle et.al. (1989) was used. In order to profoundly respond to negative and varied situations, the experts have attempted to design many ethical leadership models. This study has been conducted on the employees in micro, small and medium manufacturing enterprises, located in India. Pearson Correlation and t-test were applied. The significant positive correlation was found between Servant Leadership and Psychological Wellbeing. Further, on the basis of age and grades (levels) the employees were tested for their perception of servant leadership. So, for both age groups and grades (levels) of employees results were found significant for psychological well-being and perception of servant leadership.

Keywords: *Servant Leadership, Psychological Well- Being, Happiness, MSME.*

INTRODUCTION

In recent times, inestimable scandals with an immeasurable amount of money have been observed in the news, relating to the business, government and sports organisations. This has led to contemplate adapting an apropos leadership model leading to the ethical behaviour of the leaders resulting in better service to the society and wellbeing of the employees of the organisations. The sanity has led to the invention of the new paradigm of leadership providing higher levels of proficiency to check aforesaid malpractice on one hand and on the other hand providing the approaches to hire and retain employees who can lead the organisations with priority to organizational interest and goals and not to the personal and immoral interest.

Such a model was brought about by Greenleaf in 1974. This has been affirmed by many researchers of the current times that there is increasing recognition for the leadership services, providing extended favor for the employees giving service and their precious lifetime (Greenleaf and Spears, 2002; Grant and Mayer, 2009; Hoffman et.al., 2007; Ilies et.al., 2007).

Hale and Fields (2007) defined servant leadership as "an understanding and practice of leadership that places the good of those led over the self-interest of the leader, emphasizing leader behaviors that focus on follower development and de-emphasizing glorification of the leader".

Characteristics of Servant Leadership

Spears (2004) draw and suggested qualities consisting of servant leaders. There are quite distinctive characteristics observed in the servant leadership viz. Calling, Listening, Empathy, Healing, Awareness, Persuasion, Conceptualization, Foresight, Stewardship, Growth and Community Building. Looking to these characteristics such leaders have higher degree of qualities such as Sensitivity

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and Receptivity because they call, openly listen and have empathy with followers. They are Smart as they have higher levels of awareness as they are futuristic. Their focus is Service to Society and they are highly influential, inspiring and motivating (Spears, 2004).

- **Calling** is a desire to willingly serve and sacrifice self-interest, even at the cost of personal life.
- **Listening** is openly and wholeheartedly listening and implementing subordinates' suggested ideas. This morale component is present in the Servant Leadership.
- **Empathy** is listening to others with sensitivity and realize the situation of the person.
- **Healing** is the support, recognition, and appreciation given to those employees who are suffering from broken spirit due to loss of their hope or dream.
- **Awareness** is the all-round alertness of a leader's wisdom for noticing important cues in the environment.
- **Persuasion** is the orientation of influencing others for accomplishing the task assigned in the job without legitimate authority or power.
- **Conceptualization** is encouraging employees for the application of their imaginations to ensure creative application.
- **Foresight** is the leader's speculation and estimation for the future scenario for organisation and its employees.
- **Stewardship** is a leader encouraging the employees of the organisation for a great contribution to society.
- **Growth** is described by Greenleaf et. al. (1996) as a process of reminding the outcome to employees to develop positivity.
- **Community Building** for leader is being capable to prove to employees that the organisation has the potential to develop the organisation as a spirited community.

The morale component is missing in both charismatic leadership and also in the transformational leadership, which is present in the servant leadership. Ehrhart (2004) had found and reported some uniqueness in servant leadership in terms of commitment of the followers, enhanced satisfaction with team leaders especially in terms of followers' cooperation and procedural justice. There is no leadership behaviour whether it is transformational leadership or citizenship behaviour in which servant leadership completely exists (Liden et. al., 2008). Psychological well-being provides a person who has healthy psychological functioning covers the behavioural aspects viz. happiness, life satisfaction and self-growth (Bradburn, 1969).

The psychological wellbeing is generally defined as a blend of happiness and positive affectivity with optional social effectiveness in life. It is also defined as "It is about lives going well. It is a combination of feeling good and functioning effectively." High psychological wellbeing such as spontaneous happiness, faith in own capability and satisfaction in life. The people with higher levels of psychological wellbeing generally report that they comparatively, experience more happiness, life satisfaction and feel more secure.

Many research studies have proved that psychological well-being occurs as a result of positive feelings and most importantly happiness. Black et. al. (2015) had contended that many researchers observe wellbeing does not consist only of happiness or content but it has a naturally active life with other people. So, for overall organisational progress and development too, psychological wellbeing is essential phenomena.

LITERATURE REVIEW

In 1970, Greenleaf had propounded the concept of servant leadership and ever since then it has been added as one of the styles of leadership. Although servant leadership seems same as transformational leadership but it has been proved that it stands alone as a unique leadership concept though it has few similar characteristics to the other leadership concepts and styles. Ding et. al. (2012) had examined the effect of servant leadership on the attitudes of employees as well as on Organisational Citizenship Behaviour (OCB); and similarly, Fred et. al. (2010) had focused on quantitative study on servant leadership and OCB. Drury (2004) and Meyer et. al. (1993) had found a significant and positive relationship between job satisfaction and servant leadership.

Ryff and Keyes (1995) and Ryff and Singer (2008) have proposed Psychological Well-being Model, which is very different from the past available models especially in terms of positive emotions and happiness, whereas, Velleman (1991) had mentioned that balanced life is capable of engaging various factors of well-being and does not have any type of narrower. It was proved through researches that psychological well-being is a result of positive feelings and most importantly happiness. Social well-being is a type of participation with people and communities. Psychological well-being is the affective feeling associated with it. Black et. al. (2015) had found that many researchers who study wellbeing believe that wellbeing is not only a state of happiness or contentment rather it has additional qualities such as involving activity with people and life. When people try to meet the rising demands of the society or the construct in which they are present it leads to stress as a result of demanding situations which deleteriously affect the psychological wellbeing of employees.

Since servant leadership is an emerging concept most researchers are trying to identify its importance and the strength of relationship it has with many factors like organization citizenship behavior and employee attitudes (Fred et. al., 2010), organization commitment (Drury, 2004), the effectiveness of teams (Irving, 2005) and many other factors. An Organizational Commitment Scale was used by Meyer et.al. (1993) for measuring the commitment and Organizational Leadership Assessment Scale (Laub, 1999) was used for servant leadership. The correlation between organizational commitment and organizational leadership was found to be positive and significant. When servant leadership was correlated with organizational commitment the result was contrary and statistically significant.

Irving (2005) had found that significant relationship between servant leadership and team effectiveness exists. Reinke (2004) had explored whether employees' perception of servant leadership affects their trust amongst them or not and it was observed that there exists a significantly high positive correlation. Jia and Liden (2011) have studied various factors such as organizational goal, clarity in the process, servant leadership and their impact on organizational citizenship behaviour; and the strength and performance of teams. They found that these variables are significantly related. A study was conducted by Joseph and Winston (2005) with research objective to explore the relationship between trust and servant leadership and it was found that both are positively related. Similar results were observed by the Greenleaf (1977). Findings of research studies conducted by Greenleaf (1977) and Lad and Luechauer (1998) suggested that job satisfaction is enhanced when factors of servant leadership are applied. Servant Leadership was also investigated in the hospital setting by Jack et. al. (2014). It was contended that in a rural hospital the employees' perception of their leaders' servant leadership has positive impact and is strongly related to their satisfaction.

A study was conducted to prove that servant leadership leads to a decrease in job burnout (Rude, 2004). Psychological well-being is the most important factor that researchers try to examine due to extreme work stress and lack of life satisfaction among people today. In most of the researches, psychological well-being is studied as a treatment variable rather than as a dependent variable mainly due to the effect of other factors like job satisfaction, organization culture, supervisor involvement etc. that lead to an individual's psychological wellbeing.

A study conducted by Wright and Bonett (2007) had contended that employees' psychological well-being has sufficiently affected job satisfaction with job separation. But, when the psychological well-being of employees was low; it had negatively affected employees' turnover. Cohen and Shamai (2009) focus on the trend by examining whether employees' values as individuals are related to psychological well-being and affective organizational commitment. Brad and Thomas (2013) have focused on relationship between workforce engagement and productivity and also with psychological well-being. The low workforce engagement and productivity as well psychological well-being are negatively correlated.

Morgan (2013) had contended that there was a positive and significant correlation between work-life balance and psychological well-being. Ryff (1989) highlights what psychological well-being is and Nielsen et. al. (2008) studied relationships between leadership and employees' well-being through structural equation modeling.

RATIONALE OF THE STUDY

There is a growing tendency for economic progress in the individuals. Most of the people are attracted for better and comfortable life. The employees working on key positons as leader are often observed involved in some corruptions. Such reasons have dramatically increased malpractices in both government and private sectors. Servant leadership is the way to put check on such malpractices in the society. The psychosomatic diseases are increasing as reported by many research studies. Servant leadership may provide opportunity for better mental health since it has a basic purpose of service to the organisation, people and society. Thus, current study becomes imperative as it is important to understand psychological well-being in light of servant leadership.

OBJECTIVE

To investigate Servant Leadership and its relevance with Psychological Well-Being amongst the employees' of MSME.

RESEARCH METHODOLOGY

The Study: The study is exploratory in nature and aims to explore the relevance of servant leadership with psychological well being of employees.

The Sample: Total size of the sample was 30 employees from MSMEs located in India. The percentage ratio between males and females was 80 percent and 20 percent. The average age of the respondents was 33 years. The age ranged between 22 and 58. The respondents were categorized into two age groups. age group 1 was from 22 – 34 years and age group 2 was 34 years and above. The grade levels of employees were also categorized into two levels – Grade Level 1 has top level and senior level employees and Grade Level 2 has middle and junior level employees.

Tools for Data Collection: The treatment variable is the servant leadership. The servant leadership variable is a multi-dimensional variable comprising of five dimensions-altruistic calling, emotional healing, wisdom, persuasive mapping and organizational stewardship. All the five dimensions of servant leadership have been collectively measured by the Servant Leadership Questionnaire (Barbuto and Wheeler, 2006) consisting 23 items. The dependent variable is psychological well-being (PWB) comprising of three dimensions namely, Positive Affectivity, Negative Affectivity and Life Satisfaction. All the three dimensions have been collectively measured using the Oxford Happiness Questionnaire (Argyle et.al., 1989) having 29 items.

Tools for Data Analysis: The collected data was analyzed using t-test and correlation analysis were applied through SPSS 18.

HYPOTHESES

H_{01}: There is no significant correlation exists between Servant Leadership and Psychological Well-Being of employees.

H_{1a}: There is significant correlation exists between Servant Leadership and Psychological Well-Being of employees.

H_{02}: There is no significant difference between the mean scores of Servant Leadership of employees of both age groups.

H_{2a}: There is significant difference between the mean scores of Servant Leadership of employees of both age groups.

H_{03}: There is no significant difference between the mean scores of Psychological Well-Being of employees of both age groups.

H_{3a}: There is significant difference between the mean scores of Psychological Well-Being of employees of both age groups.

H_{04}: There is no significant difference between the mean scores of Servant Leadership of employees of both grades.

H_{4a}: There is significant difference between the mean scores of Servant Leadership of employees of both grades.

H_{05}: There is no significant difference between the mean scores of Psychological Well-Being of employees of both grades.

H_{5a}: There is significant difference between the mean scores of Psychological Well-being of employees of both grades.

RESULTS AND DISCUSSION

The collected data was analysed and the findings of t-test and correlation analysis are discussed. Table 1 reveals the mean of Servant Leadership Scores and Psychological Well-being scores of employees of MSME working in Bengaluru. The score was found to be 3.1933 for servant leadership and 4.7933 for psychological well-being. Further, the research finding had exhibited a positive correlation between servant leadership and psychological well -being, with Pearson's coefficient 'r' = 0.625 (63 percent), which means that the servant leadership as treatment variable explains 63 percent of the variation in the response or psychological well-being as experimental variable and it was found statistically significant at $p < 0.0001$ level (Table 2). It can be cross checked by referring the significance level at t Stat values being greater than t-critical one-tail values. t-Stat value being greater than t-critical one-tail values. t-Stat value stands at 14.55 and t- critical two tail value stands at 2.004 (Table 1). Thus, null hypothesis H_{01} was rejected and the alternative hypothesis H_{1a} that "There is significant correlation exists between servant leadership and psychological well-Being of employees of MSME" is accepted.

In this research study the descriptive statistics is used for the employees age group and employees grade i.e. two levels or rank. It can be seen from the tables 3,4,5 and 6. The mean scores for servant leadership for age group 1 stood at 3.32 whilst for age group 2 stood at 3.72. The standard deviation, represents how much the members of a group differ from the mean value for the group, stood at 0.29 for age group 1 and 0.28 for age group 2 (See Table 3). Further, it was observed that t-Stat is greater than t- critical value. Therefore, we do not accept the assumption that 'means of the values for Age groups 1 and 2 are statistically the same', Age groups 1 and 2 have statistically different mean values for servant leadership. It further indicates that lower age group (22 – 34) feels that they receive lower levels of servant leadership. Hence, null hypothesis H_{02} is rejected and alternative hypothesis H_{2a} "There is significant difference between the mean scores of Servant Leadership of MSME employees of both age groups" is accepted.

The mean scores for psychological well-being for age group 1 stood at 4.56 whilst for Age group 2 it stood at 5.22. The standard deviation, meaning the quantity expressing by how much the members of a group differ from the mean value for the group, stood at 0.41 for age group 1 and 0.44 for age group 2, so the dispersion and spread was quite moderate.

This can be seen in the result that t Stat is greater than t-critical Value, therefore, we do not accept the assumption that 'means of the values for Age groups 1 and 2 are statistically the same' (Table 4). Age groups 1 and 2 - have statistically different mean values for psychological well-being. It further indicates that the higher age group (Above 34 years of age) feels that they receive higher levels of psychological wellbeing. Here, null hypothesis H_{03} is rejected and alternate hypothesis H_{3a} that "There is significant difference between the mean scores of psychological well-being of MSME employees of both age groups" is accepted.

It clearly indicates that low levels of perceived servant leadership amongst the younger age group (22-34) also reflects lower levels of psychological well-being, whilst higher levels of perceived servant leadership amongst the older age group (Equal to or Above 35 years of age) also reflects higher levels of psychological- wellbeing.

The mean scores for servant leadership for Level 1 stood at 3.35 whilst for Level 2 it stood at 3.44. The standard deviation, meaning the quantity expressing by how much the members of a group differ from the mean value for the group, stood at 0.46 for Level 1 and 0.40 for Level 2, so the dispersion and spread was quite moderate (Table 5).

The t Stat is lower than t-critical value, therefore, the null hypothesis H_{04} is accepted that "There is no significant difference between the mean scores of Servant Leadership of MSME employees of both grades", meaning that the 2 groups of analysis - Levels 1 and 2 have similar mean values for Servant Leadership

Levels 1 and 2 comprise 15 employees each, with Level 1 comprising of employees belonging to the top management team and senior management, whilst Level 2 comprises of employees belonging to the middle and junior levels of management. The mean scores for psychological well-being for Level 1 stood at 4.82 whilst for Level 2 it stood at 4.77. The standard deviation, meaning the quantity expressing by how much the members of a group differ from the mean value for the group, stood at 0.54 for Level 1 and 0.51 for Level 2, so the dispersion and spread was quite moderate (Table 6).

Since the t-Stat is smaller than t-Critical Value, therefore, null hypothesis H_{05} that "There is no significant difference between the mean scores of Psychological Well-being of MSME employees of both grades" is accepted. Hence, accepting the assumption that the 2 groups of analysis, levels 1 and 2, have similar mean values for psychological well-being.

In the light of the objective of this research study it was found that there is significant positive relationship between servant leadership and the psychological well-being. This indicates that higher degree of servant leadership will lead to better psychological well-being of the employees working in the MSME, Bengaluru. No organisation can gain competence without employees' well-being. De Voorde (2010) has defined employee well-being and stated that it has three dimension happiness, health and relationships. The author has investigated 41 research studies conducted during 1995 to 2008 and contended that the employees' well-being in terms of happiness and relationships function provides mutual gain with performance. This indicates that the psychological well-being is of pivotal importance, and current study found that both servant leadership and employees well-being are related.

Both age groups exhibited significant difference in terms of servant leadership. Since, the younger group has lessor mean value for servant leadership, therefore, it implicates that they feel that senior employees are giving comparatively less attention or discriminated in some of the dimensions of servant leadership vis. empathy, calling, listening etc.

SUGGESTIONS

It is vitally important for the employees to display high levels of psychological well-being (PWB), as PWB is seen to be linked to job satisfaction, motivation as well as employee health. There are several ways to promote PWB in organizations and organizations of the day will do well to implement human resources interventions, with motivational techniques and programs to inculcate higher levels of PWB.

This research has shown, the presence of servant leadership will suffice for an employee's PWB levels to be higher, and thereby, increase the motivation and satisfaction levels too. In the backdrop of this research, the suggestions from the research will be then to promote Servant Leaders, as well and this may involve having or designing leadership programs, leadership development and fostering a culture wherein servant leaders are recognized and honored. So, the organizations across the world have to adopt the concept of servant leadership which would result in togetherness and a collective sense of purpose and PWB amongst the employees.

In the organization regardless of the persons' positions, each one (whether a leader or a sub-ordinate) has to be trained for awareness, acceptance, appreciation and recognition of both servant leadership attributes as well as psychological well-being.

Companies should adopt servant leadership and develop corporate/organizational culture to fostering ethics and values, norms and beliefs. This situation leads to a positive outcome, particularly as the servant leader dimensions that this research study has measured to promote the leaders (who may reinforce their behavior by further embracing servant leader attributes) as well as the subordinates who have a reason to go well above and beyond their stated mandate. As such the employees and the organization enjoy the positive outcomes.

Organizations need to modify the policies as well as their regulations transparent environment. This will de-emphasis the 'Unservant' behaviour and build a cohesive organisational culture. The supportive organisational climate will lead to free and spontaneous expression of employees thanking, ideas, and emotions, which in the long run cultivate PWB, in the organisation.

In a nutshell, organizations should embrace aspects aimed towards promoting servant leadership and also recognize the mechanisms which will ascertain the PWB feelings of the sub-ordinates, as a reason for the servant leaders' behaviors. As such there must be a relook on this servant leader – psychological well-being continuum by the organizations to add value to its people practices, not only from a psychological perspective but also from a pragmatic perspective. It will, in the long run, surely be a mean of positive strategic alliances in the corporate practices.

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ANNEXURES

Table 1: t-test: Two- Sample Assuming Unequal Variances

	PWB	SLQ
Mean	4.793333333	3.1933333333
Variance	0.22616092	0.136505747
Observations	30	30
Hypothesized Mean	0	
Df	55	
t Stat	14.5521375	
P(T<=t) one-tail	8.28664E-21	
t Critical one-tail	1.673033965	
P(T<=t) two-tail	1.65733E-20	
t Critical two-tail	2.004044783	

Table 2: Pearsons Correlations between PWB and SL

	Psychological Wellbeing	Servant Leadership
Psychological Wellbeing	1	0.625787487
Servant Leadership	0.625787487	1

Table 3: Descriptive Statistical Analysis involving Employees' Age (Groups) and Servant Leadership (SL)

t- Test: No-Sample Assuming Unequal Variances between Age Group 1 and Age Group 2 Scores for Servant Leadership Scores		
Statistical Analysis	Age Group 1 - Ages between 22 and 34	Age Group 1 - Ages Above 35
Mean	3.326666667	3.72
Standard Deviation	0.293906367	0.283347339
Variance	0.086380952	0.080285714
Observations	15	15
Hypothesized Mean	0	
Df	28	
t Stat	-3.731487639	
P(T<=t) One-tail	0.000429529	
T Critcal one-tail	1.701130934	
P (T<=t) two-tail	0.000859058	
T Critical two-tail	2.048407142	

Table 4: Descriptive Statistical Analysis involving Employees' Age (Groups) and Psychological Well-being (PWB)

t-Test Two-Sample Assuming Unequal Variances between Age Group 1 and Age Group 2's scores for Psychological Wellbeing		
Statistical Analysis	Age Group 1- Ages between 22 and 34	Age Group 1- Ages above 35
Mean	4.566666667	5.2266666667
Standard Deviation	0.418614495	0.443148905
Variance	0.175238095	0.196380952
Observations	15	15
Hypothesized Mean Difference	0	
Df	28	
t State	-4.193151772	
P (T< = t) one-tail	0.000124919	
t Critical one-tail	1.701130934	
P(T< = t) two-tail	0.000249837	
t Critical two-tail	2.048407142	

Table 5: Descriptive Statistical Analysis involving Employees' Grade Level and Servant Leadership (SL)

t-Test: Two-Sample Assuming Unequal Variances between Employee Level 1 and Employee Level 2's scores for Servant Leadership		
Statistical Analysis	Level 1	Level 2
Mean	3.353333333	3.44
Standard Deviation	0.461157963	0.404969135
Variance	0.212666667	0.164
Observations	15	15
Hypothesized Mean Difference	0	
Df	28	
t Stat	-0.54691411	
P(T < = t) one-tail	0.294385203	
t Critical one-tail	1.701130934	
P (T < = t) two-tail	0.588770405	
t Critical two-tail	2.048407 142	

Table 6: Descriptive Statistical Analysis involving Employees' Grade Level and Psychological Well-being

t-Test: Two-Sample Assuming Unequal Variances between Employee Level land Employee Level 2's Scores for Psychological Well-Being		
Statistical Analysis	Level 1	*Level 2*
Mean	4.826666667	4.773333333
Standard Deviation	0.540458359	0.509154294
Variance	0.292095238	0.259238095
Observations	15	15
Hypothesized Mean Difference	0	
Df	28	
t Stat	0.278187257	
P(T<=t) one-tail	0.391456318	
t Critical one-tail	1.701130934	
P(T<=1) two-tail	0.782912637	
t Critical two-tail	2.048407142	

FACTORS AFFECTING USAGE OF INTERNET BASED FOOD DELIVERY SERVICE APPS

Raksha Thakur*, Nidhi Sharma*, Bhavya Bhatt*

The lifestyle of the people in our country is changing rapidly. An increasing number of working women, changing trends in families and offices and many other reasons have lead to a change in the food habits of Indians. A huge expansion is being observed now-a-days in the number of online food delivery service apps. The most common apps are Zomato, Swiggy, Food Panda etc. The current study explores the factors affecting the usage of internet-based apps for food delivery service by the people of India. The study reveals seven factors on the basis of responses collected from 143 respondents. The study concludes that Convenience and Value to Customer are the most important factors that affect customers' perception towards food delivery apps followed by Ease and Comfort, Customer Satisfaction, Menu and Items Offered, Dependability and Reliability and Outreach of Apps.

Keywords: *Online Food Delivery Service, Apps, Consumers, Internet.*

INTRODUCTION

The lifestyle of the people in our country is changing rapidly. An increasing number of working women, changing trends in families and offices and many more reasons have led to a change in the food habits of Indians (Roh and Park, 2018). Online food delivery is a concept where food is ordered to local chefs, food outlets, local/national restaurants or international chain restaurants using a mobile app or through websites; and is delivered to the customer's destination (Jadhav, 2018). A huge expansion is being observed now-a-days in the number of online food delivery services apps. As many people nowadays prefer to order food online by mobile apps (Liu et. al., 2019) food ordering through online apps has grown substantially. India's online food delivery market, comprising of aggregators and internet kitchens, grew at 150 percent in 2016 with an estimated Gross Merchandise Value (GMV) of USD 300 million (Kapoor and Vij, 2018). If restaurants are linked with any online service provider they get a better response as their information is visible brightly on mobile screens of consumers. Since, visibility is better on apps, consumers reach out to such restaurants which help them attract new customers. Just as the delivery of goods through online orders, companies are providing online delivery of food, providing expediency to customers. The business model of both is quite similar where customers have accounts with the service providers. Customers get to select between pick-up and delivery options; also options of payment are there like digital or cash.

The first online food ordered was pizza from pizza hut, whereas, the first online food service provider was a worldwide waiter, found in 1995, and popular as waiter.com in the current time. The company initially operated only in northern California, expanding further to many other cities in the United States. Grubhub, established in 2004, is an online and mobile food company that connects clients with a local restaurant. By late 2000 major pizza chains had created their mobile applications and were doing 20-30 percent of their business online. There are some advantages of online food ordering systems. Firstly, products just one click away;

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secondly, services are fast, easy, comfortable and available 24/7. Third, it appears attractive and stimulating to hungry and foodies.

Proliferation in the usage of online food delivery apps has generated the interest of authors in this paper to investigate factors affecting people's perception of the online food delivery services apps. The result of this paper will be useful for companies offering food delivery services, multiple restaurant intermediaries and food retailers to understand the reasons for customer satisfaction. The companies would be able to target different segments of customers in a better way. Reasons, motivating consumers to buy from an online medium are important for food retailers (Yeo et. al., 2017).

REVIEW OF LITERATURE

Kimes (2011) surveyed 470 internet users and found that almost half of them ordered food online through mobile apps or a text message. Patel (2015) suggested that the proposed online ordering system will make the ordering process for the customer and the restaurant very convenient. The proposed system provides an interactive and up-to-date menu with wide options in a user-friendly manner. The customer has an option to select one or more items and place an order that will land in the Cart. The customer can view his entire order details before checking out.

According to Alagoz and Hekimoglu (2012), online shopping provides huge exposure to a variety of products and services to customers as compared to traditional shopping. Customers can easily compare prices of products of different brands and purchase from different apps at the same time.As per the study conducted by Tobing (2016), one of the main issues in product delivery services is to find the shortest path between customers' addresses that enable quick delivery of products, save fuel usage and optimize the usage of the vehicles and delivery staff. The optimization requirement is usually expected from the delivery staff as the applicants are required to know the streets or shortcuts in a particular area or city.

Kedahet. al. (2015) conducted a study and found that website trust and customer satisfaction as well as customer satisfaction and loyalty are positively related. The study also found an unanticipated link between service quality and loyalty. The popularity of online banking among customers encouraged diverse online businesses including online food ordering. Online food ordering satisfies the rising demands of people living in metropolitan and other cities who are using such apps to receive quick delivery of food. Acording to Parashar and Ghadiyali (2017) digital technology is growing rapidly in India which has given rise to multiple online industries. The online food delivery industry is no exception. The usage of online portals has been continually rising and is estimated to augment at a swift rate even in the near future. In a research, Kim Dang et.al. (2018) stated that the Internet has empowered online food service providers by empowering people to search, compare and conveniently access these services. As of 2016, around 95 percent of the United States population explored the internet for online food service information at least once. In 2015, it was studied that more than 75 percent of Asia-Pacific participants in developing countries searched and ordered products via internet.

OBJECTIVES

To explore the factors affecting the usage of internet-based food delivery service apps.

METHODOLOGY

The Study: The current study is exploratory in natureand explores the factors affecting the usage of internet based apps for food delivery service.

The Sample: The population for the study was constituted of all concerned people who access mobile apps. The sampling method for the study used was convenient sampling and the sample was constituted of 143 respondents from various cities of India.

Tools for Data Collection: For collecting primary data, a self-developed questionnaire having 24 items. Likert type five-point scale (where 5 denotes ‘Strongly Agree’ and 1 denotes ‘Strongly Disagree’) was used. This was based on thorough observation as well as literature review and prepared with a view to getting a clear idea about the usage of food delivery services apps amongst people of India. The questionnaire consisted of two sections. Section one consisted of the respondent’s demographic information like age, gender, income and education. Another section consisted of 24 statements on which the respondents were supposed to rate from strongly agree to strongly disagree. The link was shared online via personal/group messages after making respondents aware of the purpose of the study.

Tools for Data Analysis: The data was analyzed through Principal Component method of factor analysis with the help of SPSS.

RESULT AND DISCUSSION

Overall reliability was calculated for the scale by assessing the internal consistency of the 24 items using Cronbach’s Alpha. The scale (N = 24) had reliability of 0.862 (Table 1). Data adequacy was checked using KMO and Bartlett’s Test. The Kaiser-Meyer-Olkin measure of sampling adequacy value was 0.819, Bartlett’s test of sphericity was significant (p-value = 0.000) (Table 2). Therefore, all 24 sub-factors were accepted for the final scale and subjected to the principal component method of factor analysis based on varimax rotation. Table 3 and 4 show all explored factors with the items loads, eigenvalues and percent of variances (60.209).

Factor 1: Convenience of Consumers

This factor has a load of 4.911 with 9 items and all items in the factor are related to the convenience of consumers(Table 3).The item that affects the usage of the online food delivery service apps the most is about discounts. The statement says “discounts, available on food delivery services app apps are highly attractive”, having an item load each equal to 0.688. Users of food delivery services apps are highly attracted by the food available on discounted prices (Yeo et. al., 2017). Food delivery services app companies keep coming with discount offers. Zomato’sPiggyBank scheme which offers a 10 percent discount on the next order forever is an example of this. Zomato, Swiggy, UberEats andFaasos offer various discounts on many food items.Sometimes in partnership with others with a restaurant or e-wallets with some percentage of discount on paying through Amazon Pay or Paytm. Orders with discounted rates are more desired by the customers (Jacob et. al., 2019). There are different segments of consumers like students, working bachelors, working women, and housewives who enjoy the discount offers on apps.

"Convenience of Consumers" factor is related to the convenience that consumers get on ordering food online sitting at home. ‘It saves my efforts too’ was the statement in the questionnaire which is another major factor (item load 0.622) affecting usage of food delivery service apps. It is obvious that in today’s fast and stressful life, crowded markets and roads, people prefer to order online than to dress up, personally visit a restaurant, order, dine and drive back. Meal delivery services meet the needs of people who want to save time and effort by purchasing fully prepared meals (Roh and Park, 2018). The next major item affecting usage of food delivery services app, ‘the apps are well designed for an easy usage’ (item load 0.559) further makes it easy for people to order quickly and easily add to their convenience. Features such as 'one-click ordering' and 'check order status' made the ordering process easier for customers and enabled problem-free tracking of their orders online (Paul and Purkayastha, 2012).There are many attributes for a mobile app or website, which influence a consumer's purchase intention. These attributes can be on the softer aspects, such as visual appeal or navigation experience or towards technicalities such as smart filter options, payment gateways or real-time tracking (Kapoor and Vij, 2018). App developers must consider this factor to make the app more user-friendly so that more users can be attracted. Perceived complexity (the ease of use) is a major barrier to the adoption of online food shopping among consumers (Wang and Simon, 2018).

Another noteworthy item in this factor affecting usage is 'such apps are not dependable always due to their dependency on the Internet' (item load 0.555). The majority of people agree that if the internet is not available, the convenience of ordering food online may get disrupted. Online food delivery services apps offer all varieties of food (item load 0.546) is the fifth item in the factor 'convenience of consumers'. Gone is the culture in many modern families where all members eat the same menu. Children and youth don't adjust to a simple menu at home and look for options and more choices. In such situations, online ordering of food is preferred by many as the food delivery services apps offer a variety of food items to satisfy varied choices of all members of the family. The sixth item in this factor is 'ordering food on food delivery services apps save money' (item load 0.510). It is obvious when people order food sitting on their couch, save expenses incurred on visiting a restaurant right from maintaining formal outfits to transportation.

'The food I get through online apps is always fresh' (item load 0.497) is the seventh item in the first factor. The freshness of food is very important for health of the consumer. This is an important factor affecting the usage of food delivery services apps. The next item which majorly affects the usage of apps is 'the delivery charges are reasonable' (item load 0.494). The majority of respondents agree that delivery charges are reasonable. Most of the companies do not charge anything for the delivery of food. This may be one of the reasons for the proliferation of usage of food delivery services apps now-a-days. Some apps charge for delivery of small orders below some minimum fixed value. It seems that in the case where delivery charges are taken, it is comparatively dearer for consumers to pay delivery charges than visiting a restaurant.

The ninth item in this factor is 'I enjoy using the apps offering multiple brands' (item load 0.422). Brand consciousness is increasing with time and people tend to stick to their choice of brands. It is difficult for some people to try out new brands if they are satisfied with one. It is not uncommon to see families consisting of members having brand loyalty for different brands. Children today are extremely aware of the various brands in the market and are conscious of the products they use or consume. They pick and choose carefully according to their needs, style preference, etc. (Vincent 2014). Hence, the apps offering multiple brands offer choice and are convenient to their customers. This feature of apps is a major factor affecting the usage of food delivery services apps.

Factor 2: Customer Value

The second major factor affecting the usage of food delivery service apps is named as 'Customer Value' (factor load 2.102) (Table 3).Online food delivery apps provide a feedback system where the users can provide feedback and recommendations, rate the food item and mode of delivering (Jacob et. al., 2019). The first item in this factor is 'online food delivery services companies give importance to consumer feedback' item load 0.734.It is observed that the customers feel valued when the service providers give importance to their feedback. General feedback about their services and products is collected with every purchase by almost all companies in this segment.

The second item related to customer value is 'companies respond quickly to complaints' (item load 0.721). The companies in this matter quickly respond to complaints of customers. The problems can range from the delivery of the wrong food item to the wrong ingredient in the food. In case of complaints, companies usually accept and refund customer's money. This feature is appreciated by the customers and they feel valued. The third statement in this factor is 'payment options given by companies are easy' (item load 0.647) which affects the usage of food delivery services apps majorly. An array of payment options are offered by companies to their customers, e-wallets to pay pals, debit and credit cards to the cash payment option, keeping in mind customer's ease and satisfaction, bestowing due value to the online customers.

Factor 3: Ease and Comfort

The third factor (factor load 1.968) is about ease and comfort that customers enjoy in ordering online (Table 3). The first item was 'I prefer ordering food online sitting at home than going to a restaurant' (item load 0.749) which is an important point to be considered in the usage of online food delivery apps. In this fast-paced life where people are in a rush most of the time, sitting home is relaxing and comfortable (Yeo et. al., 2017). It is easy to order online well in advance. There is no possibility of misinterpretation of orders since it is not verbal. People take pleasure in ordering online also because it saves their valuable time (Jadhav, 2018). 'This is time-saving' is the second statement in this factor (item load 0.731). While the food is prepared and served by the delivery boys, people can utilize their time for other work making time management easy for them. Ordering online is fast and one is not put on hold to speak to the salesperson to place an order. The third item in this factor relates to 'recommendation of apps to friends' (item load 0.488). The ease and comfort in ordering through apps on mobile give users so much pleasure that they recommend the apps to their friends and relatives.

Factor 4: Customer Satisfaction

This factor is related to customer satisfaction with a factor load of 1.539 (Table 3). The first item in this factor is 'delivery time is as promised by the companies' (item load 0.801). Estimated time of delivery is displayed on the app; delivery within this time is imperative in having customer satisfaction in online food ordering, also important in order on the table. Information on the estimated delivery time of the request is a determinant in the confirmation of purchase. If there is the information of delay in delivery, the customers may choose another restaurant available on the online menu, without spending their time in this process (Pigatto et. al., 2017).

The next item here is 'I am satisfied with services given by companies' (item load 0.738) is related to satisfaction of customers that they get by services offered by such apps. Services include notifications, phone calls, emails, internet banking, feedback systems, online chat and physical product delivery (Kim et. al., 2007). The moment one orders on these apps, the status appears on the app, showing a pictorial display of order status like acceptance of the order by the restaurant, preparation or processing of food or pick up/delivery of the parcel. The delivery boys call the customer and locate the address quickly providing you utmost satisfaction. Right from ordering to payment till after-sales feedback etc. all services of food delivery services apps are important for the satisfaction of users.

Factor 5: Menu and Items

With a factor load of 1.453, this factor is related to the menu and items (Table 3). Items in this factor are 'The items on menu at restaurant and online menu are same' (item load 0.765) and 'There is no price difference between menu at restaurant and online menu on apps' (item load 0.688). Customers prefer using food apps where they find no difference in the menu at restaurants or online menu. Respondents do not appreciate differences in pricing of food at restaurants and on apps. Hence, food apps must try to have a similar menu and prices in both online and offline menus.

Factor 6: Dependability and Reliability

Dependability and reliability is a factor that describes the dependability of food apps on technical and networking effectiveness. Factor load of this factor is 1.224. This factor has 2 items. First item in this factor is 'Installation of some food delivery apps fail' (item food 0.737). Other item in this factor is 'The quality of food ordered online through apps is reliable' (item load 0.487).Hence, food apps are focused on making their installation and usage quicker and user friendly. Similarly, the usage of food apps is also dependant on the reliability of those apps to maintain their delivery of quality of food items regularly. A similar study on grocery says that consumers see the risk of low-quality grocery being deliveredin ordering online through apps (Kaur and Shukla, 2016).

Factor 7: Outreach of Apps

The last factor in the list is 'Outreach of Apps' with a factor load of 1.922. The first item here is 'I order online as it is in trend now-a-days with an item load of 0.798. The outreach of apps is such that some people use it for the sake of the following trend. Next item is 'I order online as these companies produce employment opportunities' (item load 0.565). If people use it to support employment generation, it shows the outreach of apps. The last item in this study is 'Online food services are available in all areas' with an item load of 0.559. The usage of food delivery apps is affected by the availability of services in all areas. Companies providing these services must focus on reaching out to maximum locations in and out of cities.

CONCLUSION AND SUGGESTIONS

There is no doubt that food delivery apps have carved their niche in the market and are getting huge response from consumers. Though they are getting increasingly popular as discussed there are few areas that call for substantial attention from service providers to increase their penetration and sales. The major factors explored through this research were convenience, customer value, ease and comfort, customer satisfaction, menu and items, reliability and dependability and an outreach of apps. Implications from the study can be used by food delivery service providers and mobile companies to enhance their services and products.

Convenience of consumer should always be considered by service providers in designing the app as well as service delivery. Global food producers, marketers and policymakers should continually improve their online retail or promotional platforms to meet Chinese consumers' expectations related to the ease of use for online food shopping (Wang and Simon, 2018). Service providers should also value customers and his satisfaction by offering quality and timely services, providing ease of payment and ordering as these were important factors behind the increasing popularity of food delivery service apps. Companies should focus on improving the reliability and dependability factor and gain consumer's trust at large. Mobile companies can work on better devices to support the easy use of apps plus better connectivity of the internet. Lastly, companies need to expand to new areas and options to gain a large customer base.

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ANNEXURES

Table 1 : Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.862	.871	24

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.819
Bartlett's Test of Sphericity	Approx. Chi-Square	1.039E3
	Df	276
	Sig.	.000

Table 3:Factors, Items and loadings

Factors	Items	Item Load	Factor Load	Eigen Value
Factor 1: Convenience of Consumers	Discounts, available on such apps are highly attractive.	0.688	4.911	26.903
	It saves my efforts too	0.622		
	The apps are well designed for an easy usage	0.559		
	Such apps are not dependable always due to their dependency on Internet	0.555		
	Online food delivery services apps offer all varieties of food	0.546		
	It saves money	0.510		
	The food I get through online apps is always fresh	0.497		
	The delivery charges are reasonable	0.494		
	I enjoy using the apps offering multiple brands	0.422		

Factor 2: Customer Value	Online food delivery services companies give importance to consumer feedback	0.734	2.102	7.446
	Companies respond quickly to complaints	0.721		
	Payment options given by companies are easy	0.647		
Factor 3: Ease and Comfort	I prefer ordering food online sitting at home than going to a restaurant	0.749	1.968	6.21
	This is time saving	0.731		
	I would recommend online food delivery app to my friends.	0.488		
Factor 4: Customer Satisfaction	Delivery time is as promised by the companies	0.801	1.539	5.567
	I am satisfied with services given by companies.	0.738		
Factor 5: Menu and Items	The items on menu at restaurant and online menu are same	0.765	1.453	5.395
	There is no price difference between menu at restaurant and online menu on Apps	0.688		
Factor 6: Dependability and Reliability	Installation of some food delivery apps fail	0.737	1.224	4.397
	The quality of food ordered online through apps is reliable	0.487		
Factor 7: Outreach of Apps	I order online as it is in trend now-a-days.	0.798	1.922	4.292
	I order online as these companies produce employment opportunities	0.565		
	Online food services are available in all areas.	0.559		

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.457	26.903	26.903	6.457	26.903	26.903	3.268	13.618	13.618
2	1.787	7.446	34.348	1.787	7.446	34.348	2.374	9.892	23.510
3	1.490	6.210	40.558	1.490	6.210	40.558	2.157	8.986	32.497
4	1.336	5.567	46.125	1.336	5.567	46.125	1.849	7.703	40.199
5	1.295	5.395	51.520	1.295	5.395	51.520	1.733	7.222	47.421
6	1.055	4.397	55.917	1.055	4.397	55.917	1.566	6.523	53.944
7	1.030	4.292	60.209	1.030	4.292	60.209	1.503	6.265	60.209
8	.978	4.073	64.282						
9	.926	3.860	68.142						
10	.824	3.434	71.576						
11	.813	3.386	74.962						
12	.746	3.110	78.072						
13	.658	2.744	80.816						
14	.592	2.466	83.282						
15	.580	2.417	85.698						
16	.537	2.236	87.934						
17	.490	2.043	89.977						
18	.466	1.943	91.919						
19	.435	1.814	93.733						
20	.360	1.501	95.234						
21	.329	1.369	96.603						
22	.305	1.273	97.876						
23	.284	1.182	99.057						
24	.226	.943	100.000						

Extraction Method: Principal Component Analysis.

FINANCIAL PERFORMANCE OF BANKS IN INDIA BY CAMEL MODEL : A STUDY

Richa Bhatia*, Ish Gupta*

The research intends to analyze the financial performance of commercial banks in India. Sample of six commercial banks was taken which includes three Public and three Private sector banks and the data collected ranges from 2008-09 to 2017-18. The banks included in the study are Axis Bank, Bank of Baroda, Corporation Bank, HDFC Bank, ICICI Bank, and State Bank of India. The data is collected from various sources comprising of published annual reports, websites of banks, and Reserve Bank of India. CAMEL Model is applied for measuring the aspects of the financial performance of banks which includes capital adequacy, asset quality, management efficiency, earning quality, and liquidity. The significance of these parameters was tested using ANOVA. The study found that the State Bank of India (public sector) and HDFC bank (private sector) performed significantly well in almost all aspects. However, Bank of Baroda in the public sector and Axis Bank in the private sector exhibited maximum growth of their prices and returns at the BSE.

Keywords *: Banking, CAMEL Model, Financial Performance, Capital Adequacy, NPA.*

INTRODUCTION

According to the Reserve Bank of India (RBI), India's banking sector is amply capitalized and well-controlled. India's financial and economic status is far above as compared to the rest of the globe. Modern banking systems like payments through digital platforms and small finance banks have been observed in India of late, like Immediate Payment Service (IMPS) as well as Faster Payments Innovation Index (FPII). The adoption of these new methods by RBI is expected to restructure banking in India. Some more efforts like improved expenditure for infrastructural development, prompt project execution as well as reformations in the industry may give more momentum. Therefore, the Indian banking industry is on the edge for enlargement as the speedily rising companies may desire credit support from banks.

Mobile and internet banking services are increasing in demand. Banking in India is greatly emphasizing on offering high-end services plus raising the technological systems to augment the user understanding and practice to gain a competitive edge. This research paper is an attempt to evaluate the financial performance of the selected public and private sector banks in the sample period of ten years.

REVIEW OF LITERATURE

Antoun et. al. (2018) investigated bank specific, industry-specific and macroeconomic determinants of the financial performance of the Banks in Central and Eastern European countries. To analyze these determinants the author constructed a Financial Performance Index (FPI) based on the CAMEL ratios. The data for 2009-14 was collected from the bank scope database, World Development Indicators, and financial structure and development database. The empirical analysis using the fixed-effect panel regression concluded that the asset quality, earnings, capital adequacy, and liquidity are negatively affected by the size and positively affected by business mix and economic growth. Alemu and Aweke (2017) analyses the overall performance of the private

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commercial banks in Ethiopia for 10 years from 2007-2016 by using the CAMEL rating approach. The collected data from the audited annual reports were analyzed by descriptive statistics and the panel regression model was applied to find the impact of the CAMEL elements on the bank performance i.e. ROA and ROE. The results of the study concluded that NIB bank stood on the top and the panel model estimations indicated that the explanatory variables were significant in the determination of the profitability indicators. Kaur et. al. (2015) measured and compared the financial performance of the leading five public sector banks SBI, Bank of Baroda, Punjab National Bank, Bank of India and Canara Bank for the year 2009-14. The study applied the CAMEL Model i.e. Capital Adequacy, Asset quality, Management efficiency, earning quality, and liquidity to analyze the performance and concluded that Bank of Baroda leads in all the aspects of the CAMEL model. Bansal and Mohanty (2013) analysed the financial performance of the banks was evaluated by applying the CAMEL Model based on market capitalization five major Banks SBI, HDFC Bank, ICICI Bank, Axis Bank, and Kotak Mahindra Bank were selected for the study from the period of 2007-11. The banks were ranked based on the overall weighted results of ratios in which HDFC stood first.

Hawaldar et. al. (2017) evaluated the financial performance of 8 commercial banks from the year 2005-2015. To determine the relationship between the financial parameters of these banks, regression, correlation, and t-test was applied. The study concluded that the profitability of the banks has an impact on the capital adequacy and the financial leverage but did not confirm the relationship between profitability and the efficiency of the banks. Gudata (2015) analyzed the financial performance in the Ethiopian Commercial Banking Sector for five years from 2007-2011. The banks selected for the study were Commercial Banks of Ethiopia, Construction and Business Bank, Bank of Abyssinia, Awash International Bank, and United Bank. Ratio analysis was applied to study the financial performance and t-test was used to see whether there is a significant difference in the profitability, operational efficiency, liquidity management, solvency and risk of the selected commercial banks. Srinivasan and Britto (2017) evaluated the financial performance of 16 commercial banks from the period of 201-2017. The liquidity, solvency, and profitability ratios were calculated and one – way ANOVA was applied to determine whether there is a significant difference in the means of the financial ratios of the private and the public sector banks. The impact of liquidity, solvency, and efficiency on the profitability of the public and private sector banks was studied by employing the panel data estimation fixed and random effects models. The empirical results revealed a positive and significant impact on profitability.

Roy et. al. (2018) conducted study to develop and validate a scale for measuring the consumer's perceived service value in Indian retail banking services. Based on expert opinion through focus groups and literature review, the author compiled a list of possible measurement items. The sample size for the study was 442 that included the respondents using retail banking services. The survey instrument was used and analysis was done through the structural equation modeling. The study discovered a seven-dimensional scale for measuring service that included service equity, service quality, customer intimacy, product leadership, operational effectiveness, customer communication, and perceived sacrifice. Repkova (2015) in the study applied data envelopment analysis to determine the efficiency in the Czech banking sector for the period of 2001-12. The author applied panel data analysis to estimate the determinants of the banking efficiency and concluded that the level of capitalization, liquidity risk, and riskiness portfolio has a positive impact on banking efficiency. Tzeremes (2015) analyzed the banking efficiency in Indian banking industry from 2004-12. To analyze the dynamic effects on the industry's performance level the author applied the conditional directional distance estimator. The results of the study indicated that foreign banks perform better compared to national and domestic private banks. The findings support the view that ownership structure affects bank technical efficiency levels.

Fahad (2014) empirically analyzed and compared the financial performance of the conventional and Islamic banks in Bangladesh. The analysis was done from the year 2008-12 and the panel data of 10 conventional banks and 6 Islamic banks were collected from the audited annual reports. The author calculated the relevant financial ratios and regression model in which Return on Assets (ROA) and Return on Equity (ROE) were used as dependent variables along with various internal and external independent variables. The results of the study indicated that credit risk, concentration, size, and economic conditions are most significant to conventional banks in Islamic Banks. Karim and Alam (2013) measured the financial performance of five private sector banks of Bangladesh from the period of 2008-12. The author used the secondary data collected from the various audited annual reports and financial ratios like net interest margin (NIM), returns of assets (ROA), return of equity (ROE) and non performing assets (NPA) were analysed. The internal performance was measured by return on assets, the market-based performance was measured by Tobin's (price/book ratio), and the economy based performance was measured by the economic value. By applying multiple regression analysis the study showed a positive impact of the three indicators on the financial performance of the Bangladeshi banks.

Miencha and Selvam (2013) examined and compared the performance of the Kenyan commercial banks after the global financial crisis era. The data was collected from the Annual Report, Banks in Kenya, published reports and journals from the period of 2007-11. By the Data Envelopment Analysis (DEA) it was found that the performance of private banks was relatively high compared to the public sector and foreign sector banks in Kenya. Goel and Rekhi (2013) investigated the profit earning capacity and the factors affecting the profit earning of the selected private and public sector banks from the year 2009-12. Based on the data collected from the audited annual reports of the banks the ROA, ROE, demand deposit, saving deposit ratio, debt-equity ratio, credit deposit ratio, and net interest margin was calculated. Based on the correlation matrix, the author concluded that interrelation existed between efficiency and profitability and the private sector banks showcased higher efficiency than the public sector banks.

Paradi et. al. (2011) analyzed a major Canadian bank with 816 branches based on a two-stage data envelopment analysis approach that has been developed for simultaneously benchmarking the performance of units along various dimensions with a modified Slacks-Based Measure Model. This was applied to aggregate the efficiency scores obtained from stage one and generate a composite performance index for each unit. The performance dimensions were evaluated based on production, profitability, and intermediation. This three- dimensional efficiency analysis shows a significantly more comprehensive evaluation of bank branch performance that is also likely to be better accepted by branch level management. The study concluded that poor performance in one aspect does not predict similar poor results in the other two aspects.

OBJECTIVES OF THE STUDY

- To evaluate the financial performance of the selected public and private sector banks using the CAMEL Model approach.
- To evaluate whether there is a significant difference in the Capital Adequacy, Asset Quality, Management Efficiency, Earnings and Profitability and the Liquidity of the sample banks.

HYPOTHESES

H_o: There is no significant difference in the Capital Adequacy, Asset Quality, Management Efficiency, Profitability, and Liquidity of the Sample Banks.

H_a: There is a significant difference in the Capital Adequacy, Asset Quality, Management Efficiency, Profitability, and Liquidity of the Sample Banks.

RESEARCH METHODOLOGY

The Study: The study is exploratory in nature and is aimed to study financial performance of nationalized commercial banks in India using CAMEL Model. The study has considered six banks, three nationalized and three private banks and various ratios for measuring the performance have been calculated.

The Sample: For conducting the research, sample of six commercial banks was taken which included three Public and three Private sector banks. The data was collected for the period of 2008-09 to 2017-18. The banks included in the study are Axis Bank, Bank of Baroda, Corporation Bank, HDFC Bank, ICICI Bank and State Bank of India.

Tools for Data Collection: The data was collected from various sources comprising of published annual reports, websites of banks and Reserve Bank of India.

Tools for Data Analysis: CAMEL Model was applied for measuring the aspects of the financial performance of banks which includes capital adequacy, asset quality, management efficiency, earning quality and liquidity. The significance of these parameters was tested using ANOVA. The following ratios were calculated to evaluate the financial performance of the sample banks:

CAPITAL ADEQUACY

1. Capital Adequacy Ratio (CAR): CAR is critical to ensure that banks have enough cushions to absorb reasonable amount of losses before they become insolvent. Banks with a higher capital adequacy ratio are considered safe and are able to meet their financial obligations. The minimum ratio to be maintained by banks is 8 percent under Basel II and 10.5 percent under Basel III.

2. Debt Equity Ratio: This ratio is considered as the key financial metric as it indicates positional financial risk. A high debt equity ratio indicates an aggressive growth strategy by the company as it is dependent on debt. A debt equity ratio of 1.5 or lower is considered desirable and the ratios higher than 2 are less favorable.

3. Credit Deposits Ratio: This ratio will indicate how much a bank lends out of the deposits it has mobilized. The credit deposits ratios of the bank are 75 percent.

4. Cash Deposits Ratio: The cash deposits ratio of the banks is the ratio of cash in hand and the balances with RBI as a percentage of the aggregate deposits. This ratio is maintained above CRR given by the bank.

5. Investment Deposits Ratio: This ratio indicates how much of the bank deposits are invested in government securities. This ratio is normally the

higher value of Statutory Liquidity Ratio (SLR).

ASSET QUALITY

The loan portfolio and the credit administration program will determine the asset quality of the bank. It indicates the efficiency of the bank in controlling and managing the credit risk and the credit rating to be achieved. The percentage of gross and net non performing asset (NPA) is analyzed for determining the asset quality of banks.

MANAGEMENT EFFICIENCY

The efficiency ratio of the banks will measure the bank's overhead as a percentage of its revenue. This ratio indicates the ability of the banks to convert assets into revenue. This ratio is calculated as the ratio of expenses to revenues. A lower efficiency ratio means that the banks are operating better, and a ratio under 50 percent is considered to be optimal. An increase in the efficiency ratio means that bank expenses are increasing or its revenues are decreasing. The ratios like total income / total assets, total Income /compensation to employees, interest income of bank as a percent of working funds, operating profit of bank as percent to working funds, net interest income / interest earned are also calculated for the study.

EARNING AND PROFITABILITY

1. Operating Profit Margin: This ratio indicates the proportion of the revenue which is available to cover the non operating costs like interest. A high operating profit margin indicates a lower risk.

2. Net Profit Margin: It indicates how much net profit is generated as a percentage of revenue. A high net profit margin indicates profitability.

3. Return on Net Worth: This indicates the efficiency of the shareholder's capital to generate profits. A high ratio indicates the prudent use of the shareholder's money.

4. Return on the Total Assets: This ratio indicates how effectively the company is using its assets to generate earnings. A high return on total assets will help investors in recognizing good stock opportunities.

5. Return on Capital Employed: It indicates the company's profitability and the efficiency with which the capital is employed. A high return on the capital employees is the indicator of the success of the company as it indicates a large number of profits can be reinvested for the benefits of the shareholders.

LIQUIDITY

Current ratio and quick ratio measures the short term liquidity of the banks. It measures the ability of the company to meet its short term obligations. The dividend payout ratio indicates how much money the banks return to its shareholders and the retention ratio indicates the net income which can be retained by the company after payment of dividends.

RESULTS

For the evaluation of the banks, a different set of fundamental factors are considered as they have a different operating structure than the regular industrial companies. Table 1 shows that the Capital Asset Gearing Ratio (CAGR) of net worth for the sample period of 10 years is 14.39 percent and 14.49 percent for SBI and Bank of Baroda and in the private sector, HDFC maintains 24.26 percent. Deposits growth indicates how much a bank can lend. SBI and HDFC maintain a high CAGR of 15.46 percent and 20.91 percent. Advances of the banks assess the aggressiveness of bank management, SBI and HDFC maintain a high CAGR of 15.18

percent and 23.45 percent. The growth in investments will indicate the amount is being invested by the Banks. SBI and HDFC shows a high CAGR of 16.14 percent and 17.03 percent. Table 2 showcases the NPA positions of the banks. Lower NPA indicates better credit policy and ability of loan recovery from the debtors than the other banks.

Table 3 shows all the six banks namely Axis Bank, Bank of Baroda, Corporation Bank, HDFC Bank, ICICI Bank and State Bank of India have an average capital adequacy ratio ranging from 12 percent to 18 percent. In public sector bank SBI and BOB have an equal average of 13 percent and in private sectors, ICICI maintains a high average ratio of 18 percent, whereas, Axis Bank has an average of 15 percent. This shows that these two banks have more capacity to adjust to their losses. The assets / loans fund percent average is highest for SBI 76.82 percent and HDFC in the private sector at 81.68 percent. The credit deposit ratio indicates how the bank lends out the deposits it has mobilized, SBI at 80.72 in the public sector, and ICICI at 97.10 in the private sector indicates full utilization of resources. But the credit deposit ratio above 75 percent also indicates pressure on the resources. The cash deposit ratio is the ratio of cash in hand and balances with RBI as a percentage of aggregate deposits; it's always maintained more than Case Reserve Ratios (CRR) given by RBI for study period is 4 percent. In public sector SBI 6.53 and the private sector, HDFC 6.78 maintained the highest average cash deposit ratio. Investment deposit ratio indicates the number of deposits of banks invested in the government securities and is maintained above Statutory Lending Ratio (SLR) as per study period is 19 percent. In the public sector, SBI and corporation banks stood at 33 percent and in the private sector, ICICI stood at 62.83. The debt-equity ratio of Axis Bank is 9.91 in the private sector and corporation bank in the public sector at 18.86 is the highest, which means that the creditors and depositors of these banks are at the highest risks as they are focusing more on debt than shareholders fund.

Table 4 shows Bank of Baroda secures the first position with the lowest NPA of 2.09 followed by corporation Bank 2.28 and State Bank of India with the highest NPA 2.74. It shows that when compared with other banks, Bank of Baroda has a better credit policy and the ability to recover loans from the debtors. The risk of increasing Non-performing assets is also low. The NPA of the other four banks is comparatively high which signifies that these banks are lacking efforts to decrease their NPA's. In the private sector, HDFC secures the first position with the lowest NPA of 0.21 followed by AXIS Bank 0.79 and ICICI with the highest NPA 1.75.

Table 5 shows the management efficiency ratio of the banks. The total income to total assets shows how effectively a bank uses its assets to generate earnings. In the public sector, SBI and Corporation Bank have an equal ratio of 0.09 with BOB at 0.08. In the private sector, HDFC and Axis Bank have an equal ratio of 0.1, and ICICI Bank has the percent lowest ratio of 0.09. Both public and private sectors perform fairly close for total Income to total assets. In total income to compensation to employees, SBI and ICICI perform well at 7.25 and 13.73 respectively. The interest income of banks as a percentage of working funds is 8.50 for corporation Bank followed by 7.27 for SBI and Bank of Baroda stands last at 6.89. In the private sector, HDFC Bank shows the highest average of 9.15, followed by 8.27 in Axis Bank and 7.69 in ICICI. The average operating profit of banks as percent to working funds is 1.97 in SBI and 3.27 for HDFC Bank. The net interest income / interest earned is 36 for SBI with a very less coefficient of variation of 7 percent and in the private sector, HDFC maintains a high average of 47.20.

Table 6 shows the earning and profitability ratios. A high operating profit margin shows fewer financial risks as compared to a low ratio. SBI secures the first position with the highest operating profit margin of 21.2 followed by Bank of Baroda 20.9, and corporation Bank with the lowest margin of 14.47. In the private sector at Axis Bank has a high margin of 29.22. A high net profit margin makes the company control its costs. SBI secures the first position with the highest net profit margin of Bank of Baroda 6.53 followed by SBI at 5.82 and Corporation Bank with the lowest margin of 0.84. In the private sector, HDFC Bank has a high margin of 15.26 which is very high as compared to the private sector. The wise use of shareholders funds is indicated with a high return on net worth which is 9.67 in Bank of Baroda and private sector HDFC shows a high return of 17.17. A low percentage indicates the less efficient deployment of equity resources. Corporation Bank and ICICI shows a low return of 1.02 and 10.26 respectively. The return to total assets is considered a sign of how well a company is using its assets to generate earnings. In the public sector, Bank of Baroda have a high ratio of 0.55 followed by SBI with 0.53 were as the Corporation Bank is at 0.09. The private sector performs well than the public sector with the highest average ratio of 1.62 for HDFC, 1.30 for ICICI, and 1.26 for Axis Bank. Return on capital employed indicates that a large portion of capital is invested back in the company for the benefits of the shareholders and is a sign of the successful growth of the company. In the public sector, BOB secures the first position with the highest return on capital employed ratio of 4.92 followed by SBI at 3.32 and Corporation Bank with the lowest margin of 0.06. In the private sector, HDFC secures the first position with the highest return on capital employed ratio of 9.56 followed by Axis Bank at 5.93 and ICICI Bank with lowest return of 3.39.

Short term liquidity of banks is measured by the current ratio and quick ratio. Table 7 shows that in public sector SBI has a high ratio of 0.05 followed by Corporation Bank at 0.04 and lowest is Bank of Baroda at 0.03. The private sector performs well then the public sector with the highest average ratio of 0.1 for ICICI Bank. HDFC and SBI had a value 0.05. In quick ratio, public sector Corporation Bank has a high ratio of 23.98 followed by Bank of Baroda is at 21.36 and the lowest is SBI at 10.90. In private sector Axis Bank 19.21, followed by ICICI at 14.06 and the least value of 9.77 for HDFC Bank. A high dividend payout ratio means that the company is sharing more of its earnings with the shareholders and therefore the retention ratio will be low. In public sector SBI maintains a high average dividend payout ratio of 18.8 and in the private sector, ICICI has a ratio of 26.2 were Axis Bank. The retention ratio indicates the profits retained by the banks for future investments in which Corporation Bank is at 86.333 and in private sector HDFC is at 86.07.

Table 8 shows the trends of annual stock returns based on BSE. In the public sector, the average of 10 years shows that Bank of Baroda gives the maximum returns at 20.57 percent followed by SBI at 17.76 percent and corporation Bank at 10.96 percent. In private sector Axis Bank, shows the highest average returns of 35.04 percent. HDFC and ICICI show a return of 30.75 percent respectively.

Table 9 shows the application of ANOVA for testing the significant difference in the Capital Adequacy, Asset Quality, Management Efficiency, Profitability, and Liquidity of the sample banks for ten Years.

The p-value for all the selected ratios on the application of ANOVA is less than 0.05 which rejects the null hypothesis. Therefore, there is a significant difference in the Capital Adequacy, Asset Quality, Management Efficiency, Profitability, and Liquidity of the sample banks.

CONCLUSION

The research sought to examine the financial performance of commercial banks in India.

Six Commercial Banks were taken as the sample which included three Public and three Private sector banks. The data for the current study was collected for a period of ten years from 2008-2009 to 2017-2018. The banks included in the study were Axis Bank, Bank of Baroda, Corporation Bank, HDFC Bank, ICICI Bank, and State Bank of India. The collection of data from various sources has been done, comprising of published annual reports, websites of banks, and Reserve Bank of India. CAMEL Model was applied for measuring the aspects of the financial performance of banks, including capital adequacy, asset quality, management efficiency, earning quality, and liquidity. The significance of these parameters was tested using ANOVA. The results confirm the following:

1. In the first parameter of the CAMEL Model which measures Capital Adequacy in the public sector, SBI and the private sector HDFC Bank perform well as compared to the sample Banks. This ensures the efficiency and the stability of the banks, that they are capable of meeting its financial obligations. The application of ANOVA shows a significant difference in the capital adequacy ratio of the sample Banks.

2. In the second parameter of the CAMEL Model reveals Asset Quality which assesses the credit risk associated with particular assets. These assets require interest payments such as loans and investment portfolios. In the Public sector Bank of Baroda and private sector, HDFC Bank shows the lowest average in the percentage of Net NPA in the sample period of 10 years.

3. In the third parameter of CAMEL Model, management efficiency is measured. In the public sector SBI and the private sector HDFC Bank perform well as compared to the sample Banks. The management efficiency may improve by more focus on the customer's service.

4. In the fourth parameter of CAMEL Model shows the earnings and profitability measures. In the public sector SBI and the private sector, HDFC Bank performs well as compared to the sample banks in operating profit margin, return on total assets and in net profit margin, return on net worth, return on capital employed in the public sector Bank of Baroda and the private sector HDFC Bank perform well as compared to the sample Banks in the sample period of 10 years. In a highly competitive market and the digital revolution, banks need to move beyond the model of "one-size-fits-all".Sophisticated customer segmentation, product bundling and relationship, pricing automating, customer care, and multi-channel seamless experience will help banks to attract and retain its customers and increase its profitability.

5. In the fifth parameter of CAMEL Model liquidity is measured. In the public sector SBI and the private sector ICICI Bank performs well as compared to the sample banks. In public sector category SBI and private sector category ICICI bank maintains a high average dividend payout ratio in the sample period. A high liquid ratio will add good value to meet unforeseen contingencies and short term obligations. Controlling overhead expenses, negotiating for longer payment cycles, allows having better quick and current ratios and allows you to save some of your liquidity in the near term and put it to better use.SBI in the public sector

and ICICI in the private sector maintains a stable dividend payout Ratio.

The banking sector of India has witnessed a paradigm shift, evolving from physical banking to becoming digital anchors. The role of technology has become an integral component in the strategic framework of banks to driving, shaping, and redefining the business models and the revenue streams. Enhancing customer's banking experience, credit re-engineering, digitization for customer efficiency, and customer inclusion and banking with quality are the parameters to focus on growth and face the challenges of the banking sector. In the current scenario, the customers are spoilt for choices, but they want to bank with the "fittest "bank. It is inevitable for the banks to spend on digitization and customer services but also to maintain their profitability through cost optimization. The bank's overall strategy should be towards its growth. The banking sector should be forward-looking in integrating the upcoming technology and leveraging data and analytics to become smarter in identifying and servicing customers' needs.

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ANNEXURES

Table 1: Key Banking Parameters and CAGR of Sample Banks
(all values in crores)

	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	CAGR (in %)
Net Worth	SBI	57,947.70	65,949.20	64,986.04	83,951.20	98,883.68	118,282.25	128,438.22	144,274.44	156,700.41	194,280.58	**0.14**
	BOB	12,835.54	15,106.39	21,043.54	27,476.85	31,969.44	35,985.68	39,835.35	40,198.98	40,303.25	43,394.77	**0.14**
	Corp.	4,896.51	5,774.87	7,137.81	8,275.93	9,565.69	10,085.10	10,484.48	10,686.14	12,048.67	10,182.57	**0.08**
	HDFC	15,052.73	21,522.49	25,379.27	29,924.68	36,214.14	43,478.63	62,009.42	72,677.77	89,462.35	106,295.00	**0.24**
	ICICI	49,883.02	51,618.37	55,090.93	60,405.25	66,705.96	73,213.32	80,429.36	86,918.11	96,908.94	102,155.75	**0.08**
	Axis	10,214.80	16,044.61	18,998.83	22,808.54	33,107.86	38,220.48	44,676.51	53,164.91	55,762.54	63,445.26	**0.22**
Deposits	SBI	742,073.13	804,116.23	933,932.81	1,043,647.4	1,202,739.6	1,394,408.5	1,576,793.3	1,730,722.4	2,044,751.4	2,706,343.3	**0.15**
	BOB	192,396.95	241,044.26	305,439.48	384,871.11	473,883.34	568,894.39	617,559.52	574,037.87	601,675.17	591,314.82	**0.13**
	Corp.	73,983.91	92,733.67	116,747.50	136,142.20	166,005.45	193,393.01	199,345.82	205,170.84	220,559.62	183,315.95	**0.11**
	HDFC	142,811.58	167,404.44	208,586.41	246,706.45	296,246.98	367,337.48	450,795.64	546,424.19	643,639.66	788,770.64	**0.21**
	ICICI	218,347.82	202,016.60	225,602.11	255,499.96	292,613.63	331,913.66	361,562.73	421,425.71	490,039.06	560,975.21	**0.11**
	Axis	117,374.11	141,300.22	189,237.80	220,104.30	252,613.59	280,944.56	322,441.94	357,967.56	414,378.79	453,622.72	**0.16**
Borrowings	SBI	53,713.68	103,011.60	119,568.96	127,005.57	169,182.71	183,130.88	205,150.29	323,344.59	317,693.66	362,142.07	**0.24**
	BOB	5,636.09	13,350.09	305,439.48	23,573.05	26,579.28	36,812.97	35,264.28	33,471.70	30,611.44	62,571.97	**0.31**
	Corp.	2,072.40	9,077.53	15,965.38	14,248.10	12,898.85	13,021.45	10,414.90	13,112.19	6,468.17	22,171.08	**0.30**
	HDFC	2,685.84	12,915.69	14,394.06	23,846.51	33,006.60	39,438.99	45,213.56	53,018.47	74,028.87	123,104.97	**0.53**
	ICICI	67,323.69	94,263.57	109,554.28	140,164.91	145,341.49	154,759.05	172,417.35	174,807.38	147,556.15	182,858.62	**0.12**
	Axis	10,185.48	17,169.55	26,267.88	34,071.67	43,951.10	50,290.94	79,758.27	99,226.38	105,030.87	148,016.14	**0.35**
Advances	SBI	542,503.20	631,914.15	756,719.45	867,578.89	1,045,616.55	1,209,828.72	1,300,026.39	1,463,700.42	1,571,078.38	1,934,880.19	**0.15**
	BOB	143,985.90	175,035.29	228,676.36	287,377.29	328,185.76	397,005.81	428,065.14	383,770.18	383,259.22	427,431.83	**0.13**
	Corp.	48,512.16	63,202.56	86,850.40	100,469.02	118,716.65	137,086.30	145,066.04	140,322.24	140,356.79	119,868.84	**0.11**

	HDFC	98,883.05	125,830.59	159,982.67	195,420.03	239,720.64	303,000.27	365,495.03	464,593.96	554,568.20	658,333.09	**0.23**
	ICICI	218,310.85	181,205.60	216,365.90	253,727.66	290,249.44	338,702.65	387,522.07	435,263.94	464,232.08	512,395.29	**0.10**
	Axis	81,556.77	104,343.12	142,407.83	169,759.54	196,965.96	230,066.76	281,083.03	338,773.72	373,069.35	439,650.30	**0.21**
Investments	SBI	275,953.96	285,790.07	295,600.57	312,197.61	350,927.27	398,799.57	481,758.75	575,651.78	765,989.63	1,060,986.72	**0.16**
	BOB	52,445.88	61,182.38	71,396.59	83,209.40	121,393.72	116,112.66	122,319.72	120,450.52	129,630.54	163,184.53	**0.13**
	Corp.	24,937.77	34,522.63	43,452.74	47,474.63	58,164.49	66,191.21	63,412.28	63,280.63	64,072.98	70,349.76	**0.12**
	HDFC	58,817.55	58,607.62	159,982.67	97,482.91	111,613.60	120,951.07	166,459.95	163,885.77	214,463.34	242,200.24	**0.17**
	ICICI	103,058.31	120,892.80	134,685.96	159,560.04	171,393.60	177,021.82	186,580.03	160,411.80	161,506.55	202,994.18	**0.08**
	Axis	46,330.35	55,974.82	71,991.62	93,192.09	113,737.54	113,548.43	132,342.83	122,006.20	128,793.37	153,876.08	**0.14**

Table 2: Status of NPA of the Sample Banks (all values in crores)

	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Gross NPA	SBI	15,588.60	19,534.89	25,326.29	39,676.46	51,189.39	61,605.35	56,725.34	98,172.80	112,342.99	223,427.46
	BOB	NA	NA	3,152.50	4,464.75	7,982.58	11,875.90	16,261.45	40,521.04	42,718.70	56,480.39
	Corp.	NA	NA	790.23	1,274.21	2,048.23	4,736.79	7,106.68	14,544.25	17,045.22	NA
	HDFC	NA	NA	1,694.34	1,999.39	2,334.64	2,989.28	3,438.38	4,392.83	5,885.66	8,606.97
	ICICI	NA	NA	10,034.26	9,475.33	9,607.75	10,505.84	15,094.69	26,720.93	42,551.54	54,062.51
	Axis	NA	NA	159.94	1,806.30	2,393.42	3,146.41	4,110.19	6,087.51	21,280.48	34,248.64
Net NPA	SBI	9,552.00	10,870.17	12,346.89	15,818.85	21,956.48	31,096.07	27,590.58	55,807.02	58,277.38	110,854.70
	BOB	NA	NA	790.88	1,543.64	4,192.02	6,034.76	8,069.49	19,406.46	18,080.18	23,482.65
	Corp.	NA	NA	397.74	869.39	1,410.88	3,180.56	4,464.98	9,160.14	11,692.18	NA
	HDFC	NA	NA	296.41	352.33	468.95	820.03	896.28	1,320.37	1,843.99	2,601.02
	ICICI	NA	NA	2,407.36	1,860.84	2,230.56	3,297.96	6,255.53	13,296.75	25,451.03	27,886.27
	Axis	NA	NA	41.04	472.64	704.13	1,024.62	1,316.71	2,522.14	8,626.55	16,591.71

Table 3: CAMEL Ratio for Select Banks (2008-09 to 2017-18)

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
Capital Adequacy Ratio basel-II	SBI	14.25%	13.39%	11.98%	13.86%	12.92%	12.44%	12.00%	13.12%	13.11%	12.60%	0.13
	BOB	14.05%	14.36%	14.52%	14.67%	13.30%	12.28%	12.60%	13.17%	12.24%	12.13%	0.13
	Corp.	13.66%	15.00%	14.11%	13.00%	12.33%	11.64%	11.09%	10.56%	11.32%	9.23%	0.12
	HDFC	15.69%	17.44%	16.22%	16.52%	16.80%	16.07%	16.79%	15.53%	14.55%	14.82%	0.16
	ICICI	15.50%	19.40%	19.50%	18.50%	18.70%	17.70%	17.00%	16.60%	17.40%	18.40%	0.18
	Axis	13.69%	15.80%	12.65%	13.66%	17.00%	16.07%	15.09%	15.29%	14.95%	16.57%	0.15
Advances / Loans funds %	SBI	78.34	74.22	77.19	78.01	82.25	82.04	77.39	76.31	71.15	71.25	76.82
	BOB	81.35	77.38	78.56	78.07	72.22	71.78	68.03	60.9	61.63	66.47	71.66
	Corp.	72.61	71.07	74.07	70.98	72.1	71.15	69.71	65.56	63.04	55.43	68.57
	HDFC	78.87	77.24	79.34	79.19	79.93	83.86	82.77	86.45	86.15	83.02	81.68
	ICICI	69.86	58.57	68.53	69.44	69.64	73.26	75.94	77.02	75.25	74.18	71.17
	Axis	73.87	72.96	76.16	72.29	71.53	73.29	76.65	78.84	76.4	78.44	75.04
Credit Deposit Ratio	SBI	74.97	75.96	79.9	82.14	85.17	86.84	84.47	83.56	80.38	73.79	80.72
	BOB	72.78	73.6	73.87	74.76	71.68	69.54	69.54	68.13	65.24	67.95	70.71
	Corp.	67.77	67.01	71.63	74.07	72.54	71.18	71.84	70.55	65.93	64.43	69.70
	HDFC	66.64	72.44	76.02	78.06	80.14	84.84	85.5	87.41	90.22	89.8	81.11
	ICICI	91.44	90.04	90.45	97.71	99.25	100.71	104.72	105.08	98.69	92.92	97.10
	Axis	68.89	71.87	74.65	76.26	77.58	80.03	84.71	91.1	92.17	93.63	81.09
Investment Deposits Ratio	SBI	36.38	36.33	33.45	30.73	29.52	28.87	29.64	31.97	35.54	38.45	33.09
	BOB	27.96	26.22	24.26	22.4	23.83	22.78	20.1	20.37	21.27	24.54	23.37
	Corp.	32.03	35.67	37.22	35.96	34.96	34.6	33	31.32	29.91	33.28	33.80
	HDFC	44.43	37.85	34.45	36.99	38.51	35.05	35.13	33.13	31.79	31.88	35.92
	ICICI	46.35	53.28	59.77	61.16	60.38	77.6	76.51	70.34	61.27	61.6	62.83
	Axis	39.04	39.55	38.71	40.35	77.58	42.51	40.88	37.5	32.45	32.4	42.10
Cash Deposits Ratio	SBI	NA	NA	NA	NA	NA	5.81	6.76	7.42	6.82	5.86	6.53
	BOB	NA	NA	NA	NA	NA	3.08	3.47	3.71	3.78	3.81	3.57
	Corp.	NA	NA	NA	NA	NA	6.29	6.08	5	6.48	7.09	6.19
	HDFC	NA	NA	NA	NA	NA	6.02	6.46	5.77	5.71	9.95	6.78
	ICICI	NA	NA	NA	NA	NA	6.14	6.43	6.35	6.14	5.93	6.20
	Axis	NA	NA	NA	NA	NA	5.98	6.12	6.2	6.88	7.62	6.56
Total Debt to owners Fund	SBI	13.73	13.75	16.21	13.94	13.87	13.34	13.87	14.24	15.08	15.79	14.38
	BOB	15.43	16.84	15.57	14.87	15.07	16.83	16.39	15.11	15.69	15.07	15.69
	Corp.	15.53	17.63	18.59	18.17	18.7	20.47	20.01	20.43	18.84	20.18	18.86
	HDFC	9.93	8.38	8.79	9.04	9.09	9.36	8	8.25	8.02	8.58	8.74
	ICICI	5.77	5.74	6.08	6.55	6.57	7.11	7.05	7.36	6.9	7.58	6.67
	Axis	12.49	9.88	11.34	11.14	8.96	8.68	9.05	8.64	9.35	9.52	9.91

Table 4: Net and Gross Percentage of NPA

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
% of Gross NPA	SBI	2.84	3.05	3.28	4.44	4.75	4.95	4.25	6.5	6.9	10.91	5.19
	BOB	0	0	1.36	1.53	2.4	2.94	3.72	9.99	10.46	12.26	4.47
	Corp.	0	0	0.91	1.26	1.72	3.42	4.81	9.98	11.7	0	3.76
	HDFC	0	0	1.05	1.02	0.97	1	0.9	0.94	1.05	1.3	0.82
	ICICI	0	0	4.47	3.62	3.22	3.03	3.78	5.21	7.89	8.84	4.01
	Axis	0	0	1.01	0.94	1.06	1.22	1.34	1.67	5.04	6.77	1.91
% of Net NPA	SBI	2.1	1.82	1.63	1.82	2.1	2.57	2.12	3.81	3.71	5.73	2.74
	BOB	NA	NA	0.35	0.54	1.28	1.52	1.89	5.06	4.72	5.49	2.09
	Corp.	NA	NA	0.46	0.87	1.19	2.32	3.08	6.53	8.33	NA	2.28
	HDFC	NA	NA	0.2	0.2	0.2	0.3	0.2	0.28	0.33	0.4	0.21
	ICICI	NA	NA	1.11	0.73	0.77	0.97	1.61	2.67	4.89	4.77	1.75
	Axis	NA	NA	0.26	0.25	0.32	0.4	0.44	0.7	2.11	3.4	0.79

Table 5 : Management Efficiency Ratios of Banks

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
Total Income to Total Assets	SBI	**0.09**	**0.09**	**0.09**	**0.10**	**0.09**	**0.09**	**0.09**	**0.09**	**0.08**	**0.09**	0.09
	BOB	0.09	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.08
	Corp.	0.10	0.09	0.08	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09
	HDFC	0.13	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.11
	ICICI	0.10	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.09	0.09
	Axis	0.11	0.10	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.09	0.10
Total Income to Compensation to Employees	SBI	**7.80**	**6.81**	**6.01**	**7.20**	**7.48**	**6.79**	**7.33**	**7.53**	**7.84**	**7.69**	7.25
	BOB	7.56	8.42	9.64	12.53	12.49	11.43	11.56	9.81	10.50	10.84	10.48
	Corp.	14.04	13.28	13.25	18.03	19.26	18.16	19.84	15.40	15.62	12.52	15.94
	HDFC	8.85	8.80	8.63	9.85	10.45	11.59	11.94	12.31	12.45	13.89	10.88
	ICICI	20.08	17.08	11.67	11.77	12.40	12.86	12.84	13.63	12.80	12.21	13.73
	Axis	13.69	12.29	12.06	13.03	14.13	13.99	14.05	14.87	14.40	13.17	13.57

Interset Income of Banks as a % of Working Funds	**SBI**	**7.30**	**6.80**	**7.00**	**8.00**	**7.80**	**7.60**	**7.60**	**7.30**	**6.90**	**6.40**	7.27
	BOB	7.80	6.90	7.00	7.60	7.30	6.80	6.60	6.30	6.30	6.30	6.89
	Corp.	8.40	7.60	7.80	9.20	9.40	9.20	9.30	8.80	8.10	7.20	8.50
	HDFC	9.30	8.40	8.00	9.60	9.90	9.70	9.60	9.20	8.90	8.90	9.15
	ICICI	8.10	7.20	6.80	7.80	8.20	8.00	8.20	8.10	7.40	7.10	7.69
	Axis	8.60	7.70	7.50	8.70	8.90	8.80	8.80	8.60	7.90	7.20	8.27
Operating profit of bank as % to working funds	**SBI**	**2.00**	**1.80**	**2.20**	**2.40**	**2.00**	**1.80**	**1.90**	**1.90**	**2.00**	**1.70**	1.97
	BOB	2.20	2.00	2.20	2.20	1.90	1.60	1.50	1.30	1.60	1.80	1.83
	Corp.	2.50	2.30	2.20	2.00	1.90	1.60	1.40	1.40	1.90	1.60	1.88
	HDFC	2.90	3.30	3.10	3.20	3.20	3.40	3.40	3.30	3.30	3.60	3.27
	ICICI	2.30	2.70	2.40	2.40	2.70	3.00	3.30	3.60	3.60	3.20	2.92
	Axis	3.00	3.50	3.20	2.90	3.00	3.30	3.30	3.40	3.10	2.40	3.11
Net Interest income / Interest earned	**SBI**	**32.72**	**33.34**	**39.96**	**40.64**	**37.05**	**36.14**	**36.10**	**34.88**	**35.24**	**33.95**	36.00
	BOB	33.95	35.57	40.22	34.77	32.15	30.73	30.69	28.91	32.02	35.56	33.46
	Corp.	28.74	27.24	32.18	24.17	22.34	21.07	20.81	21.84	22.86	27.45	24.87
	HDFC	44.66	50.53	52.46	45.64	44.81	44.81	45.99	45.65	47.62	49.87	47.20
	ICICI	27.82	31.24	34.30	31.84	34.18	37.03	38.45	39.89	39.64	41.61	35.60
	Axis	34.02	43.00	43.31	36.45	35.56	39.01	40.09	41.07	40.62	40.67	39.38

Table 6 : Earning and Profitability Ratios of Select Banks (2008-09 to 2017-2018)

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
Operating Profit Margin	SBI	21.5	21.3	23.6	24.7	22.8	19.3	21.4	19.9	22	15.5	21.20
	BOB	17.7	23.7	25.7	23.1	20.7	18.6	19.1	15.5	19.7	19.1	20.90
	Corp.	18.4	20	19.3	15.7	14.3	9.4	12	9.3	15.3	11	14.47
	HDFC	26.1	31.9	31.5	26.5	26.4	28.3	29.3	29.2	30.8	33.3	28.89
	ICICI	20.8	28.1	26.3	23.6	26.2	29.7	31.3	34	34.6	31	28.56
	Axis	25.9	33	30.8	26	27.2	29.6	30.1	31.5	30.6	27.5	29.22
Net Profit Margin	SBI	11.9	10.5	7.5	9.5	10.3	6.1	5.9	2	3	-8.5	5.82
	BOB	12.4	14.7	16.1	13.7	11.5	10.5	6.5	-14.7	1.4	-6.8	6.53
	Corp.	11.1	12.8	13.5	9.8	8	1.2	2.2	-11.8	1	-39.4	0.84
	HDFC	11.1	14.6	16	13.4	14.7	15.6	16.7	16.3	16.9	17.3	15.26
	ICICI	8.5	11.4	15	15.4	16.6	17.5	17.9	13.8	12.2	8.9	13.72
	Axis	12.2	15.2	15.8	14.4	14.6	15.6	16.2	14.9	6.2	-1.4	12.37
Return On Net Worth	SBI	16.9	14.8	11.1	15.6	15.5	8.7	8.2	2.7	4.2	-12.4	8.53
	BOB	18.6	20.9	23.9	20.9	16.2	14	8.5	-19.3	1.9	-8.9	9.67
	Corp.	17.6	20.1	22.5	19.5	15.6	2.5	4.6	-23.6	2	-70.6	1.02
	HDFC	16.6	16.1	16.7	16.3	18.4	19	18	17	16.9	16.7	17.17
	ICICI	7	7.4	9.3	11.1	12.6	13.6	14.2	11.2	9.7	6.5	10.26
	Axis	17.6	17.8	17.5	18.7	17.5	16.6	17.2	15.3	6.4	-1.4	14.32
Return on Total assets	SBI	1.1	0.9	0.6	0.9	1	0.6	0.5	0.2	0.2	-0.7	0.53
	BOB	1.1	1.2	1.3	1.1	0.9	0.8	0.5	-1	0.1	-0.5	0.55
	Corp.	1	1.1	1.1	0.9	0.8	0.1	0.2	-1.1	0.1	-3.3	0.09
	HDFC	1.4	1.5	1.6	1.5	1.6	1.7	1.8	1.7	1.7	1.7	1.62
	ICICI	0.9	1	1.3	1.4	1.6	1.7	1.7	1.4	1.2	0.8	1.30
	Axis	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.5	0.6	-0.1	1.26
Return on Capital Employed	SBI	6.9	5.9	4.1	5.9	5.9	3.3	3.2	0.9	1.3	-4.2	3.32
	BOB	9.7	10.8	11.6	10.2	8.5	7.1	4.3	-10	1	-4	4.92
	Corp.	9.5	8.8	7.5	6.4	6.1	1.1	2.2	-11.2	1.1	-30.9	0.06
	HDFC	10.1	10	10.6	9.6	9.9	9.9	10	8.7	8.5	8.3	9.56
	ICICI	2.4	2.6	3.2	3.5	3.9	4.3	4.5	3.6	3.5	2.4	3.39
	Axis	7.7	7.9	7.8	7.7	7.3	7.2	6.7	5.2	2.2	-0.4	5.93

Table 7: Liquidity Ratios of Selects Banks

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
Current Ratio	SBI	**0.04**	**0.04**	**0.04**	**0.05**	**0.04**	0.03	0.06	0.07	0.07	0.08	0.05
	BOB	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.05	0.04	0.05	0.03
	Corp.	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.07	0.07	0.1	0.04
	HDFC	0.04	0.03	0.06	0.08	0.06	0.06	0.04	0.07	0.06	0.04	0.05
	ICICI	0.13	0.14	0.07	0.07	0.09	0.09	0.06	0.13	0.12	0.12	0.10
	Axis	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.07	0.1	0.1	0.05
Quick Ratio	SBI	**5.74**	**9.07**	**8.5**	**12.05**	**12.15**	13.81	11.02	10.89	11.94	13.83	10.90
	BOB	9.62	21.88	26.51	28	23.9	24.05	20.78	18.27	19.38	21.18	21.36
	Corp.	9.53	18.35	26.65	23.15	26.35	27.91	27.74	31.68	21.47	27.01	23.98
	HDFC	5.23	7.14	6.89	6.2	7.84	8.55	12.69	14.51	11.19	17.48	9.77
	ICICI	5.94	14.7	15.86	16.71	10.53	11.31	13.81	14.97	16.31	20.44	14.06
	Axis	9.52	19.19	19.6	21.63	20.1	18.57	20.64	25.74	17.1	20.02	19.21
Dividend Payout Ratio Net profit	SBI	**20.18**	**20.77**	**25.84**	**20.06**	**20.12**	20.56	20.21	20.28	20.11	NA	18.81
	BOB	17.22	17.92	15.23	13.86	20.21	20.33	21.42	NA	24.06	NA	15.03
	Corp.	20.08	20.22	20.96	20.16	20.25	20.13	20.07	NA	NA	NA	14.19
	HDFC	18.94	18.62	19.55	19.52	19.46	19.38	19.62	19.53	NA	NA	15.46
	ICICI	35.58	33.23	31.3	29.41	27.71	27.07	25.93	29.89	NA	21.5	26.16
	Axis	23.16	22.56	16.91	15.51	16.29	15.11	14.78	14.48	38.25	509.74	68.68
Earning Retention Ratio	SBI	**84.13**	**86.02**	**76.95**	**79.94**	**79.88**	79.44	79.79	79.72	79.89	100	82.58
	BOB	84.64	86.16	84.77	86.14	79.79	79.67	78.58	100	75.94	100	85.57
	Corp.	81.56	83.34	79.04	79.84	79.75	79.87	79.93	100	100	100	86.33
	HDFC	88.95	88.76	80.45	80.48	80.54	80.62	80.38	80.47	100	100	86.07
	ICICI	83.66	83.79	68.7	70.59	72.29	72.93	74.07	70.11	100	78.5	77.46
	Axis	83.55	85.36	83.09	84.49	83.71	84.89	85.22	85.52	61.75	-409.7	32.78

Table 8: Annual Stock Returns of Select Banks

Ratio	Years / Banks	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
Total Returns	SBI	99.19	34.31	-23.33	0.7	-4.8	39.99	-26.31	52.58	-13.75	19.03	17.76
	BOB	178.27	53.94	-15.99	-12.51	12.03	14.55	-7.89	17.57	-17.18	-17.05	20.57
	Corp.	174	36.73	-30.85	-5.12	-23.11	-5.13	-23.17	34.44	-41.52	-6.68	10.96
	HDFC	100.97	22	11.76	20.95	21	37.75	5.52	35.74	32.01	19.76	30.75
	ICICI	190.64	18.49	-19.2	20.3	21.16	28.57	-23.69	19.59	11.37	42.78	31.00
	Axis	186.48	21.26	-17.43	15.35	13.81	93.87	-20.03	11.42	4.81	44.42	35.40

Table 9: Analysis of Variance (ANOVA) on CAMEL Ratios

Source of Variation	*SS (Sum Of Squares)*	*df(Degree of Freedom)*	*MS(Mean Square)*	*F*	*P-value*	*F crit*
Capital Adequacy Ratio						
Between Groups	0.023063746	5	0.004612749	30.543052	0.000	2.3860699
Within Groups	0.008155323	54	0.000151025			
Total	0.031219069	59				
Percentage of Gross NPA (Asset Quality)						
Between Groups	135.065335	5	27.013067	2.7648745	0.0270	2.3860699
Within Groups	527.58475	54	9.770087963			
Total	662.650085	59				
Total Income to Total Assets (Management Efficiency)						
Between Groups	135.065335	5	27.013067	2.7648745	0.0270	2.3860699
Within Groups	527.58475	54	9.770087963			
Total	662.650085	59				
Operating Profit Margin						
Between Groups	1887.3175	5	377.4635	35.568069	0.0000	2.3860699
Within Groups	573.071	54	10.61242593			
Total	2460.3885	59				
Current Ratio (Liquidity Ratio)						
Between Groups	135.065335	5	27.013067	2.7648745	0.0270	2.3860699
Within Groups	527.58475	54	9.770087963			
Total	662.650085	59				

CONNECTEDNESS: ENHANCING THE INNOVATIVE CAPACITY OF AN ORGANIZATION IN AN ERA OF BIG DATA

Dorothea Greenwood Mastrangelo*

In today's economy, big data is driving disruptive change through the stimulation of inventions of new technologies and innovative business models. It is the premise of this paper that interactions across the ecosystem increase idea generation to advance the capacity for an organization's innovation with new value to the organization. The study also highlights reviews on author who have found a higher pace of innovation than in cities compared to smaller towns attributed to higher levels of interaction. Similarly, few studies also suggested that innovation emerges best in a dense network, like a city or corporation, where interaction stimulating new discoveries is fostered. In today's world, enlightened organizations can consider unleashing big data technologies and organizational processes to interconnect individuals and organizations, with different perspectives across industry, academia and government, towards enhancing the organization's capacity to innovate and enable new value for the organization. This article describes the four building blocks of connectedness and offers six propositions to cultivate innovative behaviors and actions for connectedness in the big data economy. Business processes and social network analysis tools that enable an organization to move from current levels of connectedness to desired levels are also detailed.

Keywords : *Social Capital, Network Ties, Absorptive Capacity, Big Data, Innovation Value Chain.*

INTRODUCTION

In today's economy, new technologies permit access to data everywhere, now called big data, driving disruptive change with innovation emerging daily. It is the premise of this article that interactions across the ecosystem increase idea generation to advance the capacity for an organization's innovation with new value to the organization. West (2006) discovered that cities had a higher ideas-per-capita than smaller towns due to the greater interaction among diverse people. Johnson (2010) similarly reveals that innovation emerges best in a dense network, like a city or corporation, due to increased interaction. A.G. Lafely (2008), former CEO of Proctor & Gamble, offers that interaction though connections across the ecosystem with the consumer at the center are essential to innovate for sustained profitable growth over time.

These assertions lead to the understanding that network connections across the ecosystem which combine deep expertise from different perspectives across industry, academia and government, are likely to stimulate interactions amounting to enhance innovation. These network interactions also result into connectedness among people in enlightened organizations leveraging diverse networks of expertise. They also address the new demands better emerging to enhance value. Accomplishing this, requires a collaborative mindset in organizations for connectedness with others across the ecosystem and openness to external ideas for rapid internal creation of novel ideas for new innovative products and services.

This article identifies six propositions with processes and social network analysis to guide executive leadership towards connectedness and the cultivation of

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innovative behaviors and actions of the organization for enhanced capacity for innovation in the fast-paced big data economy. Increased connectedness across individuals in Corporations, Universities and Governments increases the flow of new ideas, practices and methods making sense of big data and stimulating innovation (Barabasi, 2003; Gray and Vander Wal, 2012; Sari et.al., 2007), driving speed in decision-making and shifting power in organizations (Gailbraith, 2014) for increased innovative capacity. Maturing an Organization's capacity to continually innovate in the world of big data is an emerging challenge and opportunity for organizational design to enable innovative capacity and organize for connectedness across the organization and innovation value chain.

An understanding of connectedness can guide leadership in adapting organizational design to increase and sustain innovative capacity for enduring competitive advantage. An organization can assess its current level of connectedness and establish strategies to increase its connectedness and innovativeness utilizing practices and methods presented in this article.

INCREASING INNOVATIVE CAPACITY OF ORGANIZATIONS

Innovative capacity is an organization's ability to bring new value to the organization through its invention of new products and services. Innovative capacity is a consequence of emerging organizational processes, shown in Figure 1 and employing the building blocks for connectedness shown in Figure 2. In the fast-moving world of big data, connectedness leverages diverse perspectives across an organization's innovation chain to make sense of ever-changing data to stimulate identification of novel external data, access the data, and integrate new ideas discovered into an organization's internal thinking to increase the organization's capacity to innovate (Greenwood, 2010).

Figure 1: Emerging Organizational Process for Innovation

Source: Greenwood, 2010

Figure 2: Connectedness Building Blocks for Organizational Innovative Capacity

Source: Greenwood, 2010

The four building blocks for connectedness are social capital, network ties, ability to span innovation network boundaries and the agility of an organization's internal absorptive capacity (Greenwood, 2010). The first building block of innovative capacity is an organization's social capital. Personnel in the organization individually and collectively contribute to the organization's social capital representing its reputation of a willingness and motivation to share (Alder and Kwon, 2002; Batt, 2008). This reputation affects the organization's likelihood of agreements for connectedness and business ventures with other organizations across the innovation ecosystem.

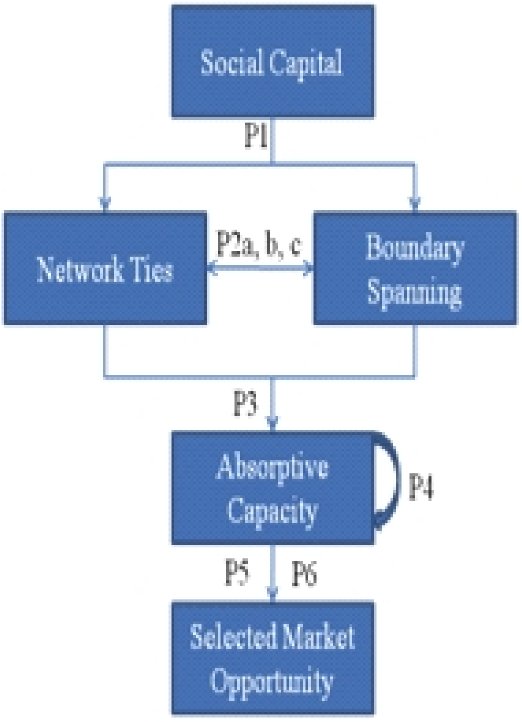
An organization's ability to build network ties is the second building block which spans boundaries with leaders and individuals of other organizations in the innovation chain. The relationship among these ties will strengthen the trust for connectedness and sharing.

Spanning boundaries of other organizations is the third building block of innovative capacity which helps discover fresh external ideas across the innovation value chain. Its boundary spanning helps the organizations discover unusual information to create new ideas for novel products or services (Fleming and Waguespack, 2007). The first, second and third building blocks are interdependent just for the reason that the ability to span boundaries is reliant on an organization's network ties and the culture as reflected in its social capital.

Finally, the fourth building block helps an organization to develop absorptive capacity. Absorptive capacity measures how well an organization recognizes and welcomes the value of external ideas. It helps assimilate the ideas with current internal knowledge and brings innovative products and services to fruition (Cohen and Levinthal, 1990; Zahra and George, 2002).

SIX PROPOSITIONS FOR ENABLING INNOVATIVE CAPACITY

Figure 3 illustrates six propositions enabled by the four building blocks for connectedness discussed above to enhance the innovative capacity of an organization in the world of big data (Greenwood, 2010). As per the first the proposition, the pervasiveness of big data requires higher social capital leading to openness for sharing with valued external network ties along with boundary spanning. Second, external network ties are also required for more boundary spanning necessary to access more big data with reciprocal exchanges of information. More network ties and boundary spanning also provide for higher activation triggers for research and development from the novel external ideas found in Big Data increasing the capacity for innovation in an organization. More activation triggers from the novel external information lead to higher agile absorptive capacity enhancing collaborative relationships in an innovation ecosystem and higher social capital for more big data collaborative exchanges. Fifth, agile absorptive capacity produces more innovation with big data in an organization. Sixth, more innovation leads to more differentiating market opportunities for promotion by executive leaders.



Proposition	Description
P1	Higher social capital leads to **more network ties and boundary spanning.**
P2a	Stronger network ties lead to more boundary spanning for the **reciprocal exchange of complex knowledge and resources** between organizations.
P2b	Weaker network ties lead to more boundary spanning for **reciprocal knowledge spillovers** but not complex technological knowledge between organizations.
P2c	More discovery of structured holes lead to more boundary spanning for knowledge spillovers and discovery of **more new differentiating market ideas**.
P3	More network ties and boundary spanning results in **more activation triggers** for innovation and higher social capital.
P4	More activation triggers lead to **higher adaptive absorptive capacity**.
P5	Adaptive absorptive capacity will produce **more innovation.**
P6	A higher innovative capacity correlates with **more differentiating market opportunities** for selection by executive leaders.

Figure 3. Propositions of Connectedness for Innovative Capacity

Source: Greenwood, 2010

For Proposition 1, the organizations with higher social capital develop a reputation in fair and open collaboration through network ties spanning the boundaries of external organizations. Higher social capital leads to greater trust with other organizations and further increases an organization's social capital.

For Proposition 2, information is exchanged more regularly and freely with trusted network ties to enhance the discovery of novel external information, increasing opportunities for internal idea generation. organizations must balance their investment in strong and weak ties (Ahuja, 2000). Strong ties require directed energy to build and retain a trusted relationship with a selective number of organizations and deeper investigation, as shown in Proposition 2a. Weaker ties tend to be more superficial with much broader access to more diverse information of the external organizations and less time and energy spent nurturing the relationships, as shown in Proposition 2b. With the broader access to diverse external knowledge through weaker ties across the ecosystem, an organization can identify "structural holes", as shown in Proposition 2c, providing opportunities for organizations to pursue first-to-market advantage.

As shown in Proposition 3, triggers are activated in organizations when ideas are generated from the novel external ideas discovered through boundary spanning with network ties. Increased social capital and network ties will likely lead to more boundary spanning permitted by collaborative organizations for deep dives into the organization's information and enhancing the capacity for innovation. In Proposition 4, more activation triggers result in higher absorptive capacity.These activation triggers are driven by the external ideas from Proposition 3 and lead to innovative practices, products and services for the organization. It is through the absorptive capacity of an organization that relevant external ideas are integrated with internal thinking to trigger innovative investigations in the organizations. As shown in Proposition 5, an organization can then chose to pursue candidates most likely to achieve innovative products and services.

Finally, as shown in Proposition 6, more rapid and targeted innovative products and services with big data in the organization increase its opportunities for market successes. Increasing innovative capacity requires critical review and consideration of these six propositions enabled by the building blocks discussed to move an organization towards more mechanisms to continually discover and analyze novel information from people, devices and sensors across collaborative networks worldwide to create new, innovative products and services (Manyika et. al., 2011).

NEW PROCESSES ENABLING PROPOSITIONS FOR INNOVATIVE CAPACITY

Organizations require new processes to achieve the six propositions leveraging Big Data with the four innovative capacity building blocks, as shown in Table 1. These processes enhance the innovative capacity of an organization to appropriately leverage and scale Big Data across the enterprise for increased capacity for innovation.

The first process, linked to Proposition 1, is to collaborate to build organizational social capital and an organization's reputation for a willingness and motivation for connectedness. To develop higher social capital, leadership must ensure that employees welcome new ideas, from inside and outside the organization, and share openly and fairly with others to spark creativity towards the invention of new products and services.

The second process, linked to Proposition 2, is to build relationships and trust to enhance network ties. This process includes mechanisms to track the connections and collaboration among those in the organization and across its value chain including customers, partners, suppliers and even competitors in industry, academia and government. Collaboration provides opportunities to collectively make sense out of the ever-changing and voluminous big data with trusted partners spanning the boundaries of the other organizations to gain access to external knowledge and expertise regarding Big Data (Wood et. al., 2012).

In the third process, linked to Propositions 2 and 3, novel information is discovered in deep dives into information in external organizations triggering innovation in the organization. Mechanisms are needed to establish network ties with external organizations of interest in the innovation chain, monitor the levels of collaboration with the organizations, the depth of access permitted by the external organizations into their information and the flexibility with which an organization can mine the external information. Finally, once an organization has identified novel external information, mechanisms are needed to track how well the organization triggers the integration of the external information into internal thinking for innovation.

The fourth process, linked to Propositions 4, 5 and 6, is to continually assess an organization's agile absorptive capacity. With effective network relationships and boundary spanning, connection to these ideas can be rapidly transferred into an organization to enable innovation and speed of transition to new products services. Agile absorptive capacity in organizations relies on openness to external ideas, the creative use internally of external ideas discovered and the flexible exchange of creative thinking and research and development of the organizations with open experimentation to develop marketable products and services with partners in the innovation value network.

SOCIAL NETWORK ANALYSIS (SNA) TOOLS TO SUPPORT PROCESSES FOR PROPOSITIONS FOR INNOVATIVE CAPACITY

Big Data has redefined business intelligence in industry, academia and government. It has moved executives from traditional reporting and printouts to tools with real-time dashboards that provide visualizations of relevant data. Computer and mobile device used by people and systems in an organization today form network accessible "nodes" on the organization's "digital network" and are valuable sources of information to assess connectedness. Connectivity among the nodes form the "social networks" of an organization with a computational engine behind it called Social Network Analysis (SNA) (Krebs, 2013). SNA is the primary tool emerging to analyze connectedness. It helps map and measure the relationships and flows between people, groups, organizations, computers, websites and other network-accessible knowledge entities. SNA tools permit an organization to understand the shape, composition and *connectedness* of its innovation network diagramming who is talking to whom to target ways to expand or reshape online interaction and communities (Jones and William, 2013). Most importantly, SNA can reveal the silos in the organization with islands lacking interaction, as shown in Figure 4. Organizational leadership can consider use of the dynamic SNA tools to assess the ever-changing organizational patterns of behavior and migrate the organization away from the undesired patterns of unconnectedness, as shown in Figure 4, to patterns that addresses interactions across the broader social network of the organization's value chain to sustain collaborative knowledge connectedness, as shown in Figure 5 (Frank, 2012).

Figure 4: Unconnected Islands of Information Sharing

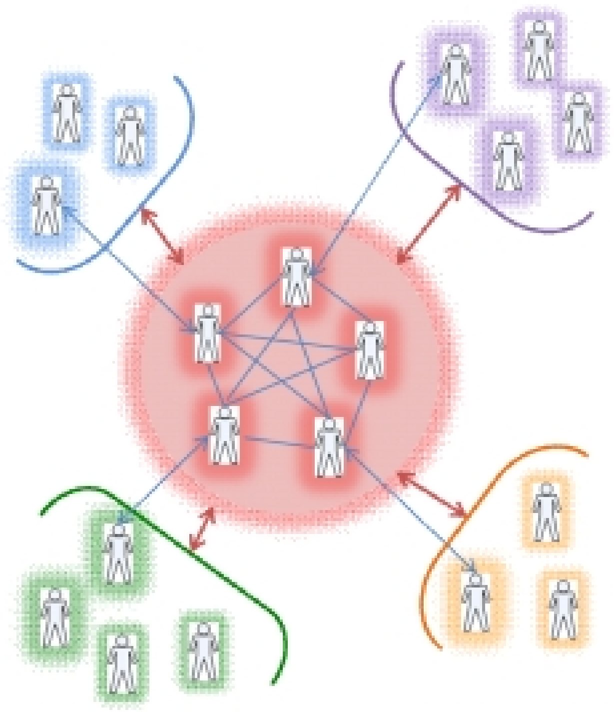


Figure 5: Desired Connectedness

CONCLUSION

Connectedness may be a primary success factor for innovative capacity in today's fast-paced economy. This article initiates a discussion for organizational leaders to consider the prospective influence of connectedness on the enhancement of the organization's capacity to innovate. The article provides propositions, building blocks, processes and social network analysis tools for an organization to consider and use for monitoring an organization's capacity for innovation towards desired activities and behaviors to accelerate an organization's innovation. These four building blocks offer mechanisms to migrate towards connectedness to allow an organization to accumulate social capital, organically build network ties, span boundaries of organizations to access knowledge, and maintain absorptive capacity crucial for speed of action in organizational learning, knowledge transfer and innovation.

Executive leaders should consider adopting recommendations postulated in this article and monitor organizational effectiveness in innovation for sustained and enduring competitive advantage. As innovative capacity is enhanced, executive leadership can adapt and refine its organizational strategy, investments and practices to achieve and sustain enduring competitive advantage through empowered connectedness in this era of Big Data.

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Table 1: New Processes Enabling Innovation Capacity

Innovative Capacity Building Block	Process Needed	Proposition
Social Capital	Collaboration	1
Network Ties	Relationships and Trust	2
Boundary Spanning	Deep Dive Investigations	2, 3
Adaptive Capacity	Absorptive Capacity	4, 5, 6

ENTREPRENEURSHIP E-LEARNING: XBRAIN*

E-learning market in India is growing at phenomenal speed. One such start-up Xbrain was started in 2013 with the objective of trying to change the way people learn. It is a Delhi based education marketplace incepted by two young entrepreneurs Rohit Kapoor and Aman Mehta with the vision of providing marketplace for self-paced online courses on professional skills, exam preparation and hobbies. In spite of increasing demand for online education the company had a negative net margin because of high cost of funds, depreciation expenses etc. The organization was no-where near break-even. Besides, the organization faced the challenge that students were not open to online education and therefore, winning their trust was very important to penetrate the market.

Keywords : *E-learning, Education Marketplace, Online Education, Net Margin.*

INTRODUCTION

With the growing role of e-commerce in India, a large number of start-ups have came into existence offering a varied range of products and services online. One such start-up had been Xbrain which started in 2013 with the objective of trying to change the way people learn.

The formal education in India which was based on classroom teaching can be found in the long history of thousand years where shishya learned under the supervision of gurus in Gurukuls. Today, it is the most common and widespread method of learning all over the world. However, the guru-shishya teaching was one to one or one to few, whereas, now the education has become one to many. With a rapid penetration of internet and smart phones, new–start-ups are focusing on providing e-learning or what is commonly known as digital learning.

Online Education in India

According to one of the report published in Business Standards by Anita Babu on February 6, 2015, the e-learning market in India was estimated to be around $3 billion. In an another report published in India Today, online education market in India was expected to grow at a CAGR of 17.50 percent over the period 2014-2019. A lots of start-ups were already setting their foot in online education. They were not only focusing on chunk of prospective Indian customers but they also seen a significant number of users all around the globe.

Background

Xbrain Elearn Private Limited was Delhi based education marketplace which was incepted in 2013 by two young entrepreneurs Rohit Kapoor and Aman Mehta with the vision of providing marketplace for self-paced online courses on professional skills, exam preparation and hobbies. It provided online courses on various topics, such as Android development, art and drawing, big data, cloud computing, digital marketing, entrepreneurship, game development, graphic design, HTML/CSS, language, maths, MS Office and Web design etc. However, the main focus was on exam preparation especially for GATE, IIT-JEE, IELTS and Bank-PO. It also offerd courses

* The case was developed by Yogeshwari Phatak, Raj Kishore Sharma, Tarun Kushwaha and Prayatna Jain of Prestige Institute of Management and Research, Indore during Thirty Sixth National Case Writing Workshop organized by Prestige Institute of Management and Research, Indore in collaboration with Association of Indian Management Schools, New Delhi on November 28 – 30, 2016.

on spoken English with guaranteed job. Xbrain was the third venture of these two alumni of IIT Delhi. Prior to this both of them co-founded Aaarambh Knowledge Solutions in 2007 and Maximus Education Pvt. Ltd. with Patel group in 2008 which was also involved in providing desktop solutions for KG to class twelve (K12) students with e-learning solutions. The present day smart classes are based on this concept. However, the two partners sold out their share to Maximus after which they started Xbrain.

The idea behind Xbrain was that the experts from around the world shall be able to come and create courses on the portal and find a worldwide audience as subscribers/students. At the core of the marketplace lies its unique course delivery tool, which combined state of the art teaching tools, technology and learning pedagogy to deliver an interactive and adaptive, online learning experience. On the site, users could learn from individual resources, engage one on one with experts, participate in projects and courses with them and interact with peers through the marketplace. The platform empowered experts with teaching tools, pedagogical structures and student interaction events, thus, providing them increasing number of ways to 'productize' their knowledge and time.

Working Approach

The organization has divided its operation PAN India with its corporate office at Delhi, Chandigarh office catered to content development, Chennai office was dedicated towards technical management and recently the organization has started an office in Indore which took care of sales and customer support. The organization worked on the concept that certain things cannot be taught solely through e-learning modules and there was a need for mentoring in order to clarify student difficulties. To provide this hand holding the organization besides providing pre-recorded lectures through CDs and online modes also provided each student customer with a faculty mentor. These mentors were available to the students throughout the day through Skype, WhatsApp, phone calls and emails. This required a large number of high quality faculty to be on the roles of the company. The faculty mentors were recruited in two ways. Firstly, through their web portal where faculty could register themselves with their CVs indicating their willingness to be on the faculty mentor panel and secondly, the firm identified faculty which it felt were needed to mentor students and provide high quality input for course material provided to students. Faculties were, therefore, recruited as full time or part time employees. A full time employee had to be available to the organization for eight hours a day whereas, a part time employee had to be available for two to four hours a day. The salary depended on the qualification, experience and type of employee namely, full time or part time.

The lecture recording, course content development, web portal and other online services were handled by the Chandigarh office. The work was outsourced as well as some content was developed in-house. To ensure that the e-course material and lectures were not pirated, the CDs which were given to the student customers came with three locks which required authentication keys. Besides, there was a need to connect to the organization server for the CD material to be accessed. This ensures that the copyright of the content is maintained. Sometimes, student customers change computers or laptop requiring reloading of the course content which was done after proper student authentication after student requested for the same. The organization understood the need for student satisfaction and therefore, had a dedicated staff looking after feedback of both, student customers and faculty employees. In case students were not happy with faculty mentors faculty were changed and sometimes even fees was refunded.

However, this happend only 1 in 500 students. The organization had a good success rate of their programs with 80 percent success rate in IELTS examination modules and a 60 percent success rate in the IIT-JEE examination.

In case of the English module course which was for three months students were offered jobs with the company if they cleared the end examination. This the organization could afford to do as the recently set up Indore branch which handled marketing and sales needed to recruit at least 100 tele-callers-cum-counselors which stood at 25. Initially the organization used only digital marketing for awareness and marketing of its program, however, it has realized that this strategy was not very effective as in the education business students needed counseling before they were convinced about the program. Once lead was generated through social media marketing, the tele-callers-cum-counselors needed to contact and follow up these leads. For which they needed to be proficient in English and Hindi as the student customers were PAN India and in South English was a pre requisite. This was a challenge as Indore comes in a Hindi speaking belt and therefore, employees even if they knew English were not good with their pronunciations. The organization was offering English language courses from Hindi to English but later plans to make it available in regional languages also.

The organization had total 200 employees both full time and part time including faculty. Full time faculty was 80 in number. The cost of the courses offered was Rs. 4000 to Rs. 35000, highest being for the English speaking course. In case of English module the company allowed the student to pay Rs. 20000 initially and Rs. 15000 was to be paid in installments once the student got the Job. As it is an employment guaranteed course, the company provided placement to student customers. Besides this, other strategy the organization used was that the organization also provided students with free trials of the courses to give the students a feel of online learning. Students were also allowed to buy a part of the program like only mock test material or only course content.

Staff for tele-calling and counseling included graduates, engineers etc. The salary offered is Rs. 15000 to Rs. 25000 per month depending on the qualifications with targets of Rs. 100000 business in one month. Salaries were increased in two months to Rs. 35000 with increased target of Rs. 150000 volume of business per month. The staff was recruited initially for a week with a stipend of Rs. 1000 and post one week if their performance was found to be satisfactory they were retained. This was done as their tele-calling skills were difficult to judge in a short interview. The company had a gross margin of 40 percent but a negative net margin because of high cost of funds, depreciation expenses etc. The organization was no-where near break-even for which it required to generate a business of Rs. 1 crore per month. It was looking at some venture capital funding. It was also trying to have some B2B tie ups with educational institutions for its programs to get mass student customers but these institutions themselves offered certificate programs and thus, were actually competitors of Xbrain. The organization faced competition from anyone offering classroom education be it educational institution or coaching classes. However, it was the only organization to offer this large basket of e-learning programs besides Easyelearn Inc. Besides, the organization faced the challenge that students were then not open to online education and therefore winning their trust was very important to penetrate the market.

Questions :

1. Suggest an appropriate marketing strategy for the company.
2. Comment on the future of online education in India.

INNOVATION TO SUSTAINABILITY: A CASE OF DCIS*

The case discusses the issues and challenges faced and strategies adopted by an NGO set up in Indore region of M.P. The case highlights the dilemma of a local NGO in light of environmental and societal factors along with limitation with respect to promotion and growth. The case is structured in a manner so as to enable students to understand the challenges faced by social entrepreneurs in a highly competitive and globalised environment. The case is designed to expose students to the working and challenges of decision making of entrepreneur. The purpose of the case is to give exposure to the students/participants to the concept of innovation, entrepreneurship and decision making.

Keywords : *Innovation, Sustainability, NGO, IT.*

INTRODUCTION

Mou, a young and dynamic HR manager in one of the leading IT solution company was sipping coffee in a warm winter afternoon. She was looking outside the glass window towards one of the busiest roads of central Indore from her newly furnished cabin. She got a call from one of the founder directors and he congratulated her for a new office premises and called her up for a meeting to discuss the new expansion plan of the company.

She was recalling her journey, when as a young management graduate she joined Dynamic Cyber Infrastructure (P) Limited (DCIS), in the year 2010 to team of 100 and today she was a part of a team of 400 employees. The company had its new office premises situated in 3000 square meters in Indore, industrial and business capital of Madhya Pradesh, India.

Background of DCIS

DCIS was started in 2003 by three college graduates with a mission to continuously strive to make IT work better. It started in the year 1999 when three engineering graduates Karan, Amit and Rohan along with tech developers Phizo and John (see Appendix 1) were trying to earn some pocket money. In May 2002, they started getting clients and in August 2002, DCIS completed its first international assignment for a New York based company. In November 2003, it was a big day as the Company got its own domain and first internet presence with an investment of $150 (Appendix 1).

The company was growing steadily and DCIS showed its maturity in Computer Protection and System software development capabilities by launching its PC protection suit for public, in December 2005.In July 2006, company started its KPO (Knowledge Process Outsourcing) services for a Florida based giant real estate company and by June 2008, they had received their First Joint Venture contract with Sky-Rise Development group, Florida, USA. The Company had more than 100 employees at Indore, US and European locations and was providing its services in 5 major areas namely Software Development, Customer Support Services, Offshore Staffing, SEO Services and USA nationwide staffing services. The information technology and business process outsourcing were among the fastest growing sectors, with a cumulative growth rate of revenue 33.6 percent between 1997–98 and 2002–03 and contributing to 25 percent of the country's total exports in 2007–08 in India. The performance of IT sector was not only fueling growth for developing

*This case was developed by Ranjana Patel and Satnam Ubeja during Twenty Eighth National Case Writing Workshop organized by Prestige Institute of Management and Research, Indore in association with AIMS, Delhi on November 26-28, 2012.

countries like India but also paving way of growth for companies like DCIS. The share of the Indian IT industry in the country's GDP also increased from 4.8 percent in 2005–06 to 7 percent in 2008.

By the year 2009, DCIS started offering services with Open Source Technologies and was recognized by Drupal Organization for their quality Drupal Development Services which helped them in gaining more and more projects and clients in this domain. This was followed by the achievement of Microsoft Gold Partner Status and opening its first marketing office in Sunnyvale, USA in the year 2009. The year 2009, also gave place to seven Indian firms as they were listed among the top 15 technology outsourcing companies in the world. DCIS continued expanding by promoting itself in the international IT events and expos of the world, Like Gitex, Dubai and IndiaSoft which also gave them new avenues to promote the company. The company also started developing mobile application wing by the end of year 2009.

By 2010, DCIS had more than 150 members, and the value as per the NASSCOM Reports, 2010 was more than 4.5 Million dollars. The company aimed at expanding more in the coming year and targeted a fourfold growth in the number of employees and business. DCIS pioneered the Right Sourcing Model (RSM), which emerged as a disruptive force in the outsourcing industry. The RSM was based on taking work to the location where the best talent was available and where it makes the best economic sense along with the least amount of acceptable risk. RSM allowed the company to source best talent and provide service at least cost to its client. In 2011, DCIS had become a leading IT and consulting company with turnover in the millions and offices in 3 countries, regional representatives in over 13 different countries and delivering technology-enabled business solutions for companies in more than 45 countries. By the end of year 2012 DCIS was shifted to a new business location in the centre of city with over 3000 square meters area and the employee strength grew to 400.

Working Process of DCIS

DCIS was one of the best Outsourcing Software Development Methodologies to make the whole Offshore Software Outsourcing and Development Process go smother and easier. The company operated on unique Software Development Life Cycle (SDLC). The company had expertise in Microsoft .Net Platform such as – asp.net, vb.net, C#, Soap, xml and many others. DCIS also provided services in PHP (Hypertext Preprocessors) technology and image processing services in the above technologies as a part of Outsourcing Software Development. The company had best talent and skilled developers, who were well equipped and trained to meet the global challenges for Offshore Software Outsourcing Services. The working and development was divided into six phases namely, envision, planning, design and development, testing, delivery and after sales services.

Once the RFP (Request for Proposal) was submitted by the prospective client to DCIS then the team started to analyze the given proposal. The team tried to implement the best combination of the resources available to start the analysis of the possible Custom Development Services as the first step. Planning was the second step of SDLC where all possible functionalities such as Functional Specification, Time and Cost Estimation, Best Resources to be Implemented and all other aspects of Custom Software Development were taken care off. After this step it became clear for the client, as to what to adopt and as how to manage the schedule for all possible Offshore Software Development Outsourcing Services.

Once the project was approved by the client in terms of time and cost estimates then the third step was design and development started and in this step usually a prototype was given to the client that gave the actual look and feel of the system without coding. Further, Coding and Software Development was done once the design and prototype were approved by the client. Then the next step was software testing, where the developed software had to go through Software Outsourcing Testing Phase and it is was delivered and implemented at clients end when it passed the testing phase successfully. This was the last and final phase where Outsourcing Software Development contract with the client was completed. Training to the clients was also provided as per the clients need. Once the total Software Design and Development Services were completed and the project was handed over to the client. After delivering the developed system to the clients the Custom Software Development Contracts ended and as per the need of the client after sales support and service was given.

Functional Areas of DCIS

There were major three functional departments in the organization which included marketing department, HR and training and development and development and quality assurance department.

Marketing Department

DCIS had a strength of seven employees in the year 2003 in its marketing department and grew to 50 employees in 2012. The marketing team was based in USA, Iceland, Sweden and Europe. The company had its business development centers located in USA and Europe as they had their major projects based in these countries. The company also had Phizo Hayat as Vice President, Business Development USA who was responsible for strengthening DCIS in USA and Global clientele and helping wide range of clients for their long term successes. While John Hardy was working at Iceland and Sweden market as Vice President, Business Development in Europe and was developing and helping widen clientele base in European countries (Appendix 1).

The growth in the Indian IT sector by the year 2012 was attributed to increased specialisation, and an availability of a large pool of low cost, highly skilled, educated and fluent English-speaking workers, on the supply side, matched on the demand side by increased demand from foreign consumers interested in India's service exports, or those looking to outsource their operations. DCIS also had competitive advantage over other IT companies as it was providing services in the developed countries like America and Europe at cost effective prices which was a key growth aspect.

HR and Training and Development Department

The company had vertical training and development department where the team leads were responsible to train the new employees in every department. The company believed that senior team leads knew better about the working, although they did not had any formal training and induction department. The newly recruited were trained for fortnight period and then were assigned live projects under the supervision of team leads. The team leads were responsible for the supervision and working of the team. DCIS had an ERP based online HR system for the convenience of the employees with flexibility and ease to employees for updating and availing, leaves, filing taxes etc. DCIS followed a 360 degree appraisal system which was done every nine months. DCIS believed in employee satisfaction and, thus, followed a benchmark appraisal system that appraised the employees not only on performance basis but was also unique as the IT industry usually had a yearly system of appraisal.

Development and Quality Assurance Department

DCIS had its development department based in Indore headquarters. The department had employees who were engineering graduates and were responsible for undertaking the task of developing and coding. DCIS was a project based company that catered to the needs of the client on demand basis. DCIS had a strong team of 400 employees in its development department.

DCIS also had quality assurance department with strength of fifteen employees which was responsible for rigorous testing of the developed project. The project had to pass through the quality testing before it was implemented at the client's end to ensure complete satisfaction of the client.

DCIS Certifications and Strategic Alliance

DCIS had CMMI Level 3 practices and Microsoft Certified Partner and had an ISO 9001: 2000 certification.DCIS had strategic alliances with Microsoft, Apple, Google, Paypal, Drupal, Joomla, Adobe, google checkout, ZOHO, Eye Os, Sun Microsystems and Double Click.

Expansion Plan

DCIS had an expansion plan looking into the global scenario and the business development prospects of the IT sector in the developed nations. In the year 2012, the world was economy witnessing recovery from global meltdown crisis and there were only few Asian countries like India and China who were able to outperform in the overall economic crisis scenario. Of all the sectors in the economy, few sectors like IT, ITES and telecom and BPO were able to perform as they were competitive enough in terms of cost involved for technological development and human capital.

DCIS was growing leaps and bounds with a 300percent growth rate and was targeting to widen its employee base to 1000 in 2013 and 1700 by the end of the year 2017. DCIS had state of the art head office with well equipped facilities aimed at better and conducive working environment looking into the future expansion plan. The company was also expanding its operations in other European and American countries. DCIS already had an edge over with respect to current trends and technology in the sector and was continuously striving and developing new technology and application to broaden the range of its products and services. DCIS was also focusing on developing in the arena of application software development market. As according to a recent Gartner report the world wide application software development market was expected to cross $9 billion in 2012 and would continue to increase by a ratio of 4:1 compared to native PC project by 2015.

Questions :

1. Analyze the case with the help of TOWS Matrix and highlight on the strengths and Opportunities of DCIS.
2. Discuss the expansion strategy of DCIS in light of the products offered and overall expansion.

APPENDIX 1

Note on Promoters and Management Team

Karan, Amit and Rohan, graduate in engineering in 2002 from RGPV founded Dynamic Cyber Infrastructure (P) Limited, "DCIS" in the year 2003. All had experience of different companies and specialized experience in marketing and development.

Karan's responsibilities encompassed, providing strategic direction to the company, corporate planning, corporate policies and corporate finance. His distinguished knowledge came from an abundance of experience in developing large distributed systems. He has conceived, designed, and implemented several web products, had an extensive technology background, gained through years of experience.

Amit was responsible for providing technology direction at DCIS and building technology capabilities. He championed DCIS's Operations Quality & Process initiatives and oversees building infrastructure and solutions that were instrumental in driving major financial and operational benefits to DCIS's clients. He was also instrumental in establishing key alliances and building well-informed teams on best-of-breed technologies, giving DCIS's a competitive edge. Amit managed multiple projects running at DCIS, while maintaining budgets and deadlines. He steered the development lifecycle for their web initiatives and mentored the research and implementation of innovative web/ mobile & cloud tools. He was also responsible for new technology assimilation and adoption in the company.

Rohan was responsible for the team's overall vision, business direction, corporate initiatives and goals. He was a proven hands-on leader with a successful track record in business leadership and ownership, both Offline in the development of domestic project development and sales, and Online in creating compelling web solutions. The balance of 'brick and mortar' and ecommerce business experience has resulted in accomplishing goals successfully. Over the years he had been handling business activities in Real-estate businesses and software based business and had been successful in all of them.

Phizo Hayat born and brought up in United States, had strong capabilities of starting, running and leading flagship global businesses from scratch. With degree in Commerce he started his career at the age of 17, and since then had successfully run multiple businesses in USA and UK. With Cyber Infrastructure as V.P. Business Development USA, he was strengthening DCIS' USA and Global clientele and helping wide range of clients for their long term successes.

John Hardy born and brought up in Iceland and was working at Iceland and Sweden with Cyber Infrastructure as V.P. Business Development, Europe. John was developing and helping DCIS' wide clientele in European countries and helping them for their every day success.

LOOKING FOR A REAL DRUG: IFPA LABORATORIES*

This case is focused on issues and challenges faced by IFPA in managing the product lifecycle of a drug and how to appreciate the need for better decision making in drug research and development in the pharmaceutical industry. Progress had actually been made by the company toward sustainable development. The acquisition gave the Indian company front-end sales and marketing access to the highly regulated life-saving drug market having the USFDA and CFD (Computational Fluid Dynamics) Certification. This case illustrates the impact of prepackaged pharmaceutical products, usually manufactured by multinational firms, on the health care sector of developing market economies.

Keywords : *Pharmaceutical, Durgs, Prepackaged Products.*

IFPA Laboratory

IFPA was an International Pharmaceutical company based in Mumbai, India. It was fully integrated Indian Pharmaceuticals company manufacturing over 350 formulations and 80 APIs (Active Pharmaceutical Ingredient) for various therapeutics segments. Pravesh Gupta was the president of this company. It was founded on October 19, 1949. The main activities of company were to produce and market pharmaceuticals and drugs. In 1975, the management of the company was taken over by Ashish Bhalchandra. IFPA was a therapy leader in India for anti-malarial drugs with a market share of over 34 percent with a fast expanding presence in the international market as well.

IFPA Laboratories started its operations in 1994, specially-focused on *Lariago drug- Anti malarial life-saving drug* initially having capacity six tons per month and increased their capacity to 130 tons. But again capacity decreased to 50-60 tons due to CGMP (Current Good Manufacturing Practices) and safety concern.

For over 20 years, IFPA had been playing a lead role in the Indian APIs market, both in the anti-malarial and anti-hypertensive therapeutic segments. IFPA had emerged as one of India's top exporters of APIs with nearly 25 percent of the turnover coming from APIs. Regulated markets like the USA, Canada, Europe and Australia account for 75 percent of their API exports. IFPA was one of the world's largest manufacturers of APIs- Atenolol (Anti-Hypertensive), Chloroquine Phosphate (Anti-Malarial), Furosemide (Diuretic), Hydroxychloroquine Sulphate (NSAID), Metoprolol Succinate (Anti-Hypertensive), Metoprolol Tartrate (Anti-Hypertensive) and Pyrantel Salts (Anthelmintic) besides being one of the largest suppliers of these APIs worldwide. IFPA's domestic customers included Abbott, AstraZeneca, Bayer, Cipla, Dr. Reddy's, Merck, Pfizer, Ranbaxy and Wockhardt. IFPA's formulations basket included generics for the developed markets and branded formulations for emerging markets. Formulations accounted for 67 percent of export turnover, making IFPA one of India's largest formulation exporters. IFPA manufactured over 350 formulations virtually every dosage form oral, solids and liquids, dry powders for suspension and injectable (liquid and dry).

Indian Pharmaceuticals Sector

Indian pharmaceuticals sector accounted for about 1.4 percent of the global pharmaceuticals industry in value terms and 10 percent in volume terms. The cost of

*This case was developed by Anukool Manish Hyde (PIMR, Indore), Seema Jhala (Indore Institute of Management and Research, Indore) and Ankita Jain (SVIM, Indore) during Thirty Sixth National Case Writing Workshop organized by PIMR, Indore on November 28-30, 2016.

setting up a production plant in India was 40 percent lower than in western countries. India had a skilled workforce as well as high managerial and technical competence in comparison to its peers in Asia. India accounted for 20 percent of global exports in generics. The strength of Indian Pharmaceuticals company was low cost of production. India's cost of production was nearly 60 percent lower than that of the USA and almost half of that of Europe The structure of pharmaceuticals sector included active pharmaceuticals ingredient/bulk drugs and formulations.

The Indian Pharma industry, which was expected to grow over 15 percent per annum between 2015 and 2020, will outperform the global pharma industry, which was set to grow at an annual rate of 5 percent between the same period. The market was expected to grow to US$ 55 billion by 2020, thereby, emerging as the sixth largest pharmaceutical market globally by absolute size, as stated by Mr. Arun Singh, Indian Ambassador to the US. Branded generics dominated the pharmaceuticals market, constituting nearly 80 percent of the market share (in terms of revenues).

India has also maintained its lead over China in pharmaceutical exports with a year-on-year growth of 11.44 percent to US$ 12.91 billion in FY 2015-16, according to data from the Ministry of Commerce and Industry. Imports of pharmaceutical products rose marginally by 0.80 percent year-on-year to US$ 1,641.15 million.

Overall drug approvals given by the US Food and Drug Administration (USFDA) to Indian companies had nearly doubled to 201 in FY 2015-16 from 109 in FY 2014-15. The country accounted for around 30 percent by volume and about 10 percent by value in the US$ 70-80 billion US generics market. India's biotechnology industry comprising bio-pharmaceuticals, bio-services, bio-agriculture, bio-industry and bioinformatics was expected to grow at an average growth rate of around 30 percent a year and reach US$ 100 billion by 2025. Bio-pharma, comprising vaccines, therapeutics and diagnostics, is the largest sub-sector contributing nearly 62 percent of the total revenues at Rs. 12,600 crore (US$ 1.88 billion).

Human Resource at IFPA

IFPA believed in safety of employees as it leads to satisfaction of workers and reduced rate of accidents hence less compensation to employee. HR Manager was little flexible in approach and he believed that if employees were late, did not make any difference to the organization but if it is a practice then action would be taken against employees. Employees were getting canteen facility on subsidized rates. Employees used to meet HR Manager every month to discuss problems otherwise they used to give suggestions for improvement. Cultural programs were organized on the day of Mahashivratri in which employees along-with their family members used to come to organization for fun with other employees as well. Looking to the safety aspect, IFPA had hired a world renowned consultant for giving advice on safety measures. Twice in a year employees were given Safety shoes and they were also provided with uniform. Ronald Daniel (Senior HR Manager) shared that once the young employee met with an accident and died, his wife got Rs. 8.lac compensation. 10-25 percent hike was given to the employees annually.

Daniel was worried about IFPA as it did not operate for more than eight months. he was in dilemma as to how to generate more revenue so that it does not close down any time. Management thought that this plant was not a cash cow so why to continue with it but they were worried about employees and their dependents too.

CSR at IFPA

IFPA donated blood testing machine for

Thalassemia patients to a hospital. IFPA believed in donating money to the orphanage. Plantation was being done regularly to save environment. Full medical checkup of employees was also being done annually.

Challenges Ahead

There were many players in Indore (M.P.) region which were dealing with same type of products. Company had to reduce overhead cost in any case to survive. IFPA had decided to go for product diversification which could help them to fetch money as IFPA used to function only for eight months. IFPA had been facing financial burden of around Rs. 3.5 crore per month as a total expense. IFPA was still dealing with old issues like compensation which put them into trouble all the time. Government forced organizations to implement new system, documents to maintain on a regular basis where objective was to have transparency and better quality of product. There was a severe problem of attrition. Fresher used to join IFPA and worked there around 1-2 years and used to go to the competitors in the same region or outside. Daniel shared that young generation had a problem of low patience and subject knowledge was not sound. Freshers never treated training as a learning period.

Questions :

1. Do SWOT analysis.
2. Discuss HR practices of IFPA. Are these practices sufficient? Justify.
3. Suggest the ways to overcome challenges.

RELIANCE JIO: PREDATORY OR COMPETITIVE PRICING ?

Ankita Pathak*, **Sunil Mishra****

The case discusses how Reliance Jio Infocomm Limited (RJIL) disrupted the competition in the Indian telecom sector and became one of the main telecom networks in India. The Indian Telecom industry has seen tremendous and remarkable growth in the last few years. Expeditious changes took place in the network from 2G to 3G and 3G to 4G. Well-known players like Airtel, Idea and Vodafone came later on with the 4G bandwidth but Jio has made a masterstroke in the industry. The entire industry is flustered by the entry of Reliance Jio. Jio became a strong challenger for every player in the Indian telecom industry. Jio used the strategy of providing low-cost data and free calling to target the need and wants of the Indian customer and attracted them towards 4G speed. Indian customers are price sensitive and Jio focused on this segment. Jio provided the 4G speed, Volte technology and unlimited free calls which contumacious in the telecom industry. Mukesh Ambani brought the digital revolution in the telecom industry and holds the flagship of Reliance Telecom. Reliance Jio captured a large market share than its competitors like Airtel, Idea and Vodafone. Its competitors were framing defense measures to retain their market share to overcome from huge losses.

Keywords : *Reliance Jio, Competitors, Disruption, Price Sensitive, Business Strategy, Pricing Strategy.*

INTRODUCTION

If we look into the past, in the year 1852, the British Government in Calcutta was the first landline operator in the history of the Indian telecom sector. After Independence, in the year 1986, the Department of Telecommunication (DOT) was formed which was regulated by the Ministry of Communication (MOC). The telecommunication was controlled by the state. DOT was totally dependent upon the funding and expansion plan of MOC. A major change was observed after the formation of the Telecom Regulatory Authority of India (TRAI) which regulates the agency. The lack of infrastructure acted as a drawback which had restricted at 2G and 3G network. The government was actively participating in the development of the sector. It provided 100 percent FDI (Foreign Direct Investment) to meet the fund demand in the industry. Policies were liberalized to invite foreign investors to invest in the sector. Foreign Investor no longer required an Indian investor to invest in the market.

The Telecom industry was always attracting the various business giants in India which showed rapid growth in the world. The giant like Vodafone group (VOD), which was the second largest operator after China Mobile limited (CHL) and Bharti Airtel Limited was the third largest telecom operator on the basis of its subscriber in home turf. The Telecom industry has strengthened the economy as well as showcased the contribution to the economic growth of the country by generating employment, trade, investment and an increase in GDP. The waves in the industry were creating employment opportunities as well as

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uplifting the standard of living in the global village. Globalization has lessened the boundaries and communication has connected the people of the various nations, states and regions. The telecom industry has brought people together through various types of communication. Cell phones, Wi-Fi, broadband and internet were the various services provided by the telecom industry. It created prominent changes in the opinions of consumers, business units, principles of entrepreneurs, legal frame-work and philosophy of the government's policies and procedures.

India had the second largest market for mobile service providers. At the same time, India was having the third position in terms of number of internet users in the world. The propensity for utilizing a mobile phone in a brief period has made the telecom industry a profitable and developed industry. Not only Indian players, but the global service provider was also engaged in providing services in the Indian market and earning a good market share. Among various players, Jio entered the telecom industry which has spread its radicals in the entire industry. Reliance Jio has chosen the most recent 4G technology which acted as a benchmark for other service providers. The adoption of the latest technology has made Jio a leader in the industry. It has changed the way of offering services to the customer. Reliance strategy of free 4G internet has brought an unexpected change in the industry, consumer behavior and preferences.

ABOUT THE COMPANY

In the year 2003-04, Mukesh Ambani came into the telecom sector by the successful execution of the mega project with the tagline "Kar Lo Duniya Muthi Mein". But the split has made Reliance Infocomm fall in the bag of Anil Ambani in the year 2005 which later on became Reliance Communication. In the year 2010, a purchase of Infotel has started the journey of Reliance Jio. Infotel was a successful bidder for 4G spectrums in PAN India, which was auctioned by the Government of India (GOI). Acquisition of the Infotel has given the strength of PAN India for all 22 circles of telecom which has made Jio an independent Internet Service Provider. The acquisition made Reliance stronger as they were able to provide four times higher speed than the speed of 3G and sixteen times higher speed than 2G. It created the problem for other 3G players who needed to pay higher prices for buying the spectrum.

In the year 2013, Reliance Industries received permission from India's Department of Telecommunication to offer telecom related services which included voice telephone service in all 22 telecom service areas. Separate permission and license were required for providing internet services till 2nd August 2013. A sudden change was seen in August 2013 when the government has changed the rule and has allowed providing voice service which accounted for 85 percent of the revenue in India's Telecom Sector. The old license was converted into a unified license.

Jio conducted many researches before coming into the market to know the market need and requirement of the customers. The Jio team came up with new eyesight that it was an era where everything is available on the internet and customers were trying to find the internet access of high speed at low cost. Research also concluded that people were paying a huge amount for the GBs (Giga Bytes) of data. The idea of giving the 4G network to the customer was growing in the company. A pilot study was done among the employees and partners in December 2015 to test the network and efficiency before commercialization. Finally, Jio was launched in September 2016 in the market for the end users. Reliance Jio Infocom was very late to enter into the market of telecom. The leading companies like Airtel, Idea and Vodafone were beating the market from the last decades. An analytical skill of the Mukesh Ambani has made a unique image and brand name for Jio due to its 4G network in India. Jio was one who adopted the 4G technology which has set the benchmark for other telecom service providers. Reliance telecom served the need of the customer at a low cost which created a strong business strategy.

Reliance Jio was able to create 16 million subscribers in a month by using the strategy of providing free internet and calling to the customers which acted as a Unique Selling Point (USP). The free offer was acting as a disruptor for Airtel, Vodafone, Idea and Aircel. The major merger of Airtel and idea has corral with Telenor and Vodafone was being executed with the motto of expanding the resources which would reduce the cost of providing the services which directly lead to reducing the data usage rates. The new amalgamation was done to maintain sustainability and to remove the market leader. Jio wanted to create a demand for the data in the market and it succeeded in making people addicted to the data. Mukesh Ambani in his speech said that "Jio means to live and to be alive to every opportunity". People were demanding digital oxygen which was provided by the Jio as per the demand of the people. Reliance accomplished the goal of 50 million in short span though Vodafone and Airtel took thirteen and twelve years respectively to reach 50 million people. Reliance Jio was able to satisfy the need of the people. People were annoyed because of the slow speed of the network and the price associated with that. Jio has solved both the problems of the customer which has made them shift from the existing providers to Jio. The shift has created waves for the other operators.

The existing players were in fear of the offers and data services of the Jio. It has made them lose the market share and at the same time, they were being forced to reduce the tariff of their plan in order to retain the subscriber. It has made the Idea bankrupt because it was the one who was badly affected by the Jio. Many subscribers shifted which lead to the shutdown of the partial network. The shutdown has created a shortage of cash which has crushed the entire company. The speed of Jio to capture the target customer has created a competition among the industry. The companies were able to attract the attention of the people due to brand ambassador like Shahrukh Khan and Amitabh Bachchan who acted as a strong support pillar in creating a connection with the customer. The number reached 50 million in three months. The strategy of creating a strong buzz about their offers in the market was successfully implemented and it created curiosity in the mind of the people.

Jio has not only launched the 4G network but has provided the products and facilities to every segment of the people. Jio has not only focused on a selected target group but also planned the strategy for the untapped market. Reliance Jio has, firstly, targeted the people with the smart phone who were in need of high speed and good mobile service. It segmented the people in urban, middle and upper-class people. In the next step, Reliance launched the Jio phone with 4G connectivity for the customer who was not able to afford the Volte phone. The company has given the offer to have the phone by minimum security amount of Rs 1500 which would be refunded back when a Jio phone returned to any Jio store after 3 years. A facility of pre-booking made available from August 24, 2017. There were many fruits in the basket of Reliance Telecom like Jio Apps, Jio Wi-Fi etc. The company has crossed revenue of 108.9 million in the year 2016-17. The Telecom industry was generating huge revenue from data transmission and data seeker. The youth are the ones who are having more preference for data transmission. A prediction by the Delloitte, stated that up to 2020 the telecom industry would be generating revenue of $9 billion.

According to Ambani launching new technology was not a tough task but providing convenience and making every individual take advantage of the offer was a tough task. It has broken the myth and proved that people wanted to accept the advance technology. As per the report of the company the usage of mobile data has gone from 20 GB to 150 crore GB per month in a span of a year. A complementary and free offer boosted the sales of the organization and has helped the company to outperform. Jio owned the spectrum in 800 MHz in ten circles and 1800 MHz in six circles out of twenty two circles in the country. Reliance Jio also owned a 2300 MHz spectrum license of PAN India which is valid till 2035 (Mhabde and Dhamani, 2018). A fiber optic cable was being spread in more than 250000 kms. for the network in the nation which will band together with the local cable operators to get broader connectivity for broadband services. It was possible because of the Multi-Service Operator (MSO) License. The speed of acceptance of Jio by the people was faster than that of Facebook and Skype. Reliance Jio had a target to add a 3.7 crore subscribers in the next quarter.

Reliance was creating a strong database of the subscribers along with the income. The trust and love for the Jio has created loyalty for the brand. Such change was seen in the year 2000 where Dhirubhai Ambani has changed the scenario of the telecom industry. Reliance Jio has changed the people is mindset, business entities, entrepreneur's ideologies, legal frame-work, government's policies philosophy and the procedures.

EVOLUTION OF PRICING IN MOBILE NETWORK

Telecom industry is continuously adopting new ways and methods to retain its subscribers. Years back company used to charge high call rates. Subscribers used to take the services at high call rates as competitors were not there and the subscribers were not having an alternative option available with them. In order to provide something new and add-on benefit, a scheme of free SMS was introduced by the companies. It has created an interest in the existing service provider. A scheme of lifetime SIM was another add-on to free SMS. Customers were happy and were influenced by the service provider. Again, to add something new a rate cutter was given to the user depending upon the user frequency of calling. The need for data has created a storm with the time plan and packages were offered by the various operators to their customers as per their need, usage, and desire. This has led to various mobile data offers add-on packs for the extra use of data. Reliance Jio has focused on the need for data and its offers. Reliance used the strategy of competitive kill in pricing in order to possess the leadership in the entire market.

PRICING LEADERSHIP OF JIO

The price of the product or the services is decided on the basis of a condition in the market, the ability of the user to pay, the cost of providing the service, margins and actions of the competitors. Company advisors somewhere knew the mindset of the Indian customers who were much price sensitive. Reliance Jio entered into the telecom sector with the motto of acquiring the market share of other competitive players. There were various pricing strategies like premium pricing, penetration pricing, high low pricing, loss leader pricing etc. which were used by players to enter into the market. Reliance Jio entered the market with the strategy of penetration pricing, loss leader pricing and competitive pricing to acquire the market share. During the time of entry in the market, they followed the strategy of penetration pricing. It is the strategy to attract the customer towards the new product by offering them services at a lower price at its initial offering. The lower price takes away the customer from their competitors. Jio used the strategy of penetration pricing which has made their competitors lose their market share and lower the price of the services which lead to losses. The competitive kill pricing strategy lead the other firms to cut their prices to retain the customers and be in the market. The free calling and free data at 4G speed have made the adoption of the technology fast.

The goal of reliance Jio was to attract the customer and enter into a new market by following the strategy of penetration pricing. The strategy of predatory pricing was used to create a glass wall for entry of new competitors and the lower price affected the existing players. The predatory pricing of Reliance Jio has helped the organization in enhancing its brand image and sales. Reliance Jio offered free voice, data and message services in the name of its "Welcome Offer" from September 5, 2016 to December 31, 2016. Later, the offer was extended up to March 31, 2017 as the Happy New Year Offer.

Later on, with the time, Reliance Jio followed the loss leader pricing strategy where they sold their selected product at below the cost price in order to attract the people who were still unreached. The below cost price would make the untapped people think to shift from existing company to reliance Jio. Reliance Jio offered a free subscription which had lured the customer traffic from their retail competitors. At the start, they did'nt make any profit on goods that were earmarked as loss leaders. With the pricing strategy, Reliance Jio was able to capture the market with the loss leader and penetration pricing strategy. Reliance Jio was able to make a 44 percent market share. They have captured a good market and in order to be in the market, they followed a competitive market pricing strategy. In this strategy, the company follows the price after considering the price of the competitors. The prices of the product were raised by the Jio gradually to make the profits and follow the price of the competitors. People were very well addicted to the internet and the speed of the reliance Jio. They analyzed the market and introduced a competitive pricing strategy to make profits. Reliance Jio did not only focus on the high-end customer but also focused on low and mid-range customers. These sections of the market were being targeted by offering all services at a reasonable price.

FIRST LINE OFFER AT THE LAUNCH

Jio has made a strategy to launch a Jio SIM in the market and attracted people by providing them free SIM with minimum procedures. Only an Aadhar card was required to complete a registration process and the SIM would get activated within 15 minutes. The free SIM provided the facility of free unlimited calls, SMS, free-roaming, and unlimited data for five months.

SECOND LINE OFFER

Jio at the second line focused on the availability of the SIM in the market. A change was seen, the validity was reduced from five months to three months and an offer of unlimited data was converted to 4GB per day. Other offers remained the same.

THIRD LINE OFFER

The third line offer again a reduction of data offer was done. From 4GB per day, then come to 1GB per day, and increased the validity by 1 month, that is, 4 months.

FOURTH LINE OFFER

Customers with the above three offers, have became addicted to data usage and speed. They were using and enjoying the facilities without any problem which created a trust for the Jio and free SIM offer and data has attracted customers which created a large database of the subscribers. A ball was thrown by Jio in the fourth line of the Jio prime membership offer. Under the prime membership offer, two plans were made. Existing user can become the prime member by recharging for Rs. 99 and can enjoy the available offers. With a very short time span, a new Jio Dhan Dhana Dhan offer was introduced and the subscriber could use the services by paying Rs. 303 for 90 days. For new users, a minute change has made in the price of Dhan Dhana Dhan offer. The price for the new users was Rs. 309 for receiving the services of Jio.

Employees were complimented for breaking the records and creating a milestone in the telecom industry. Free unlimited calling and free 4G data usage for the 3 months has led the Jio to get popular and bet the old players like Airtel, Idea and Vodafone. The strategy of retaining and adding new customer was successfully implemented when the free calling and free 4G data was expanded for another three months. A strong foothold was being created by Jio, offering various schemes like free calling, data and messages till 31 December 2016, and an extension for more three months was given as a gift of New Year which was applicable till 31 March 2017.

WAR BETWEEN JIO AND OTHER COMPETITORS

A war was going on in the telecom industry to enlarge the subscribers as well as to hold and absorb the existing consumer. Jio came up with the idea of digitizing the life of every person so it came up with the tagline "Jio Digital Life". It has positioned itself as a transformer of India into the digital world at an affordable price. Price was considered as a major weapon to defeat competitors. Reliance Jio provided the free offer for three to six months which resulted in millions of Jio subscribers. It created a strong data for the company. Reliance Jio was able to subscribe to 100 million people in just 170 days after its launch. It has broken all the records in history of telecom industry. Reliance Jio was able to attract large customer base but was not able to handle the customers. The customers faced issues related to the activation of SIM card. Reliance Jio came up with the latest technology of Long Term Evolution which was the best technology in the world. But it forgot the people who were having a 3G smartphone. The VOLTE doesn't support 3G smartphones. The speed of Jio attracted many other network subscribers too but they faced the problem in porting the SIM from one provider to Jio. According to the data received by Indo-Asian News Service Jio was able to provide a speed of 18.331 Mbps whereas Airtel 9.266 Mbps, Idea cellular 8.822 Mbps and Vodafone 9.325 Mbps. Jio offered a high speed to the user but still, people were facing the problem of call dropping. In certain regions, Jio was not able to provide proper speed which resulted in a poor connection and slow loading speed. The problem was solved by the time as the improvement was taken place.

Reliance Jio has fallen into pricing controversies as they were charging the price lower than the ethical penetration. The company can't afford free offers which will negatively affect the business and profits. Activities like corruption and laundering were alighted on Reliance Jio. It was not able to maintain a code of ethics as they were using the various strategies of low pricing, the strategy of market penetration which would affect the organization in the long run. When a comparison was made between Jio and other competitors Jio is providing many add-on benefits that attracted the new and existing customers. Reliance Jio has diversified themselves into various other areas like chats, games, movie and messenger which created a source of revenue for the company and customer got the benefit of selecting the option of their choice. It was the VOLTE who had a wide scope in bandwidth which could offer many apps to the customer. Reliance Jio has offered a pack of Rs. 153 per month for the Jio phone user which provided unlimited calls, SMS and unlimited data with access to Jio apps. In addition to that various small caps were also introduced to reach every segment of the people. A plan of Rs. 54 for a week and Rs. 24 for two days has provided convenience to the consumers.

The government wanted to bring an era of digitalization but it could be possible if the cost of internet connectivity gets low. The project was boosted by the scheme of Jio. Indian would cross 500 million users, a dynamic change, and improvement was seen and felt in the last three years. The low rate has led 48 percent of populations from rural areas, 80 percent of the total population started experiencing the Jio internet within a month of launch. Some argued that Jio was able to get popularity because of the brand name and popularity of the Reliance but the fact is that Jio made a space in heart of the customer by their pocket-friendly packs and offers. Reliance always thought a step ahead from others. Depending upon the future need huge investments were done on fiber optical cable and towers. LTE will not only support the present requirement of the speed but also take care of the coming need. LTE would be supporting 5G and 6G technology which will be coming in the near future. Jio planned up for the 5G network and launch the 5G network in India. It can act as a supporting hand to the Prime Minister's vision of Digital India. It can expand its market by establishing international towers and networks with the existing network. Still, there are lots of opportunities to expand themselves in neighboring countries. In future Jio can target the people who are frequent international fliers. They either need to change their SIM or pay higher charges for the calls. Jio can create an alliance with international companies and set the network tower in the International market.

Jio was always creating competition for other companies in the industry. It could be only possible by continuously analyzing the macro environment. Micro as well as macro environment affect the smooth functioning of the company and can help the organization in taking better decisions. The market analysis helps the Jio in making their marketing strategy in product development. The lower price strategy used by the company to attract more people can create a problem for the company. The competitors have appealed TRAI for their rights as a scheme of Jio was continuously making their competitors change their price and offer. In the current scenario it is very difficult for the business to run in highly competitive market where there are number of segments. India is a country which has youngsters, middle-age people and old age people. Different segment of the consumer has a different expectation from the company but Jio has connected people and helped the nation in connecting altogether. People can be connected when they have a price that puts less weight to their pockets. Every common man is getting the benefits which have changed the life. The youth found employment opportunities as well as opportunity of doing business online, as the heavy cost was not associated with that. The thought of digitalizing India is being rooted in the mind of Indian citizens. Jio is acting as a blessing for the people and strong competitors to the rivalries. In both the cases, it is a win-win situation for the consumer.

CONCLUSION

Reliance Jio entry in the Indian market and its free introductory offer engendered a great deal of radical and unexpected changes in customer's behaviour and competitor's strategies. The new competitor in the mobile industry impacts the equilibrium and stuns the telecom sector. The major services providers started making huge losses and talked about 'mergers and acquisitions'. Due to exiting barriers, it turned out to be unreasonably difficult for them to survive as they could not get off the business. It would be unreasonably difficult for small players in the business to make a considerable market share.

Reliance Jio has revolutionized the business and has totally changed the manner in which the business works. The consumers perceived that Jio has driven a digital transformation in the Indian Telecom Industry. Out of the entire clients of Jio, a maximum number of clients of Jio fall in the age group of 15 to 20, Jio should concentrate on this age group as this is the age when young people will, in general, spend more on entertainment and features. It should concentrate more on the rural regions of the nation, with the literacy levels improving and the requirement for progression emerging in rural regions, it is an ideal opportunity for them as an ever-increasing number of individuals adapt to 4G and utilize increasingly more of information i.e. Data.

To determine whether Reliance Jio conduct has been predatory, a close assessment is required other than evaluating the pricing of products and services. Further, the market structure of the telecom industry, regulatory changes, spectrum auctions and issues related to interconnection charges need to be examined. Reliance Jio at present cannot be pronounced as a market leader and said to be associated with predatory pricing. However, conduct and the way of its entrance into the broadcast communications industry may absolutely be considered as predatory.

As appropriately said in a discourse by Mr. Mukesh Ambani, the data will prompt India out of poverty, out of misery in this way it is like Oil. With the increase in data utilization and each individual presently depending on and getting dependent on the web, Jio has made an ideal opportunity for itself. By luring free calls to the end-users and afterward enticing the clients with the expectation of complimentary data in the beginning and now cheap data, when the habit is formed it won't be hard for them to hold the customers. Jio swallowed each contender, taking the life out of them, constraining them to move or exit or merge. From the investigations, it tends to be presumed that after the launch of Jio the monetary structure of the market was as yet the same, but the degree of rivalry has grown unexpectedly. In the event that Jio proceeds at this pace, it will totally reclassify the Telecom area in India and another post Jio era will be formed in the telecom industry where everything without exception is conceivable.

Questions :

1. Analyze the market penetration strategy of Reliance Jio when the market is already dominated by big players?
2. What are the various issues and challenges faced by Reliance Jio in sustaining the market leader position of the Indian telecom industry?
3. Perform the SWOT and PESTLE analysis for the Reliance Jio.
4. What are the future challenges for Reliance Jio?

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WISETHOUGHT: TAKING INDORE GLOBALLY*

Wisethought, claimed to be the world's second largest online content company, founded under the banner of Instatag Technologies which was the entrepreneurial venture of seven young engineering students. The promoters of Wisethought realized that there were many publishers who had the sharing platform but lack contents, similarly there was content which could go viral but it did not had access to the targeted audience. Wisethought, through its affiliated 'Halla9', tried to draw a commercially viable triangle in the field of content industry having three peripherals of creation, distribution and consumption of contents. Wisethought provided a platform where anybody could express or explore content, thus, was able to generate tremendous online traffic. Wisethought wanted to be the king of content consumption. Their vision was to become holistic new media organization to survive for the decades.

Keywords: *Content Marketing, Social Media, Native Marketing, Online Marketing, Entrepreneurship.*

Wisethought, was one of the most renowned and successful name in the field of online content platform under the umbrella of Instatag Technologies Pvt. Ltd. based at the city of Indore, Madhya Pradesh, India. In the year 2015, it was awarded as the 'Fastest Growing Company in IT Sector' by All India Achiever's Foundation. Google had also selected it amongst the elite group of startups as case studies on successful companies using their products. It claimed to be the world's second largest online content company with the net-worth close to Rs 300 Crore in the year 2015-16 and around 120 million users worldwide.

Wisethought was yet another milestone in the entrepreneurial journey of its Co-Founder Manoj Joshi. Manoj, a 25 year young charismatic guy spent his childhood in an almost unknown village in the map of India named Nunsar, in Bhiwani District of state Haryana where his father was running a small grocery shop. Following the village trend, like other youths, he moved to Jaipur, Rajasthan in his final years of schooling in the year 2007 and joined coaching to face competitive examinations. Initially, he wanted to pursue his career in medical science. Soon he realized that he had an unconditional interest in computers so after few serious enquiries with his mentors he finally decided to explore his career in engineering rather than medical science. With a merit rank in IIT-JEE, he was selected for BVS University, Bengaluru for his B.Tech in Computer Science in the year 2009.

Though, he joined the course in computer science, yet he was not interested in coding and programming. He wanted to do something different in the field of Information Technology. In his second semester, he observed that many students were lacking in the basic general knowledge skills. Thus, he along with his six friends incepted an NGO called 'Buland India' on May 8, 2010. The basic idea was to provide necessary general knowledge to the students and other relevant information about which people were not generally aware of. To arrange the funds to run the NGO they started developing websites and providing digital media solutions to their near and dear ones. On the suggestion of one of the seniors they formalized the whole structure and finally came up with Instatag

* The case was developed by Tarun Kushwaha, Suyash Jhawar and Prayatna Jain of Prestige Institute of Management and Research, Indore and Shaifali Tripathi, Millenium Institute of Science and Technology, Bhopal during Thirty Fifth National Case Writing Workshop organized by Prestige Institute of Management and Research, Indore in collaboration with Association of Indian Management Schools, New Delhi on April 28-30, 2016.

Technologies in June 2010. The name Instatag, which means faith in Thai language, was derived from the initials of seven co-founders of the company. After forming Instatag, they started developing websites commercially targeting those firms who were not having presence in online market as their earning source.

Being the engineering students it was very difficult for the founders of Instatag to manage between the academics and running day to day affairs of the company. Also, there were differences in the opinions of the directors. Finally, five out of seven members moved out by the year 2012 and only Manoj and Shirish were left to run Instatag. During this period, Pawan, younger brother of Manoj joined them. Pawan understood the power of social media and made the first Facebook page of Instatag with the name 'Unique Facts in the World' to share contents based on positivity and to inspire people to explore the world.

Yet another twist came and Manoj and Shirish got separated in late 2012. Manoj was still continuing with Instatag and Shirish started his own venture 'Followheart365'. In 2013, Shirish rejoined Instatagwith his brainchild 'Followheart365' based on a model for filling the communication gap and connecting the students and teachers of any college. The pilot test was done at BVS University. However, they had to shutdown it as it was not commercially viable. Meanwhile, 'Unique Facts in the World' was continuing successfully and was able to generate 1 million organic likes within 6 months of its inception. In 2013, it hit 2 million likes and in 2016 it claimed to have 4.2 million organic likes.

Manoj realized that Facebook had its own limitations where the monetization of the audiences was a big issue. With the idea of monetizing the Facebook followers, Instatag tried various products like 'Thecrazyguy.com' and 'urstory.com'. All these were disasters on the branding front and as a result Instataghad almost reached the verge of Bankruptcy.

In 2014, Manoj came to Indore, to pay visit to Shirish's parents. He stayed in Indore for around 3 months and discovered the latent potential of Indore with amazingly low cost of operations as compared to other metro cities. Looking at this he decided to shift from Bengaluru to Indore. In September 2014, 'Wisethought' came into existence with an idea to explore the untapped growing online content market. Content writing is a most generalized form of technical writing limiting the expertise of the writer to general overviews rather than specifics. Due to which web- publishers have enter into content writing business where they found over 50 percent of India's population was under the age of 30 and was tech savvy. Wisethought realized that there were many publishers who had the sharing platform but lack contents, similarly, there was content which could go viral but it did not had access to the targeted audience. Wisethought through its affiliated 'Halla9' tried to draw a commercially viable triangle in the field of content industry having three peripherals of creation, distribution and consumption of contents. Wisethought provided a platform where anybody can express or explore content thus was able to generate tremendous online traffic.

Wisethought claimed to be the world's second largest viral native marketing company with more than 120 million digital audiences in its community network after TheBestfeed.com. The major chunk of these audiences i.e. around 35 percent were from USA, 15 percent from UK, 15 percent from India and 5 percent from Canada and Australia respectively. Wisethought did not face any major competition in Indian market; the closest competitor is Scoopwhop.com with almost half the number of audiences in comparison to Wisethought. The revenue of

Wisethought was coming from online provomatic ads and was around Rs. 26 crore in the year 2015-16. Manoj had decided a target to raise it to around 80 – 100 crore by the year 2017. Wisethought was also the biggest client of Google in India which provided almost 800, 000 to 1 million $ business to Google every month. Looking at this Google has appointed a dedicated account manager exclusively for Wisethought. Many business partners have showed their interest to invest in Wisethought but the founders believed in bootstrapping. As Wisethought was receiving an overwhelming response of their contents they decided to offer ‘Live Chat’ to their current and prospective customers.

At that point of time Wisethought had a workforce of 55 people and majority of them did not belong to Indore. The company took care of their lodging and boarding in the city. The company believed in open work culture where everybody can express his or her views in a platform called ‘panchayat’. The company had a flat hierarchy and believed in hiring people with ‘passion and not qualification’. However, talent acquisition was still a major challenge for Wisethought. Manoj and his team aimed high to expand their business in future and wanted to be the king of content consumption in various languages besides English such as Spanish, French and even Hindi and other vernacular languages of India. Their vision was to become holistic new media organization to survive for the decades. To achieve this fast the company was going to shift in its new premises with almost double the work force. This mission did not seem to be too far as Manoj and his team worked with philosophy of great intent with Amazing Ideas along with Passionate Team to offer Amazing Products.

Questions :

1. Express your views on expansion strategies of Wisethought.

2. Comment upon the entrepreneurial skills of Manoj.

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