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03	Editorial	Editor-in-Chief
<b>Research Papers</b>		
05-11	Financial Inclusion and Its Measurement	Srinivas T.V, N.S. Viswanath & T.V. Raju
12-19	Application of ICT effectiveness in Teaching Process in Management Education - An Analysis	Shanath Kumar C. & A.M. Suresh
20-26	The Service Sector as India's Road to Economic Growth: An analysis	Bhupendra Singh Hada & Ashish Suri
27-32	Economic Analysis of Artificial Intelligence & Its Implications in Business Management	Syeda Sarah Iram, Monisha Roy, Aishwarya H. & Samanvitha
<b>Synopsis : Ph.D. Thesis</b>		
33-47	A Study on Investors' Behaviour During Bull Phase in Indian Market with Special Reference to Bangalore City	N.S. Ravindra
48-78	Drivers of Employer Motivation in Banking Sector - A Radar Design Approach	M.J. Subramanyam
79-82	<b>Book Review</b>	N.S. Viswanath

आ नौ भद्रा : क्रतवौ यन्तु विश्वत : ।  
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- Rig Veda 1-89-1

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# DHĀRANA

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## **EDITORIAL**

The present issue contains four papers in the area of Business. Each is unique in its theme of research. One paper, however, is by a team of students of I year MBA Programme at M P Birla Institute of Management. The other papers cover the areas of measurement in financial inclusion, Effectiveness of ICT in Education, Service sector and growth. The issue has two synopses of the awarded Ph.D. theses. One synopsis covers the Behavioural Finance area & the other on Drivers of Employers' Motivation with special reference to Indian Banks. The issue has a review of a book on latest edition of Marketing Management written in the Indian Context. A reading of the issue will enrich your knowledge horizon & would make think on the current trends in business.

*Editor-in-Chief*



# Financial Inclusion and Its Measurement

<sup>1</sup>Srinivas T.V, <sup>2</sup>N.S. Viswanath & <sup>3</sup>T.V. Raju

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## Abstract

This short article dwells upon the concept of financial inclusion (FI) of a population, discusses it around the banking sector and its role in this context. It then considers measuring FI and suggests a few new quantitative measures of the same, along with their data requirements, which are not difficult to meet in practice. A brief mention is made about the Pradhan Mantri Jan Dhan Yojana (PMJDY) and its implications. Scope for some further work is indicated.

**Key Words and Phrases:** *Banking Sector, CRISIL Index, Deposit Penetration, Financial Inclusion/ Exclusion, National Sample Surveys, Reserve Bank of India.*

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## 1. Introduction

The two critical factors of economic growth are the safety nets: education and health. The factor which influences velocity of growth is financial services. The technological innovation in banking has been enabling transfer of payments without intermediaries. It is here that financial inclusion would activate growth process in an acceptable manner. In fact, the UNO has observed that "most poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance", particularly in developing countries like India. It is estimated that more than 560 million are deprived of financial inclusion in our country.

This has prompted vigorous efforts at government and non-government levels to bring all households under the fold of banking habits. Accordingly, policy makers have been emphasizing on this aspect in order to

1. To promote saving habit.
2. Provide a means for formal credit and
3. To make public subsidies and welfare programs effective.

The benefits of financial inclusion and the need for promoting the same in the Indian society are well accepted in academic circles as well as by the policy makers.

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The Reserve Bank of India (RBI), the apex financial regulatory body in the country, has been proactive campaigning for financial inclusion through its policies and guidelines. It has been promoting an array of programs aimed at this goal.

Three good examples are:

- a) Initiation of 'no frills' account;
- b) Banking service at the doorsteps through business correspondents &
- c) Electronic Benefit Transfer (EBT).

In fact, the RBI intends to promote schemes to unleash the potential from the poor and the vulnerable section of Indian society. These measures can ensure a new revolution of financial growth and development. The rest of the paper sequences the role of RBI, concepts of FI, its need and priority, major causes for financial exclusion, evidences from NSSO data on FI and incidence of indebtedness, measurement of FI and qualitative indices for the same, the new FI scheme (PMJDY) and an overall discussion.

### 1.1 A Real Priority

About 3 billion people in the world are at present not financially included, of which about 560 million are in India. A large chunk of the latter (approx. 457 million) spends \$1.25 per capita per day, reflecting a seriously inadequate situation. The reasons driving financial inclusion (FI) include scalable growth of wealth in the middle class and progress in the area of telecommunication, Information technology, automotive, life sciences and space technology.

India's growth process is challenged by the disproportionate distribution of national income, leading to serious disparity between the rich and the poor. About 90% of the wealth is in the hands of just about 10% of the persons at top end of the financial spectrum, while about 42% struggles to live on just about \$1.25 per day per person. All this have caused more than half the population being excluded financially. This has no formal access to financial services and hence is identified as suffering from poverty, illiteracy, malnutrition, high mortality and inadequate health care.

FI is a real priority for our country and other developing

nations for policy development, regulatory reform and new funding agencies. Government of India had set a target of 100% banking penetration by the end of the year 2015. This is achievable at least in near future through micro financing, a concept globally elevated by the Nobel laureate (2006) Prof. Md. Yunus who successfully established Grameen Bank in Bangladesh.

## 2. The Concept of FI

FI is the process of ensuring a fair, timely and adequate benefits in the form of savings, credits and insurance at a reasonable cost by financial institutions (Rangarajan Committee). In fact the issue of FI is emerging as the new paradigm of growth. Thus FI may be considered in concrete terms symbolically as FI = Govt. agencies + Banks + No Frill Account + Financial Institution + Micro-finance institution

### 2.1 FI: A Key Factor

FI is almost imperative for ensuring similar opportunities to all sections of the society, for providing inclusive growth, societal development and business opportunities to all segments of people. India's national inclusion mission is to usher in nearly 600 million new customers to the banking services. The RBI and Govt. of India play a crucial and central role in promoting FI for economic growth and to improve banking penetration in the country. State Bank of India was set up in 1995, Commercial banks were nationalized in 1969 and in 1980, and the lead bank concept was initiated in 1970, and NABARD and Regional Rural Banks (RRB) were set up in 1982 and 1975 to provide refinance assistance in agri credit. This promoted bank expansion to the rural areas and also controlled the credit interest rates.

### 2.2 Need for FI

FI is a pivotal issue for the individuals and households in low income bracket both in rural and semi urban areas. Basically, it tackles non-availability of financial services to the poor. Putting this differently, certain section of people do not have access to low cost and secure financial products and instruments. Types of exclusion are:

1. Not at all having any access to formal banking or financial services.



2. A limited access to services of formal banks and institutions.
3. Cases of having unsuitable (inappropriate) products.

The report of the Rangarajan Committee may be summarized as follows:

### 2.3 Extent of Exclusion:

#### (Rangarajan Committee Report, 2011)

- Out of 89.3m of farmer households, 45.9 million (51.4%) do not access credit, either from institutional or non-institutional sources (NSSO data).
- Only 27% of total farm households have borrowed from formal sources (of which one-third have borrowed from informal sources also).
- 95.91%, 81.26% and 77.59% of farm households in the North Eastern, Eastern and Central Regions respectively have not accessed credit from formal sources.
- Thus coverage is not only low to the poorer section of the society but also varies widely across regions, social groups and asset holdings.

### 2.4 Major Causes for Exclusion

Abidi (2014) has identified the following common reasons for financial exclusion in her study, concerning Ranchi District of Jarkhand State:

1. Geographical Exclusion in terms of limited access to banks in the area.
2. Financial illiteracy.
3. Cumbersome documentation procedures.
4. Language barriers.
5. Uncomfortable feeling for bank transactions.
6. Physical distance from banks and inconvenient timings.
7. Lack of awareness about the schemes and programs
8. Fear of refusal and failed attempts.

### 3. Micro foundation: NSSO data

Individual micro level data on households is needed for measuring the exclusion aspects. As such, no data are available on financial inclusion in public domain so far, which include all aspects of financial inclusion\ exclusion. However, for one important aspect of

financial inclusion viz., credit, NSSO data can be a good source.

### 3.1 Importance of Credit

Credit is the most important aspect in view of savings, investment and growth linkage.

Self-employed persons have a special need for credit, which requires financial inclusion.

### 3.2 Rural non-farm Enterprises

We provide a glance at the distribution of Enterprise Type in rural areas of selected States in India based on NSSO (Round 67, Enterprise Survey) findings in the following table:

**Table 1: Distribution of Enterprise Type in Rural Areas of Selected States**

States	Type of Enterprise		
	Owned Account Enterprise	Establishment	Total
Gujarat	89.6	10.4	100
Kerala	80.9	19.1	100
MP	93.2	6.8	100
Punjab	85	15	100
WB	93.7	6.3	100
India	91.4	8.6	100

(Source: *Analysis based on 67th round unit level NSSO data - Enterprise Survey*)

Most of the above are own account enterprises, hence need credit to a large extent. It is noted that, establishment for generation of employment in order to absorb disguised labor is very poor. This needs immediate corrective steps.

### 4. NSSO data as a base

The present analysis utilizes unit level data for households from the All India Debt and Investment Survey (AIDIS) and the Situation Assessment Survey (SAS) conducted as part of the 59th round of NSSO. This is the most recent available macro level data which provides information on debt and investment of 1, 43,285 households both rural and urban engaged in a variety of occupations.

#### 4.1 Situation Analysis Survey: NSSO

In order to understand farmers level of living, income and productive assets and their access to credit, Situation Analysis Survey of farmers (SAS) was conducted by the NSSO, as part of 59th round covering a period of January to December 2003.

The survey of 51,770 farmers in 6,638 villages was conducted in Karnataka. 2009 households spread over 256 villages were covered and recent data on cost was obtained at macro level.

#### 4.2 Incidence of Indebtedness

NSSO data provide information regarding households that have outstanding loans as on a per-specified date in the form of an indicator the incidence of indebtedness (IOI).

#### 4.3 IOI: Measure of Accessibility

A region wise examination of the above data reveals that IOI is directly proportion to income of households. Economically advanced states have higher level of IOI. IOI is lower in Scheduled tribe households than in General or OBC category. IOI is more taken as a pointer of access to credit. However, it also measures the extent of distress for relatively poor and needy.

#### 4.4 IOI for self-employed households: AIDIS

**Table 2: IOI of Self-Employed Households in Rural and Urban Areas of some States**

State	Rural	Urban
Chhattisgarh	23.3	17.5
Madhya Pradesh	32	15.4
Punjab	30	11.9
Haryana	33.3	17.7
West Bengal	23.8	15.6
Karnataka	38	19.8

Source: 59<sup>th</sup> round NSSO-All India Debt and Investment Survey (AIDIS)

#### 4.5 Table 3: Incidence of indebtedness: farmer households

Sector	2002			1991		
	Formal	Informal	Total	Formal	Informal	Total
Rural	13.4	15.5	28.9	15.6	9.8	25.4
Urban	9.3	9.4	18.7	11.8	9.4	21.2

#### 5. Measuring inclusion

A quantitative measure of any characteristic is highly desirable as it provides a precise assessment as well as allows comparisons across places and time points. In very general terms, an inclusion index shows the level of mixing of two related sets of units: set A and set B, the former may be a set of banks, ATMs, institutions like post offices or hospitals or even bank accounts.

In this setting, we enlist some macro and micro indicators as follows:

Macro indicators of FI are :

- Number of bank branches per lakh population.
- Number of ATM centers per lakh population.
- Distance to the nearest bank branch or ATM center.
- Monthly frequency of bank branch operations per 10000 population with a break up of credits and debits.
- Monthly frequency of ATM operations per 10000 population.
- Number of credit /debit cards per lakh population and frequency of their use.

A few micro indicators (household or individual level pointers) may be obtained from the NSSO data, available in the form of rounds (latest being the 70th round, year 2014), though usually there is a lag in its analysis. The aspects of indebtedness, investment, savings, access to credit, sources of credit etc. are covered in these studies.

#### 5.1 Inclusion Indices

An inclusion index is often in the form of a ratio or a composite of a few ratios. Thus

$$I_1 = (n_B / n_A) k \quad \dots (1)$$

Where  $n_A$  and  $n_B$  denote the sizes of the two sets and  $k$  is a scale factor. The common choices for  $k$  are 100 (per cent) and 1000, though other choices are not uncommon. ' $I_1$ ' expresses the number of units of B for  $k$  units of A. For example, number of bank branches per 1000 population obtained by using  $k=1000$ .

A composite index may be a simple (unweighted) average or a weighted average as formed at (2) and (3) below:

$$I_2 = (1/m) \sum (n_{Bi} / n_{Ai}) \quad \dots (2)$$




Where  $m$  is the number of ratios averaged.

$$I_3 = \sum W_i (n_{Bi} / n_{Ai}) \quad \dots (3)$$

Where the weights  $W_i$  add up to 1, and they reflect the relative importance of the  $m$  components. An example of (3) is discussed below as CRISIL index. More complex indices may also be developed, though their use may be seriously limited by non-availability of data.

## 5.2 CRISIL: A key inclusion index

A comprehensive index for objectively analyzing and measuring the progress of FI in a country in terms of district level.

	Parameters	Significance	Interpretation
	No of bank branches (both SCBs & RRBs) per lakh of population in a district	Measures the ease with which people in a particular territory can access banking services	The higher the better
	No of loan accounts per lakh of population in a district	Measures the extent of access to loan products offered by banks in a particular territory	The higher the better
	No of small borrower loan accounts as defined by RBI per lakh of population in a district (small borrowers = borrowers with a sanctioned credit limit of up to Rs. 2 lakh)	Measures access to credit for small borrowers, who typically face financial non-inclusion	The higher the better
	No of agriculture advances per lakh of population in a district	Measures farmers' access to credit	The higher the better
	No of savings deposit accounts per lakh of population in a district	Measures the extent of access to savings products offered by banks in a particular territory	The higher the better

## Figure 1: Compact view of CRISIL Methodology

This methodology of computing CRISIL is similar to that for other global indices. An example is that of UNDP's **Human Development Index** (HDI) which gives suitable weights to the price index, longevity of human life and level of schooling in the country. Likewise CRISIL measures FI on the three parameters of basic banking services:

1. *Branch level penetration*
2. *Deposit level penetration and,*
3. *Credit penetration.*

The focus of measurement is on number of people who have deposited or borrowed money from banks/financial institution then amount deposited or borrowed. **Higher the score, higher is level of financial inclusion.**

## 6. Key Findings

The key findings: Report on financial inclusion metrics in 632 districts of the country (2009-2011):

- On a scale of 100, the all-India CRISIL Inclusix score is 40.1. It is very low (2% branches in almost 50 bottom scoring districts, which reflects under-penetration in terms of formal banking facility in the country.
- The number of savings bank accounts is 624 million which the number of loan accounts at 160 million is almost four times.
- The bottom 50 scoring districts in India have only 2,861 loan accounts per lakh of population, which is one-third of the all India average of 8,012 which implies need for focused efforts to enhance branch presence and availability of credit.
- The CRISIL Inclusix score at an all-India level has improved to 40.1 in 2011, from 37.6 in 2010 and 35.4 in 2009. Improvement in deposit penetration score has contributed to the same.
- There exists wide disparities in terms of number of bank branches with 11% of bank branches in India's six largest cities and one each in four districts in the North-Eastern region.
- The top 50 districts showed a significant performance and increase in inclusion in terms of both Deposit

score being 9.3 and addition to bank branches by 2824 in 2011 over 2009. This is almost increase by one-fourth of total branches in the country.

- Bottom 50 districts revealed improvement of 20% (6073) deposit accounts as on 2011 compared to 4919 in 2009.
- The main parameter for improvement in the inclusion score in top 50 districts is improvement in credit penetration (CP).

## 7. Literacy on Debt Management

Lack of tangible skills have resulted in poor success and penetration of financial literacy programs. But training programs unless designed effectively are seldom successful at the same time consumes high cost, time and resources. This is well evidenced by the experience of Micro finance institutions. A film and training material developed by Ujjivan Financial Services and Parinaam foundation has gained popularity among large number of customers as it was showcased in ten regional languages. Unitus Labs are convinced that customer centric financial literacy training programs have led to customer engagement inspite of logistic and scheduling issues. Parinaam foundation used comic strips, free calculators, diary, certificates in their workshops and class room training. This has helped in ensuring high attendance. Diksha program has also come out with Impact Evaluation component to measure financial literacy.

Innovative financial inclusion models are the only solution spreading banking services in India which has been a mammoth challenge for RBI and the government. More than half the adult population in Asia's third largest economy (India) lack access to formal financial services. Promoting financial inclusion or the process of spreading banking services to the far flung corners of the country is a priority.

## 8. Two New indices

Constructing a representative index or summary number is a task. On one hand, it has to be quite reflective of the ground reality and on the other, its data requirements must be met by the available inputs. The indices discussed earlier refer to a region as base. Alternatively one may evaluate the case of specific

geographic points (like a remote village) and how much included (or excluded) it is from the view point of access to financial products like bank accounts. Taking the village center as the origin of measurement, one may compute the physical distances to facilities like ATM, bank extension counter, regular bank branch, post office or cooperative society with banking facility. Then we may compute the simple average distance

$$I_4 = (1/m) \sum d_i \quad \dots (4)$$

Or, to reflect the differences in importance, a weighted average:

$$I_5 = \sum W_i d_i \quad \dots (5)$$

With non-negative weights  $W_i$  adding up to unity. Larger values of  $I_4$  and  $I_5$  point to lower level of inclusion of the place in question, unlike the interpretations of the values of the first three indices  $I_1$ ,  $I_2$  and  $I_3$ .

### 8.1 A comprehensive FI scheme:

*Pradhan Mantri Jan-Dhan Yojana (PMJDY)*

This scheme introduced in August 2014 has three major changes as compared to the earlier financial inclusion programs (a) Focus on coverage of households (rather than village as a basic unit), (b) inclusion of both rural and urban areas and (c) implementation on Mission Mode with comprehensive coverage through a six pillar approach as follows:

1. Universal access to banking facilities by mapping each district into sub-service areas (SSA) each of 1000-1500 households.
2. Financial literacy program reaching out to SSA level
3. Providing basic bank accounts with limited overdraft facility
4. Creation of a credit guarantee fund to cover defaults in overdraft facility
5. Micro-insurance, and
6. Pension schemes for the unorganized sector.

## 9. Discussion

Financial exclusion of substantial segments of a population is a serious impediment for economic development and growth of an economy. India suffers from this malaise as evidenced from field studies (e.g. by the NSSO). Schemes like PMJDY for financial inclusion

of the bottom of population pyramid are crucial and their effectiveness is to be enhanced via corrective steps. A few new measures of financial exclusion have been proposed which are both simple and computable from minimal database.

PMJDY, though appears to be ambitious, has had a vigorous start. Monitoring its progress and using necessary mid-course corrections hold key to the success of the program. Appropriate research in this nascent stage is called for and is worthy. This may be carried out keeping in view the demonetization of high value notes in November 2016 and it's after effects. Examining the role of other institutions (like cooperatives, post offices) and the negative role of private money lenders in the sense of exploitation of people in the context of FI would also be helpful for proper policy formation by the Government.

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## Application of ICT effectiveness in Teaching Process in Management Education - An Analysis

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### Abstract

As India moves ahead on the pervasive usage of technology on all spheres of life, our educational institutions cannot be falling behind in catching up with the pace. Karnataka is at the forefront of the technology thrust and it is only natural that the students and faculty members of the educational institutions would aspire to be in the forefront of using Information and communication technologies in teaching and learning. This paper attempts to capture the mood and preparedness of the professors in the Business Management educational institutions in Karnataka through an exploratory study of ICT effectiveness in teaching process. The study extends across eight premier institutions of Karnataka and presents the data from about 500 professors of Management education. The results indicate that approximately more than 50% of the professors are positive about the effectiveness of ICT in teaching but are tentative when it comes to their ability to use innovative tools to improve student learning. This may indicate the need for more awareness and training with provision of required infrastructure and connectivity in the institutions.

**Key Words and Phrases:** *Management Education, usage of ICT, Information and Communication technologies, MBA colleges in Karnataka, E-learning, and Technology enabled education, ICT effectiveness, and Effective teaching process.*

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### Introduction

Use of ICT (Information and Communication Technologies) has been extensively tried and researched for more than a couple of decades now, especially since the advent of internet. While the use of ICT or Internet

technologies has grown in leaps and bounds in most other walks of life, its usage in traditional classroom education remains scattered and mostly unclear. The usage of ICT in distance education or online education has a clear purpose or benefit in providing better

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traction to learning and teaching by reducing the transactional distance and providing better scaffolding and engagement.

This is not the case in classroom where the conditions of teaching and learning are quite different. However, there have been increasing trials on using ICT in classroom learning with the evolution of the blended learning context, in the form of flipped learning or augmented learning. Many of these initiatives of using ICT in schools or colleges have found their origin and occurrence in the western countries, though these have been at a nascent level of interest and activity in Indian colleges in the last decade. There have been several pioneering attempts by some Universities in introducing and promoting technology enabled learning. Examples could be found in Amity University, Lovely Professional University, Manipal University, Amrita University, SRM University, NIIT University, all of these being in private sector.

There has also been an emerging interest and a flurry of activities in researching various aspects of using ICT in colleges in India, in parallel, over the last decade. However, there does not seem to be any maturing process in establishing ICT enabled teaching and learning as a standard paradigm in Indian colleges yet.

There could be many reasons for the slow diffusion or sporadic adoption of ICT in teaching and learning in the Indian colleges. Lack of adequate infrastructure such as PCs, laptops, bandwidth, availability of teacher and student time, lack of awareness and training, easier availability of alternative methods, lack of funds and investments, absence of will or motivation to implement such initiatives due to the non-profit nature of the education sector in India, all contribute to the lethargic pace of progress in ICT usage, not to forget to mention the resistance to change and the strong belief that ICT cannot substitute a real teacher in the classroom.

Nevertheless, this does not diminish or negate the appreciation that progressive initiatives and research attempts should continue to an extensive level, whereby more clarity could result towards ICT usage in Indian colleges. This is necessary due to the high rate of diffusion of internet technologies into every walk of life in society and business, necessitating that education also keeps pace to meet their needs. The constantly

emerging newer job skills, product landscapes and service innovation require that the colleges find ways to address these critical needs of society and business. This need is becoming acute in the field of business education when there are repeated questions coming up on the employability and relevant skills of graduating students to the industry.

This article tries to address a small part of the questions that are posed by presenting the findings of a survey undertaken with some of the premier institutes in Bangalore, Karnataka to assess the perception of the faculty members on the effectiveness of using ICT in teaching.

## REVIEW OF LITERATURE:

The attitude of the teachers and their perception of ICT usage being effective is critical for implementation in teaching and learning. **Light, Daniel (2010)** studied the factors facilitating the implementation of the learnings from a training programme for the faculty members on ICT usage in teaching and learning and found that the teachers agreed that their practices in teaching had changed after the training programme. **Kumar R.M. and Krishna Kumar R. (2010)** studied the impact of e-learning on teacher effectiveness, with reference to personal effectiveness, teaching skill and research and academic activities. They concluded that personal effectiveness and teaching skills are high when e-learning is used. **Magnier-Watanabe R., Benton C., Herrig H. & Aba O. (2011)** presented a paper describing their experiences in conducting a graduate management course using video conferencing and other ICT tools. The authors used a blended teaching approach aimed at increasing collaboration among the instructors and students. This resulted in the positive feedback on e-learning with the face to face approach.

**Sharma, Dharendra and Singh, Vikram (2011)**, in their study involving the faculty members of Universities in the Western Himalayan Region of India found a positive impact of the training provided to the faculty members, resulting in successful implementation of ICT in classrooms. **Benson, Vladina, Anderson Deborah, Ooms Ann (2011)** explored in their paper, the adoption of blended learning practices at a Business School in a University in the UK. Their study found that though all the

faculty members were positively inclined towards using ICT in their teaching, the barriers they encountered had a negative impact on the implementation. **Al-Busaidi K.A. & Al-Shihi H. (2012)**, examined the key factors that determined the satisfaction of the instructors with the LMS in blended learning, and how this satisfaction is related to their intention to use the LMS for blended learning. The findings indicated that computer anxiety, personal innovativeness, LMS characteristics, and organizational characteristics (management support, incentives policy and training) are key to successful implementation.

**Kanaganayagam I., Fernando S. and Jayasundara R. (2014)** conducted a study on Collaborative E-learning and found that the collaborative mode of teaching and learning was highly successful. It specifically improved the cognitive skills, processing skills and interactions between the students.

**Livingstone, Kerwin (2015)** conducted a study, through mixed methods approach, with the faculty members at University of Guyana and found that the faculty members' perception was positively inclined towards the use of ICT in teaching and learning. Through this study, it was recommended that e-learning practices be integrated into their pedagogical practices in the University. **Ghavifekr, Simin and Wan Rosdy, Wan Athirah (2015)**, through their survey conducted from 101 teachers in 10 public schools in Kuala Lumpur, Malaysia, presented that teachers preparedness with ICT tools and facilities was one of the main success factors in the implementation of ICT in teaching and learning. Using ICT in teaching and learning provides teachers the flexibility to teach students individually or in groups. Results revealed that the teachers found the implementation appropriate, relevant but demanding. The major challenges were limited access to some of the technologies, fluctuation in internet connectivity and poor ICT literacy skills. Improvement in the level of ICT use required the development of relevant infrastructure and ICT literacy training which were found as critical for successful deployment.

**Adetimirin, Airen (2016)** studied the reactions of teachers who went through a training programme on

ICT integration at the University of Ibadan and observed that the teachers were feeling very positive about the programme and felt that the programme was highly relevant, appropriate but demanding.

## STATEMENT OF THE PROBLEM

Though implementation of ICT enabled education is seen throughout the world in different countries and many research projects have been studied and published, the research efforts on the use of ICT in India is still at a nascent stage. Further, India needs to overcome many obstacles towards effective implementation of ICT usage in education through high level of investments in connectivity and bandwidth to provide critical access to teachers and students in the Universities. In addition to this critical data on the preparedness of teachers in terms of their perception of effectiveness of ICT usage in their teaching needs to be established. Though all the literature reviewed show initiatives on ICT effectiveness, it is critical that we evaluate such data locally in India, through extensive research efforts. Though Karnataka state, and in particular, Bangalore city is known for its high level of Information technology infrastructure and awareness, we still do not have enough documented information in terms of the situation prevailing in the local institutions. Further, very little data or information is available about the perception of professors in Business Management education and their inclination to use ICT in their teaching. In view of the advanced level of IT infrastructure and industries in Bangalore, it will be expected that the educational institutions, especially the Management education schools come up to speed on implementation of ICT initiatives successfully. The present study is significant in this context and throws up data on the perceptions of Business Management professors on their ability and propensity to use ICT effectively in their teaching process.

## RESEARCH DESIGN & METHODOLOGY

Since this study is one of its kind in Bangalore city addressing the question of ICT usage in Management education institutions, Purposive sampling method is used in the selection of respondents in a few Business management education institutions. The samples were selected based upon the following judgmental criteria.



1. Availability of reasonable ICT infrastructure
2. Institutions following contemporary approaches in teaching and learning
3. Information rich cases for study
4. Willingness of respondents to participate in the study.
5. The assumption made in the selection of the sample was that these samples would give us the upper level of data to be used for analysis, so that we may infer the status of other levels of institutions by default.

The type of research conducted was exploratory research using the survey by questionnaire method.

Population: The population was deemed to be Management education professors in the state of Karnataka, which is unknown to us.

A pilot study was done based on which a standard deviation was arrived at.

The standard deviation value from the pilot study, considering question on 'effective teaching' was found to be 0.75. The Sample size, when population is unknown, is estimated (Malhotra and Birks, 2006) using the following formula:

$$n = \sigma^2 \cdot z^2 / D^2$$

$\sigma$  = standard deviation = 0.75

D = level of acceptable error = 0.05 (Level of significance)

z = standard variant = 1.52

n = estimated sample size =  $(520.87) = 521$

### Questionnaire for Professors

#### Effective Teaching

No	Effective Teaching with ICT tools	SDA	DA	N	A	SA
1	You use innovative ICT tools for teaching and encourage students to use ICT for learning					

2	ICT helped you to learn and teach better					
3	Use of ICT has increased quality of teaching					
4	ICT enhances professional development of the professor					
5	ICT usage increases the assessment skills of the professor					

SDA: Strongly Disagree, DA: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

Tabulation and Collation of Data

Analysis of percentage under each response

### EFFECTIVE TEACHING

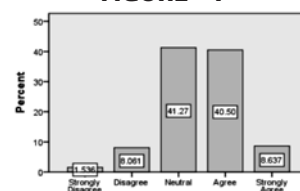
TABLE - 1

#### YOU USE INNOVATIVE ICT TOOLS FOR TEACHING AND ENCOURAGE STUDENTS TO USE ICT FOR LEARNING

Particulars	Number of Respondents	Percentage (%)
Strongly disagree	8	1.5
Disagree	42	8.1
Neutral	215	41.3
Agree	211	40.5
Strongly Agree	45	8.6
<b>Total</b>	<b>521</b>	<b>100.0</b>

Source: Primary Data

FIGURE - 1



## Result

It can be seen from Table 1.0 that “You use innovative ICT tools for teaching and encourage students to use ICT for learning” obtained the following ratings 1.5% respondents rated strongly disagree, 8.1% respondents rated disagree, 41.3% respondents rated neutral, 40.5% respondents rated Agree and 8.6% respondents rated strongly agree.

## Inference

“Neutral” dominates the rating for “You use innovative ICT tools for teaching and encourage students to use ICT for learning.”

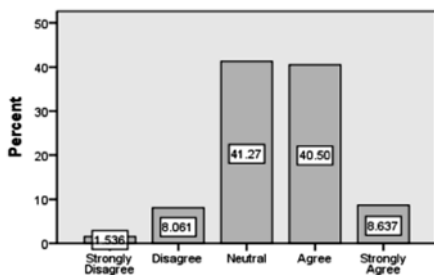
**TABLE – 2**

### ICT HELPED YOU TO LEARN AND TEACH BETTER

Particulars	Number of Respondents	Percentage (%)
Strongly disagree	16	3.1
Disagree	35	6.7
Neutral	155	29.8
Agree	230	44.1
Strongly Agree	85	16.3
<b>Total</b>	<b>521</b>	<b>100.0</b>

Source: Primary Data

**FIGURE - 2**



## Result :

It can be seen from Table 2.0 that “ICT helped you to learn and teach better” obtained the following ratings

3.1% respondents rated strongly disagree, 6.7% respondents rated disagree, 29.8% respondents rated neutral, 44.2% respondents rated Agree and 16.3% respondents rated strongly agree.

## Inference

“Agree” dominates the rating for “helped you to learn and teach better.”

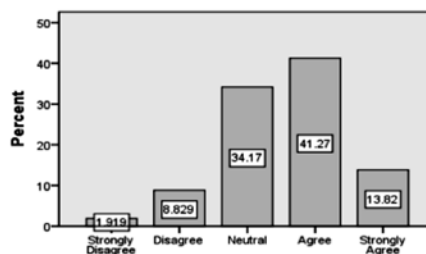
**TABLE – 3**

### USE OF ICT HAS INCREASED QUALITY OF TEACHING

Particulars	Number of Respondents	Percentage (%)
Strongly disagree	10	1.9
Disagree	46	8.8
Neutral	178	34.2
Agree	215	41.3
Strongly Agree	72	13.8
<b>Total</b>	<b>521</b>	<b>100.0</b>

Source: Primary Data

**FIGURE - 3**



## Result :

It can be seen from Table 3.0 that “Use of ICT has increased quality of teaching” obtained the following ratings 1.9% respondents rated strongly disagree, 8.8% respondents rated disagree, 34.2% respondents rated neutral, 41.3% respondents rated Agree and 13.8% respondents rated strongly agree.

## Inference

“Agree” dominates the rating for “Use of ICT has increased quality of teaching.”

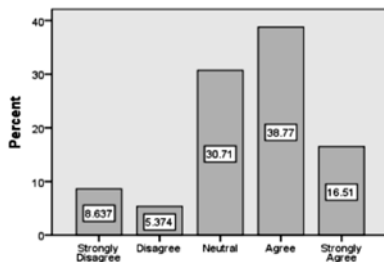
**TABLE – 4**

### ICT ENHANCES PROFESSIONAL DEVELOPMENT OF THE PROFESSOR

Particulars	Number of Respondents	Percentage (%)
Strongly disagree	45	8.6
Disagree	28	5.4
Neutral	160	30.7
Agree	202	38.8
Strongly Agree	86	16.5
<b>Total</b>	<b>521</b>	<b>100.0</b>

Source: Primary Data

**FIGURE - 4**



## Result :

It can be seen from Table 4.0 that “ICT enhances professional development of the professor” obtained the following ratings 8.6% respondents rated strongly disagree, 5.4% respondents rated disagree, 30.7% respondents rated neutral, 38.8% respondents rated Agree and 16.5% respondents rated strongly agree.

## Inference

“Agree” dominates the rating for “enhances professional development of the professor.”

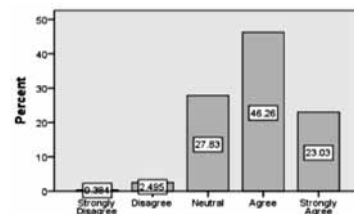
**TABLE - 5**

### ICT USAGE INCREASES THE ASSESSMENT SKILLS OF THE PROFESSOR

Particulars	Number of Respondents	Percentage (%)
Strongly disagree	2	0.4
Disagree	13	2.5
Neutral	145	27.8
Agree	241	46.3
Strongly Agree	120	23.0
<b>Total</b>	<b>521</b>	<b>100.0</b>

Source: Primary Data

**FIGURE - 5**



## Result :

It can be seen from Table 5.0 that “ICT usage increases the assessment skills of the professor” obtained the following ratings 0.4% respondents rated strongly disagree, 2.5% respondents rated disagree, 27.8% respondents rated neutral, 46.3% respondents rated Agree and 23.0% respondents rated strongly agree.

## Inference

“Agree” dominates the rating for “ICT usage increases the assessment skills of the professor.”

## Analysis and Inference

From the Table 1.0, we see that 49% of the professors agree that they use innovative ICT tools in teaching, and they encourage students

to use ICT tools too. This is a positive indication and needs to be strengthened further. Only less than 10% disagree that they use innovative ICT tools. However, about 41% of the professors are neutral towards such a statement and this needs further investigation to see what more could be done to turn this into a positive statement. There may be many constraints which may be limiting such professors from using the ICT tools including resources, time and motivation.

From Table 2.0, about 60% of the professors agree that ICT helps them to learn and teach better and this is a very strong positive statement. Only about less than 10% of the professors feel negatively about this and about 30% are neutral. More investigation is required into these statements for reasons as to their views.

Table 3.0 shows that about 55% of the professors are positive about ICT increasing the quality of teaching and this is a positive reason for encouraging them to use ICT better. Only about 11% of the professors have negative views and about 34% are neutral. Investigation into the reasons will lead us to more useful inferences to take suitable action to turn these into positive views.

Table 4.0 shows that almost 55% of the professors feel that using ICT improves their professional image and standing among the students. This needs to be further strengthened by providing incentives and better support for using ICT tools in teaching. About less than 15% feel negative about this and 30% are neutral. This needs more investigation for taking measures to address the issues involved.

Table 5.0 provides the data to show that almost 70% of the professors use ICT tools for improving their assessment skills. Only a very small 3% feel negatively about this and 27% are neutral. With better support, the professors could use ICT tools for assessments effectively.

Overall, the response of the professors to the use of ICT tools is extremely positive and confirms that the use of ICT in teaching is effective. Hence the

time is ripe to push higher use of ICT in teaching by removing any bottlenecks and challenges facing the professors to improve the quality of teaching.

## CONCLUSIONS:

From this study, it is seen that substantially higher percentage of respondents are positive about the usage of ICT in their teaching. However, there is a substantial proportion of professors who are currently neutral to this concept and hence require better support and encouragement. This means that more training and creation of further awareness is required to ensure that this proportion increases. The responses also indicate that the situation is ripe for extensive use of ICT in teaching processes to provide motivation and value to the teachers. Implementation of ICT requires a deliberate planning and communication including extensive training to be able to carry conviction and buy in from the faculty members and students. The Universities and colleges should capitalize on the positive perception prevalent among the faculty members and use them as "Change Agents" to drive adoption of ICT in the classrooms. All possible encouragement should be given to the positive respondents to access and use innovative tools and software in their teaching process. They should also be provided for avenues to increase their own skills and level of competency in using ICT in classes by attending workshops and training programmes. Teachers should also be encouraged to experiment and innovate on their teaching so that they would feel confident about using ICT comfortably.

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## The Service Sector as India's Road to Economic Growth: An analysis

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### Abstract

Services are tasks or functions, which are performed by a group or an individual, for which price is decided on the basis of demand if that particular service is available in the related market. Services are sometimes referred to as intangible goods. The consumption is done only at the point of production. Services are typically non-transferable that means they cannot be resold or purchased at a different price. In an economy the service sector plays a vital role in the resource allocation process. The service industry is not only the World's largest industry, but also contributes major portion in GDP. It generates three times more employment as compared to the manufacturing sector. The contribution of the service industry to the GDP of countries like India is over 56.1% in 2015-16.

In addition to this more than 50% of total export of services comes from export of software services in India. On the basis of this rapid growth in service sector growth rate will going to be more than 60 per cent in the next fifteen years in India. After China, India has got the second position as the fastest growing service providing country in the world.

The present study is all about the analysis of the potential and capability of the service sector in the economic growth of the country over the last couple of decades. The main aim of this study is to see the correlation between the growth in the Indian service sector along with growth in the economy in terms of growth in GDP, per capita income and foreign investment.

**Key Words and Abbreviations:** *Sustainable development, GDP, FDI.*

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### 1. Introduction

"Services are any tasks or functions, which is performed by a group or an individual, for which price is decided

on the basis of demand if that particular service is available in the related market. Services are sometimes referred to as intangible goods. The consumption

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is done only at the point of production, services are typically non-transferable that means it cannot be resold or purchased on a different price. Service sector has a huge potential in a country like India.

According to Reserve Bank of India (RBI) along with World Trade Organization (WTO) there are 'N' number of service exist in the service sector and some of the major contributors are hotel and restaurant, trade, transport, communication, storage, real estate, insurance, financing and business services along with construction services.

In utmost developed countries of the world, the services sector is contributing the major portion of its GDP and generates three times more employment than manufacturing sector. In recent years, services sector experienced a rapid shift in generating both income and employment. Thus it has been observed that the service sector has become a major player in almost all the countries of the world.

### **Overview of Service sector in India**

#### **Contribution of Gross Domestic Product**

The contribution of total services sector excluding construction in India's Gross Domestic Product (at constant prices), increased from 28.5% in FY 1950-51 to 51.3% in the FY 2013-14. But the share of total services sector, apart from construction, to India's GDP at factor cost at current prices increased rapidly from 30.5% in the FY 1950-51 to 50.8% in the FY 2010-11 and 54.40% in the FY 2018-19 which contributes Rs.169.61 lakh crore in Indian economy.

If we can include construction, then the same share of services sector improved from 56.8% in FY 2000-01 to 59.6% in FY 2013-14. Among the major components of services sector, the share of transport, Communication and trade in India's GDP (at constant prices) increased from 11.0% in FY 1950-51 to 18.6% in FY 2013-14.

The Contribution of community and personal services to GDP (at constant prices) improved from 8.5% in FY 1950-51 to 13% in FY 2017-18. The stake of real estate, business services and finance insurance increased from 9.0% in FY 1950-51 to 20.96% in FY 2018-19. Service sector made a rapid stride in last one and half decade and has appeared as largest and fastest growing sector

of Indian economy which has reached at 7th position in world's GDP ranking in 2015-16 with a GDP size of almost \$2.25Tn. With a decadal average contribution of less than 30% over the period 1950-60 the contribution of service sector has now reached over 53%.

#### **Higher CAGR and Rapid Growth of Services Sector**

The significance of services sector to Indian economy can be traced from its attainment of higher compound annual growth rate (CAGR). The CAGR of the services sector attained at 10.0% during FY 2004-05 to 2011-12 has been found to be higher than the 8.6% of CAGR of Gross Domestic Product (GDP) of India, which indicates that the services sector's growth rate is more as compare to industry and agriculture sectors. Services sector GVA at current basic prices has grown at a CAGR of 6.25 per cent between FY12-FY19\* to reach US\$1,294.41 billion. Moreover, the growth has been specifically marked in the public services, information technology and financial services.

The overall growth rate (CAGR) of service sector in 1990 was 7.5% and it increases up to 10.3% during 2004-05 to 2009-10 and it create a positive impact on the Indian economy and the result was in 1990 the CAGR was 5.7% and it increases up to 8.6% in the period of 2004-05 to 2009-10. The services sector's growth was pointedly faster as compare to agriculture and industry sectors. During the year 2015-16 agriculture and manufacturing sectors have grown by 1.1% and 7.3% respectively, whereas service sector has shown a significant growth of 9.2% during the same period of time. It is expected that The Indian service market is grow at 17% CAGR during 2015-2020 and exceed the US\$19 billion mark supported by booming hospitality, retail, and real estate sectors.

#### **Employment Generation of Services Sector**

The contribution of service sector in terms of employment generation is now increases as compare to agriculture sector which was our primary sector. Up till 2018, 34.49% of India's laboring population was working in the services sector. During 1993-94 to 2009-10, there has been a huge decline in the stake of primary sector in employment from 64.75% in 1993-94 to 53.2% in 2009-10 and further less than 50% in 2015-16.



Although there was down fall in the agriculture in terms of employment generation but still, agriculture sector remains to be the biggest employment giving sector in India as compare to service sector which comes just after agriculture sector.

For this same period, the contribution of services and construction sectors in employment increased from 19.70% to 25.30% and 3.12% to 9.60% respectively.

There are certain states which remain top in the list in terms of employment generation in rural area like Sikkim, Tripura and Manipur and there are certain states which remain top in the list in terms of employment generation in urban area with very high share of employment in service. 879 and 826 persons out of every 1000 are employed.

Kerala stands on first position in terms of high share of employment generation in the rural services sector at 511 persons out of 1000 persons among the major states. Some major employment providing service sectors are public administration, education and community, Construction; trade, hotels and restaurant.

In urban areas of India the ratio of employment with services in most of the states varied like 877 in Meghalaya, 653 in Uttar Pradesh, 787 in Jharkhand, 833 in Assam, 732 in Bihar, 711 in Kerala, 716 in Maharashtra, 743 in Rajasthan, 641 in Gujarat, 683 in West Bengal and 586 in Tamil Nadu out of 1000 employed people. The share of service sector in employment generation in India need to improve as on global aspect service sector contributes 45% in total employment.

### **Contribution to India's Services Trade**

In recent years India is grow as an export oriented country. According to Balance of Payment (BoP) data, merchandise and services exports increased by 22.3 and 26% respectively during 2004-05 to 2018-19 and it contributes US\$ 16.87 billion in Indian economy.

In the world export of services, share of India's services exports increases from 0.6% to 3.47% during 1990 to 2017, and it has been growing faster than the share of commodities exports in world exports which stood at 1.9% in 2015-16. In 2009-10 growth of service

remains slow as a result there was global recession, but the decline in the growth of service sector was less noticeable than the go-slow in commodities export growth and has recovered quickly in 2010-11.

India's services sector GVA grew at a CAGR of 6.93% to US\$1,267.1 billion in FY 2018 from US\$846.8 billion in FY 2012, during the same period CAGR of merchandise exports grew at 19.7 per cent. If we enter into the details of services sector, CAGRs of software at 21 per cent was at lower level and financial services (29.2 per cent) were at higher level.

Major services export category is software in terms of size, and the contribution was US\$167.5 billion in FY 2018 from US\$154.6 billion in FY17. The Compound Annual Growth rate of merchandise imports, at 21.4% as compared to CAGR for import of services was 20.21%. Among the various items of services imports, transportation (20.5%) and non-software services (22.6%) had high Compound Annual Growth rate.

Moreover, the liberalization in the Indian economy replicated by total trade counting services as a percentage of Gross Domestic Product showed a higher degree of openness at 59.0% in the financial year 2016-17 as compared to 25.4 per cent in FY 1997-98 and 38.1 per cent in 2004-05.

India ranked at 8th position globally in terms of export of services and contributes 3.3% of world's total export of services. While India's merchandise trade balance has always remained in negative during last 15 years, the trade balance of services has shown a positive trend during the same time. Merchandise trade balance in year 2014-15 stood at \$137.7bn while the service trade balance for the same year was \$75.6bn.

### **Services Sector Growth and FDI Inflows**

Some years ago many transnational companies, were give their focus only on their domestic markets, but now they shift their interest from domestic to internationalization which involve ambitious investments in other country. Now a days Asia is the most attractive destination for the big multinational business houses.

The FDI share of services includes real estate, computer software as well as hardware along with financial and



non-financial services. Such FDI share of services was 40.5% of accumulative Foreign Direct Investment equity in flows during the tenure of 2000 to 2012. Including the construction sector (6.5%), the contribution of services in FDI inflows increases to 47.0%.

In terms of cumulative FDI equity inflows during 2000 to 2011, the financial and non-financial services are found to be the largest recipients with 20.1 per cent, (\$31.7 billion), which is again followed by telecommunications with 7.9 per cent (\$12.5 billion), computer hardware and software with 6.9 per cent (\$10.9 billion), housing and real estates with 6.9 per cent (\$10.9 billion), and construction activities 6.5 per cent (\$10.2 billion) share.

The contribution of financial as well non-financial services in total Foreign Direct Investment inflows from these sourcing countries are Singapore 30.6%, U.K 29.5%, Japan 11.9%, USA 21.9% and Mauritius 20.1%.

During the period April 2000 - December 2018 these sectors have engrossed the highest amount of FDI equity inflows, which is near about 20% of the total foreign inflows amounting to about US\$70.91 billion.

### **Contribution towards Development of Communication and Infrastructure Services**

Services sector has also been playing an important role in the management and development of infrastructure with a special emphasis on expansion of transportation as well as communication services. Government spending on telecommunications infrastructure and services increase by six times in the country – from US\$1.41 billion (Rs.9,900 crores) during 2009-14 to US\$8.55 billion (Rs.60,000 crores) (actual plus planned) during 2014-19. The contribution of storage, transport, and communication services to the Gross Domestic Product at factor cost (at current prices) in India ranges from 8.2% in FY 2006-07 to 6.8% in FY 2018-19.

### **Contribution towards Growth of IT and ITeS**

The services sector has also cemented the way for a continuous growth of its IT and IT enabled services (ITeS) sector and thereby helping the economy of the country to attain higher growth. The IT and ITeS sector of the country has developed an image of a new and strong global knowledge power and has earned a brand identity in this sector.

Research and development (R&D), Engineering services, software products and Business process outsourcing (BPO) are four major sub-components of IT and IT industry.

According to NASSCOM estimates, India's Business process management sector and IT revenues were to the tune of US\$98 billion in FY 2015-16 and has been able to generate indirect employment of around 89 lakh and direct employment for around 28 lakh persons in the country.

The contribution of IT sector to GDP have grown considerably from 1.2% in FY 1997-98 to 9.5% in 2015-16 which was a significant part or proportion of national GDP.

Software exports from India from US\$99 billion in 2014-15 which was almost 12 % more as compare to last year. IT and ITeS industry dominate the exports and it contribute about 78.40% of total industry income.

The revenue comes from domestic sector of IT-ITeS and exports sector in 2010-11 were \$68.8 billion and \$19.0 billion respectively as compared to that of \$190 billion and \$39.45 billion attained respectively in 2018-19. Consistent and growing demand from US is largely responsible for increasing its part in total exports of India's Information technology and ITeS services.

### **Contribution towards Development of Some Social Services**

Services sector is also contribute a substantial role in the development and expansion of some social, sports and cultural services etc it contributes 13.9% of GVA (Rs.1,924,339 crore) at current prices for the FY 2016-17. Moreover, cultural activities, or services include TV broadcasting, radio, and entertainment and besides other related cultural services. In addition to the objective of Government of India is to preserve and promote all forms of art and culture. During the Eleventh Plan the total allocation of Rs.3,555 crore was made to this sector..

Throughout the world they have been identified as an vital element of job creation, growth as well as a transporter of cultural distinctiveness. India is the nation who deliver US\$4 billion worth of creative

services in 2010 only at a CAGR of 26% so it create a positive impact in the growth of Indian economy.

As per the report of Ernst and young, "the Indian entertainment and media industry is worth at US\$26 billion in 2014 and is estimated to grow at a CAGR of 14.3% in the next six years (2014-20) to touch the figure of US \$33.9 billion".

However, the outlook and status of the services sector which had once fallen due to the global economic slow-down and financial crisis faced by US, but the same sector has turned its heads towards its revival and growth once again. The growing opportunities in this sector has been generating employment to many across the nation and are also attracting FDIs for attaining success in future.

The challenge faced by this sector will be to hold India's competitiveness in those areas where the country has made a spot viz. telecommunications, IT and ITeS etc. Besides, India has to face another challenge to penetrate into some outmoded areas such as shipping and tourism where other countries have already a stronghold. India's potential for success in the sector is very high. Thus these challenges faced by India need to be addressed if the country wants to realize its pipe dream of attaining double digit growth and generating large number of employment opportunities for its growing population in the days to come.

Finally, in a country like India, having a large size of population and presently enjoying the merit of population dividend in the form of growing proportion of working age population, the potential & prospect of the services sector in producing income and employment for its people is quite optimistic.

## 2. Literature Review

**Cahal (2015)** analyze the importance of service sector for the growth of Indian economy. His study shows that in the last two decades service sector has appeared as the leading and fastest-growing sector in the worldwide economy. This sector continues to play a role of star performer as well as unremittingly contributing significantly part in the GDP growth, employment generation and enhance the trade and investment in the country.

**Singh (2015)** said that on the way of its development and economic growth, India has touched a point where there is a prevalence of service sector. But without the growth of industrial sector and agricultural, service sector single-handedly cannot continue its growth for the longer period due to the high forward and backward linkages of industrial and agricultural sector. His paper give a significant impression on Indian services sector with major challenges for service sector of India and also provides some remedial step to overcome from these issues.

**Eichengreen and Gupta (2010)** in there research they analyze the causes of development in the services sector and measure the employment generating ability of services in India. They discovery that there are both type of labor skill as well as unskilled exist in the service and manufacturing sector in India. They find out that "whether India should continue exploiting its comparative advantage in services instead of following the usual route to economic growth in the process of economic development- which consists in building-up labor intensive manufacturing, or if these two approaches are in fact complementary strategies for enhancing economic growth and raising living standards in the country".

## 3. Objectives of The Study

The objectives are stated as follows:

1. To examine the role of service sector in growth of India's GDP.
2. To examine the role of service sector in per capita income in India.
3. To examine the role of service sector in growth of FDI in India.

## 4. Research Methodology

### Type Of Data:

The present study is quantitative in nature and secondary data is used for analysis.

### Source of Data

The present study is built on secondary data. The sources of data include the evidences released by World Trade Organization (WTO), World Bank, Export and Import Bank of India (EXIM), Reserve Bank of India

(RBI), Ministry of Commerce and Industry, Government of India etc.

## 5. Analysis & Interpretation

### i) Correlation between Service Sector and GDP:

Year	Size of Service Sector (US \$ bn)	Size of GDP (US \$ bn)
2000-01	241	477
2001-02	252	494
2002-03	275	524
2003-04	324	618
2004-05	383	722
2005-06	448	834
2006-07	512	949
2007-08	675	1239
2008-09	687	1224
2009-10	778	1365
2010-11	974	1708
2011-12	893	1823
2012-13	920	1829
2013-14	951	1864
2014-15	1072	2042
2015-16	1220	2250
2016-17	1430	2274
2017-18	1500	2597

### ii) Correlation between Service Sector and Per Capita Income:

Year	Size of Service Sector (US \$ bn)	Per Capita Income (US \$)
2000-01	241	463
2001-02	252	471
2002-03	275	492
2003-04	324	572
2004-05	383	658
2005-06	448	749
2006-07	512	840
2007-08	675	1081
2008-09	687	1053
2009-10	778	1159

2010-11	974	1430
2011-12	893	1522
2012-13	920	1496
2013-14	951	1508
2014-15	1072	1627
2015-16	1220	1751
2016-17	1430	1862
2017-18	1500	1963

### iii) Correlation between Service Sector and Foreign Direct Investment:

Year	Size of Service Sector (US \$ bn)	FDI(US \$ bn)
2000-01	241	4
2001-02	252	6.1
2002-03	275	5
2003-04	324	4.3
2004-05	383	6
2005-06	448	9
2006-07	512	23
2007-08	675	35
2008-09	687	42
2009-10	778	38
2010-11	974	36
2011-12	893	47
2012-13	920	34
2013-14	951	36
2014-15	1072	44
2015-16	1220	46.4
2016-17	1430	55.56
2017-18	1500	60.22

## 6. Results & Findings

1. Correlation between Size of Service Sector and Size of GDP is found to be **0.987**
2. Correlation between Size of Service Sector and Per Capita Income is found to be **0.986**
3. Correlation between Size of Service Sector and FDI is found to be **0.939**

## 7. Summary of Findings

1. A very high degree of positive correlation is found between Size of Service sector in India and Size of GDP for the period under study. This proves that the growth of service sector has contributed to the financial growth of India. Since 2000-01 the service sector has seen a fourfold jump and the same has been seen in the overall GDP size.
2. A very high degree of positive correlation is found between Size of Service sector in India and Per Capita Income for the period under study. This proves that service sector has contributed in raising the earning level of people in India.
3. A very high degree of positive correlation is found between Size of Service sector in India and FDI flow for the period under study. This proves the growth of service sector has resulted in more inflow of foreign investment in the country.

## 8. Conclusion

The present study has shown the significance of service sector in sustainable economic development in India. For the period 2000-2018 service sector in India has attracted highest amount of foreign investment about US\$ 60.22 billion in 2017-18 which is about 17% of the total external inflows. India has emerged as one of the leading country in providing IT services to the rest of the world. The size of Indian IT industry has crossed the mark of \$167bn. It also contributes almost 55% of total service export from India. Improvement in global and domestic factors will further drive the service sector to grow at a fast pace. Performance of other sub-sectors of service industry like hotels and restaurants, transportation, storage, communication, real estate, retail, hospitality, financing and insurance sectors will also improve in FY19. The growth in GDP will surely be driven by the performance of service sector.

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## Economic Analysis of Artificial Intelligence & Its Implications in Business Management

Syeda Sarah Iram, Monisha Roy, Aishwarya H. & Samanvitha\*

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### Abstract

The value and power of Artificial Intelligence (AI) is growing dramatically every year and will soon dominate the internet and the economy as a whole. In this paper, it is proposed to assess the impact of Artificial Intelligence on business management. The effect of Artificial Intelligence on the cost and product curves are enumerated by graphical method. AI in the fields of finance, marketing and HR are described. An attempt is made to present applications of AI in business in other relevant areas.

Expert systems, machine vision and speech recognition form the basis of AI. This would enable use of such systems using computer language. Machine learning and language form the foundation of operations of systems where repetitive logic is used in solving human issues in a speedier way.

A definite caution need be expressed as regards use of working of these systems in large scale operations. While subtle human questions cannot be answered by programmed intelligence, the question of ethics cannot, however, be attempted by machines. What is true today as an ideal system for solution to a mass of humans may change over time. Such temporal changes cannot, however, be adapted by AI. The human who has made a system solution must remodify the AI of one time period over another time period.

**Key Words and Phrases:** *Artificial Intelligence, Internet of Things, Cost, Marginal Product & Average Product.*

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### 1. Introduction

Human beings reflect on an issue on a unique way. Their reflections are based on intelligence, emotion & volition. Intelligence refers to solving a problem in a way others easily cannot emulate. Emotion means

reaction based on inheritance, experiences & family norms coupled with norms established by society. Volition is a trait that a human exhibits in making right decision in spite of absence of or of part data or data not in favour of the decision made.

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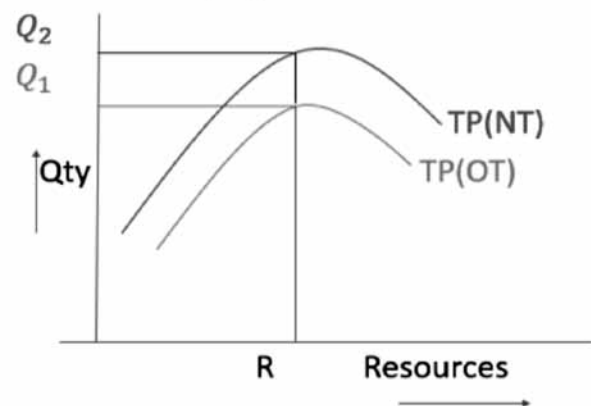
AI enables a long drawn thought process in machine language to be used for large scale applications. The programme may enable speedier, repetitive & continuous solutions for a problem in any area of human activity. This would become stale or not acceptable under a changing environment wherein path of thought process would change over time. In such situations AI becomes sterile leading to no creative solutions. How AI can be made use of in businesses wherein the thought process of decision making changes continuously? How could AI be used as a data bank? Can AI provide quick solutions to an emerging & infectious disease? Could AI help in making investment decisions? Can we bring AI to a classroom or to a Boardroom where discussions are led by facts of a manifested problem? Some of these questions are attempted to answer in this discussion paper.

## 2. Impact of AI on Product Curves & Average Cost Curve

AI is a technical change. Technical change refers to a situation of producing more output with the same amount of resources and/ or producing same amount of output with less resources. This is to imply that product curve shift upwards. Due to upward shift in product curve, there is a downward shift in average cost curve.

### 2.1 AI on Product Curves

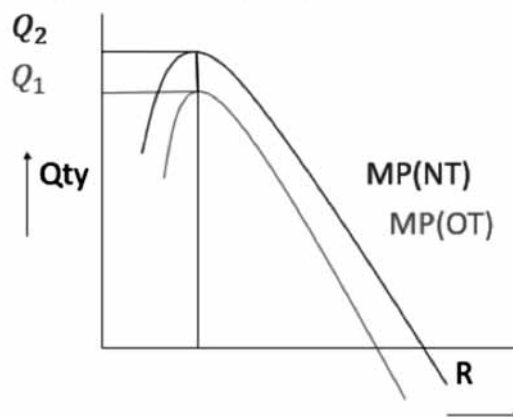
#### 2.1.1. Total Product (TP)



Any company intending to buy will analyse their resources. This is an investment decision having ramifications on the resources in the short as well as long term. When a company has sufficient resources in terms of liquid cash or in terms on assets, they move to pledge these assets to redeem the loan on the assets

after making purchases and deriving the utility of the new technology. Purchase of AI system refers to a system product, As such, mere purchase is not enough to begin with its derivation of utility. The company has to invest in training for adaptation of its human resources to new technology. So the purchase of AI is dependent on availability of resources-both liquid cash & assets- to enable to make a decision on its buying and its adaptation. At R the company would buy  $Q_2$  units to make the company complete in its implementation of new technology. At this point of meeting of R &  $Q_2$  the best would happen to the company in its efforts to adapt new technology. This is point of inflexion where would get best replacement efforts and move on more competitively than peer competitors. The adaptation of AI thus needs lead time for its acceptance.

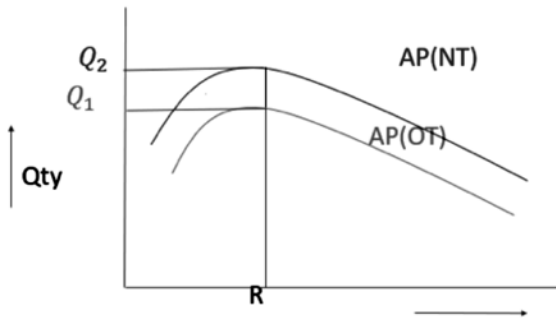
#### 2.1.2 Marginal Product (MP)



Now look at Marginal product curve and its behaviour for AI products. Marginal Revenue will increase as quantity sold would increase at a higher level. In respect of new technology AI products will increase in its marginal revenue up to a point of inflexion. And at that point the Marginal Revenue will be maximum. That is the point where total physical product will be at its maximum. Any company producing AI products must stop at this point and sustain it well to sustain total revenue. The application of marginal principle is as relevant as it is for any physical product. The new technology of AI will have a higher marginal curve of AI products and hence will facilitate economic value to company by its production. Businesses will improve with its value addition by introduction of AI products in any contextual scenario.

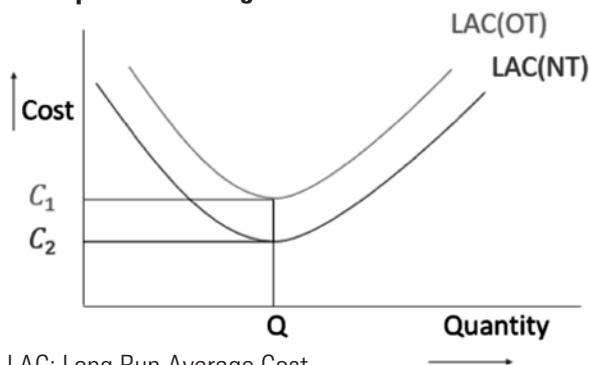


### 2.1.3 Average Product (AP)



Average Revenue (AR) will follow the pattern of MR curve at a different intensity. However, total production pattern must sustain by continuous improvement. It is essential to produce AI products of longer life. Such products must be continuously be adapted to enable update product to derive more life for AI products and to facilitate sustenance of higher growth for a longer period. Higher average levels of production may enable economy of scale and scope of operations by suitable adaptations of updated products.

### 2.2 Impact on Average Cost Curve



LAC: Long Run Average Cost

OT: Old Technology

NT: New Technology

The above diagram suggests that as the size of purchase increases the cost would decrease and hence cost per unit. Interestingly any new technology is likely to bring a new cost line much below the cost related to earlier technology. The cost curve of any technology is on a higher pedestal mainly because it was 'new' at the time of its introduction. R & D efforts enable a new technology to get replaced mainly because of better utility curve it derives in terms of advantage over the earlier one. Once the new technology takes over the

old, replacement cost to buyers will be at an advantage in terms of utility and in terms of its acceptance by cost to the buyer. There is point which a buyer would relent to buy and that is point Q. At this point, the cost will be at its minimum for quantity purchased. This is how companies derive their cost/price to get at their best which in turn is accepted by the seller. The price discovery process will enable completing transactions. The use of new technology will make the buying company competitive and as such, they would influence to fall in their line of application. The industry as a whole becomes updated and would move on further to survive and hence grow. The cycle of business thus starts operating and hence the economy.

### 3. Implications to Business Management

AI has its implications on various fields and business management is not an exception. The implications of AI on some areas of business management such as Finance, Marketing, Human Resources, Production and Big data analytics are elaborated as below:

#### 3.1 AI in The Field of Finance

Finance sector including markets can derive advantage of AI products by its adoption. Finance markets can gobble up speed, accuracy and higher level of efficiency by investment in AI products. Higher investment will lead to higher revenue streams for any organization adopting AI products. AI products adoption will make finance markets more efficient that what they are at present. Few of them are listed below:

**Risk Management:** Say for example banks, they need to decide who is eligible for a credit card and who is not. AI systems have the capability to go through 1000s of personal financial records and can recommend the banks to whom the credit offerings can be made. Any such risk oriented decisions can be made by using AI. The probability committing errors would minimize by data base, number crunched and simulation deliberated issues.

**Trading:** Highly advanced digital assistants like Alexa, Siri can help reduce unpredictability of stock market, minimize errors and trades that are mood based. Training in the use of these soft wares would enable a Manager crack a problem to make a clear yes or no for a problem on hand.

**Robo-Advisory:** Robo-Advisors provide financial planning services with minimal human supervision thereby reducing the commission rates. Also, they are available 24/7 for the customers and even monitor the markets non-stop unlike their human counterparts. One should note that Robots are for programme oriented actions. Since humans think, use of a Robot must be under his/her control.

**Conversational Banking & Customer Service:** Banks use Chatbots that allows their customers to make payments and track budgets. Chatbots engaging with customers can result in significant cost savings. FAQ chat boxes will help us answer most questions that emerge in day to day transactions. However, personalized questions are to be attended to by Managers with human face.

**Wealth Management for Clients:** AI helps the banks to provide insights on how to best serve their high net-worth clients by offering personalized, tax-optimized investment decisions to clients. Given changed circumstances of taxation, say after a budget, investment decisions in terms of allocation of personal resources can be done in a most cost effective manner. This area is growing as per capita household income has been increasing in India with both spouses contributing to it.

**Fraud Prevention & Anti-money-laundering:** "AI is especially effective at preventing credit card fraud" by recognizing suspicious activity, "which has been growing in recent years due to increase e-commerce and online transactions". This typical human tendency can be prevented by the application of AI. All possible simulation of frauds and money laundering can be attempted to make a large company system free from such events.

**Automation:** AI allows banks to make loan decisions in seconds not months by assessing risks and spending patterns etc. Banks can reduce their risk of default loans and reduces its costs plus provide improved customer experience. Credit decisions and repetitive statements are now being generated on a SAP platform. However, AI automated platform may enable data related decision issues can be attempted by the use of AI. One must exercise caution on making an organization

fully automated. It is easier to get system collapse on complete automation.

### **Future of AI in the Finance industry**

- "Reduce or eliminate transaction fee due to the absence of intermediary"<sup>1</sup>.
- Personal/Unit transactions are easier to update & ensuring continuity of transactions.
- Ease in managing personal finances "as the smart AI machines will be able to plan and execute short- and long-term tasks from paying bills to preparing tax filings"<sup>1</sup>.
- Better customer care by AI machines will reduce the time of Customer Interface Manager.
- More efficient and reliable legal compliance by helping companies detect deviations and keeping them on the right side of law.
- Reduction in legal complaints & better tax & legal compliance will be ensured by AI.
- Legal scrutiny of detection of corrupt practices using AI may enable faster & speedier clearance of cases.

### **AI in The Field of Marketing**

One of the main ways in which Artificial intelligence helps in marketing is using concepts like machine learning to anticipate possible next move of customers and help improve the customer journey.

Some identified uses & benefits are listed here:

#### **Mass Customization & Mass Custermization:**

There is always a conflict whether mass customization is possible together with customerization in marketing. The argument advanced was against it. Now with AI, it is possible to achieve it.

**Content Curation & Updating:** "Content curation and updating is the act of continuously identifying, organizing, formatting for repetitive use and sharing the best and most relevant content on a specific topic or issue online and on time. AI can help in revealing ideas as to how they can own or disown a product (in the sense of buying) to the customers"<sup>2</sup>.

**Personalization of News Feeds:** Using machine learning, AI system helps in personalization of news feeds. An 'interest profile' for the user is created by the



AI system. Since AI is data driven, it cannot assimilate emotions.

**Pattern Recognition:** Patterns are recurring data and it can be used to predict trends. These patterns are recognized by the AI system and helps businesses in serving their customers better. Time series forecasting is accurately possible by pattern recognition. The errors in prediction would get minimized. The random errors can be tested for their intensity.

**Language Recognition:** This is basically a tool used to detect the language of a text document. This does not however, mean communication. It can check grammar, structure of a sentence and not 'feel in communication'.

**Tracking:** AI can track Ads for a track user who reads Ads and search for a product to buy. AI Browse Cookie would help in tracking Ads, share information on products and share the information others.

**Data Analysis & Customer Segmentation:** The profiles created are filled with data and this is analysed by inspecting, filtering and transforming it into useful information. Based on this, customers are segmented or classified into demographic, behavioural, psychological and geographical segments.

**Automated Web Design:** "Here, the AI system uses machine learning to identify and implement web design trends. This AI technology can make websites on its own. It is not necessary to type a long HTML code for creating a webpage anymore. Instead, the user states what they want, and the AI system generates a personalized design"<sup>3</sup>.

**Predictive Customer Service:** Companies today have access to a lot of data with respect to customers. With the help of AI technology and predictive analytics, companies can dig deeper into the data and provide personalized customer experience. Brands use this information to target the right customers or potential customers and provide personalized services and recommendations.

### 3.3 AI in The Field of Human Resource (HR)

**Personal Detail Documentation & Updating of Employee Data:** Critical employee details such as contact address, telephone and mobile numbers, blood group, leave on hand, position, qualification, approval

status etc., can be keyed in. Access to such information without violating privacy is possible.

**Availability of Transaction Data:** Any officially categorized data can be accessed for making an assessment of the employees. Key Performance indicators, status of performance, progress in his/her career, career options and all such other details may be made available.

**Training Gaps:** In order to have a career advancement, data on gaps for improvement can be identified to enable empowerment of an employee carve out his/her career. Gap-need data will help HR to take concerted action for employee welfare.

**Sourcing, Searching & Hiring Process:** This function can help in referencing, identifying and face to face interaction for potential and apt candidates for a career in the organization. Talent search can be made more effective by building Talent Bank.

**Reduction in Repetitive Low Value Tasks:** HR section may avoid or reduce rhetoric low value work by reorganizing priority areas for human welfare in terms of career development plans. Strategic areas of improvement for the organization can be attempted using AI.

### 3.4 AI in The Field of Production

AI can generate production function for each commodity/produce/product. It can facilitate in supply chain activity. Further, assessment of quality, interconnecting supply for form change, appropriate packaging, storage and several such activities can be functionally connected and managed through AI. Data on product base and its change, on usage, and on deriving utility on the change base of consumers can be effectively implemented. Data on costs on the field, field data on marketing nuances and on changing pattern of consumption can be continuously compiled and updated by AI. Generation of reports on signalling market changes, public issues and several such organizational problems can be attempted by AI. Global connectivity can be established by IoT & AI to enable assessment of spatial problems. Macro changes in consumption, marketing and production can be captured by AI. Simulation of market changes for forecasting is another important application of AI.

### 3.5 AI in The Field of Big Data Analytics

Big Data analytics is a science of dealing with large and complex data sets. It enables to answer questions connected with human activity in all its manifestations. Macro data analysis would provide insights into patterns, trends, associations, correlations and hidden relationship between explicit and implicit variables. AI and Big Data together will help in assessing uncertainties in its natural and induced patterns. Anomalies, pattern recognitions and graph theory are some of the tools used along with these two technologies. Machine and mind languages have to be integrated to make results more meaningful and transparent.

### 3.6 Some More Indicative Applications of AI in Business

**Spam Filters:** AI can be effectively used in filtering spam mails. Naïve Bayes filtering may not be of much use. One can develop spam filters from the beginning using machine language. However, the best way is to develop filters using AI and induct into your email.

**Smart Email Categorization:** Categorization of emails by methods of logic can be attempted using AI. The objective is to enable priority of the emails to attend to on the basis of personalized relative importance.

**Voice to Text Features:** Voicing of texts is now in common use. There is clarity in GIS system when in use on road as to what we need to do, where we are heading to and hear, listen and are directed.

**Smart Personal Assistants:** Siri, Cortana and Google are some of the machine personal assistants used to perform routine and repetitive transactions. Efforts are to customerize to enable it to be individual friendly.

**Automated Responders & Online Customer Support:** These are now common in ATMs, in Railway Stations, Airports and in several places where there is continuous display and announcements on the status of travel. Extension of such facility in other areas such as hospitals and institutions are on.

**Process Automation:** Manufacturing industries of heavy, FMCG products, or mega kitchens depend on process automation. The process is to be extended to many other areas of larger application.

**Sales & Business Forecasting:** This is critically

essential for any executive to deal with them to move on. AI packages are being attempted to make it more accurate to lead on actions.

**Security Surveillance:** Land securities in the border areas are being worked out to make security fool proof. AI is being best used in India.

**Smart Devices that Adjust According to Behavior:** Development of smart devices are on to enable it to adapt to the behavioral changes. Neurological modulation in AI is a new field in the R & D.

**Automated Insights, Especially for Data-driven Industries:** Big Data in the areas of e-commerce and in financial services are researching on development of customerized packages to enable make right decisions at the right time. On-time decisions are enabled mainly because of the insights provided on the programmed intelligence. There are limitations of this application. However, attempts are being made to make the product derive its value.

### 4. Conclusion

AI can be used to document, store and retrieve data to capture information. Intelligent information can be extracted in a way to provide insights for decision making. AI can penetrate into any activity connected with humans for their welfare. While statistical analysis helps in categorising data and establish relationships; AI enables to drive out subtleties which are not easy to detect through just numbers. The use of AI is spreading across for authenticity of drawing actionable decisions in business, education, health care and services. Speed and Accuracy of data matter along with organisation of data for generating value at a time where inconsistencies rule the world. Insights and flashes may be apparent when crunched numbers reveal what is not expected. Only support systems can lead us to right action track with almost certainty in what is expected to reach at.

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## A Study on Investors' Behaviour During Bull Phase in Indian Market with Special Reference to Bangalore City

N.S. Ravindra\*

### Introduction

In the modern finance theory, behavioral finance is a new paradigm, which seeks to appreciate and expect systematic financial market inference of psychological decision-making (Olsen, 1998)<sup>1</sup>. By understanding the human behavior, attitude and psychological mechanisms involved in financial decision-making, standard financial approaches may be better replicated and explain the reality in today's developing markets.

Behavioural finance is the integration of classical economics and finance with Psychology and the decision-making sciences. This study is related to the fact that how investors give different weightage to investment under similar situation. Some people systematically make errors in judgment or mental mistakes. Much of the economic theory available today is based on the belief that individuals behave in a rational manner and that all existing information is embedded in the investment process or no attention being given to the influence of human behaviour on the investment process.

Behavioural Finance field is so new, that most professionals responsible for large portfolios were not

exposed to the principles of behavioural finance in their college curricula and these principles have significant practical implications for investment management.

No matter how much investor is well informed, has done research, studied deeply about the stock before investing, then also he behaves irrationally with the fear of loss in the future. Buying a stock with a bad image is harder to rationalize if it goes down. Investors typically give too much weight to recent experience and extrapolate recent trends that are at odds with long-run averages and statistical odds. In general individuals tend to feel sorrow and grief after having made an error in judgment.

Forecasting stock returns is one of the most investigated topics in behavioural finance; a number of models have been developed to explain stock returns. Although some of these models do not account for psychological factors, some studies, pioneered by Kahneman and Tversky (1979), suggest that investor psychology has a role in return generation.

A limited number of studies focus on emerging markets. In examining the relation between investor sentiment and stock returns, Lee et al. (1991), Neal and Wheatley

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(1998), Brown et al. (2002), Brown and Cliff (2004), Baker and Wurgler (2006), and Kling and Gao (2008) confront the difficulty of observing investor sentiment directly.

Many of today's customer-data segmentation tools shed light on who the customer is (demographics) where they live (geographic) and how they interact with a company (behavioral and transactional data). The most sophisticated tools, which are to be used in this study, tell us why customers do what they do (psychographics). This is powerful stuff when considering the implications and applications of such knowledge. By understanding attitude, one will be able to better predict and shape behavior. "Brains can be scanned to predict peoples' financial decisions" and lend the psychographics' study for investor's decision more relevance, reality and practicality (The Hindustan Times, February 28, 2003).

Studies dealing with lifestyle characteristics of individual investors are very few. Langer (1975) finds that self-reported risk tolerance does the best job of explaining differences in both portfolio diversification and portfolio turnover across individual investors. From the vantage point of traditional finance theory, the positive correlation between risk tolerance and diversification is surprising, as both risk-tolerant and risk averse investors diversify idiosyncratic risk. Investors who report being risk-tolerant are also more prone to believing that risk can be controlled, which suggests that self-assessed risk tolerance also serves as a proxy for an 'illusion of control', that is, overconfidence about one's ability to affect chance outcomes.

The study endeavors to test the hypothesis that influence of investment behavior of individual investors on their lifestyle (psychographic) characteristics and that there is a massive shift in the investors' preferences towards mutual fund products, a moderate continuing shift towards shares and debentures and a shift away from traditionally important financial instruments (National Savings Certificate and Life Insurance Policies). There is no difference in the importance of various sources of information for investment decisions.

By understanding the human behavior, attitude and psychological mechanisms involved in financial

decision-making, standard financial models may be modified to better replicate and explain the reality in today's developing markets. The traditional standard finance theory is the body of knowledge constructed on the pillars of the arbitrage philosophy of Miller and Modigliani, the portfolio theory of Markowitz and the Capital Asset Pricing Model (CAPM) of Sharpe, Litner and Black (Statman, 1999). These theories believe markets to be efficient and are highly analytical and normative. On the other hand, modern financial theory is based on the assumption that the market actor makes decisions according to the adages of expected utility theory and makes neutral forecasts about the future.

A field of finance that proposes psychology-based theories to explain stock market anomalies is known as behavioral finance. This is the study of how psychology affects financial decision making and financial markets. Within behavioral finance, it is assumed that the information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes.

A number of psychological biases, that affect investors' behaviour and subsequently their decisions, have been dealt with in several previous studies across the world. Such biases include: overconfidence, home bias, sensation seeking attitude, competence effect, herding, anchoring, heuristics, etc. This study attempts to address the issue of competence effect.

Many studies have been undertaken in the field of investors' behavior in other places. As some of them are directly or indirectly related to the present study, a review is made of such studies which have greater relevance to the subject matter of the present study.

### **Important Measurement Parameters**

Against the above discussed backdrop, this study analyzes the investment behavior of investors. Besides, the purpose of the study is to identify the attitudinal factors that influence the investors in terms of investing in shares, mutual funds, post office savings, bank deposits etc., and to investigate the investment objectives and factors influencing investment decision-making process from the point of view of the investors.

Kerlinger defines a research design as "the plan

structure and strategy of investigation purporting to answer research questions and control variance". Research design indicates a plan of action to be carried out in connection with a proposed research work. The process of research design includes the selection of the research problem, the presentation of the problem, the formulation of hypotheses, conceptual clarity, methodology, and data collection, testing of the hypotheses, interpretation, presentation and the like. The design of research evolved by the researcher is to answer the research questions with utmost validity, objectivity, accuracy and economy. In the research process the researcher visualizes and implements a specific plan in order to generate relevant empirical evidence. A research design suggests the appropriate directions for making observation and conducting analysis of data.

The expected utility theory says that an investor is risk averse and the utility function of a person is concave, which means the marginal utility of wealth decreases. Here, the asset prices are set by rational investors and, therefore, rationality-based market symmetry is achieved, where securities are priced according to the efficient market hypothesis.

In finance, "rationally" means two things. First, agents' beliefs are correct: the subjective distribution they use to forecast future realizations of unknown variables is indeed the distribution that those realizations are drawn from. Second, given their beliefs, agents make choices that are normatively acceptable, in the sense that they are consistent with Savage's notion of Subjective Expected Utility (SEU).

According to Investopedia, there have been many studies that have documented long-term historical phenomena in securities markets contradicting the efficient market hypothesis and cannot be captured possibly in models based on perfect investor rationality. A new area has evolved in financial research that recognizes a psychological element in financial decision making, thus challenging traditional models which assume markets. The success of contrarian and momentum strategies owes largely to psychological factors. The premise of behavioral finance is that psychological factors can enhance the effectiveness of investment strategies.

## **Research Gap**

Going by the literature review carried out by the researcher, it has been identified by the researcher that not much work has been done relating to the investing characteristics and decision making processes that affect the investors during the bull phase in Bangalore. Here, in order to achieve the objectives of this thesis as mentioned above, an attempt has been made to study the changed behavior of the investors' during bull phase in Indian market.

## **Objectives of The Study**

The study has the following objectives:

1. To assess the fluctuating behavior of investors during the Bull Phase in Indian Money Market.
2. To analyze the risk taken and stress experienced by the investors.
3. To assess the effect of investors' emotions on their decisions to invest.
4. To examine the relationship between investors decision based on market information and decision making process.
5. To make an appraisal of the influence of agents on investors decision.

## **Scope of The Study**

The present study would make an attempt to analyze the impact of behavioral finance on investors in taking critical decisions with respect to various financial portfolios. The main objective of the study is to trace the psychological behavior of the investors particularly under the Bull Phase and the factors influencing on their decisions.

The objective of the study is first of its kind in dealing with analyzing psychological behavior of investors. The study is confined to the sample respondents who are regular to the Bangalore Stock Exchange. The area of operation is limited to Bangalore metropolitan. As such relevant data was collected and the same was validated with the secondary source of information. The findings of the study would help the policy makers, consultants, finance managers, financial institutions, academics in reforming and restructuring their thought process. Thus, the importance of the study is limited



to the study of Behavioral finance and its impact on the investment decisions during the bull phase. The Bull Phase is considered a very strategic phase because lots of variations are observed and this provides more generalized strategies.

### **Research Methodology**

This study attempts to study the psychological factors affecting the investors at the time of investing, and various other factors primarily contributing to their behavior. To study about the reasons for the market ups and downs information was culled from diverse sources like Business Standard, Economic Times for the study. A few interviews of leading brokers and market players in Bangalore were also done. Since, the primary objective of this study is to study the behavior of the investors; this work is a descriptive and diagnostic in nature, which seeks to analyze the behavior of the investors in stock markets.

### **Framework of The Study**

The investment opportunities available for an investor spreads across broad areas ranging from company shares, mutual funds, insurance products, post office savings, etc.,. Depending upon the level of risks as perceived by the retail investors the quantum of investment also varies. The size of investment varies as much as the nature of the market itself. In various sectors, both service and manufacturing industries, the behavior of the investors differs.

Understanding the behavior of the investors both in quantity and quality of each investment and their attitude during bull phase, are important as they form the basis for enhancement of the volume of investment in the market, thereby in the companies and other avenues.

The attempt in this study is to analyze the attitude and behavior of the investors during bull phase. Understanding the investors' behavior and attitude during bull phase has a major implication on the performance of the various options available like share market, mutual fund companies, insurance companies etc., because it helps the concerned authorities to take a re-look at the options made available to the investors based on its strength and to identify the gaps.

### **Hypothesis Formulation**

Based on the gaps identified and the topic taken for this dissertation, the scholar, in consultation with some experts, have identified and set forth the following Hypothesis, to be tested during the course of analysis:

**H1:** There exists significant association between the socio-economic characteristics of the respondents and their investment behavior strategy in the capital market.

**H2:** There exists significant functional relation between the dependent variable i.e. amount invested and a set of independent variables of personal characters.

**H3:** There exists significant difference among respondents in the mean investment in the different opportunities in the capital market and

**H4:** There exists significant difference in the overall investment mean rank among different groups of respondents namely occupation and income groups.

### **Area of The Study**

The study was conducted in Bangalore only. For the purpose of data collection, the important agents' offices were visited and the particulars of the retail investors were collected from the agents. Moreover, the actual investors who frequently visit the exchange/ agents' office were also taken into account while conducting the survey. Along with these, select offices and banks in Bangalore have also been considered for collecting secondary data for this study.

### **Nature & Collection of Data**

Data for the study is primarily collected through a survey method in the form of a questionnaire. The survey was conducted during September, 2009 and March, 2010. In the questionnaire, the respondents were asked to compare today's trend with that of before and after the market crash in 2008, where 'today' refer to the time of survey. The other literatures concerning the behavioral finance and speculative bubble in India and outside are collected from the existing source. The questionnaire consists of twenty (20) questions concerning the fundamental factors affecting the financial decision-making and questions referring to the behavior of investors during and after the speculative bubble. In the process of primary data collection, investors of different financial products were included in the sample size and

the required data collected. The filled up questionnaires were first processed with the help of Microsoft Excel to get an impression of the primary results and then the same was fed into SPSS format. The analysis was done using SPSS (15.0 version) software.

### **Sample Size**

The study is based on sample survey. The total number of population in Bangalore who are into trading was considered and using two way self-weighted proportionate stratified sampling, a sample size of 640 were considered and interviewed for the present study. This method was originally used by John Gunaseelan in his study entitled 'Public Sector Road Corporation: A comparative study with private sector (1998)'. In the two-way self-weighted proportionate stratified sampling, the number of units to be drawn in proportion from each stratum is in the proportion of 75:25 as they stand in the universe.

In this study, gender and age group have been considered as stratification variables. Among the population engaged in retail investment in Bangalore, the gender, both male and female is in the order of the proportion 75:25 and the other variable considered for the sampling purpose, namely Age is in the order of 20 years and above. Hence, this sampling scheme has considered gender as one stratification variable and age as another stratification variable. Hence, this scheme could be named as two-way self-weighted proportionate stratified sampling.

### **Plan of Analysis**

After the data collection was over, the collected data were analyzed using suitable statistical techniques such as Mean, Chi-square test, Factor analysis and Discriminant Analysis. Statistical Packages for Social Sciences (SPSS 15.0) has been used for the analysis.

### **Limitations**

- I. The study was conducted among the retail investors in Bangalore Metropolitan, as the Stock Exchange is situated in Bangalore.
- II. All the respondents were asked to answer all the questions and as some information had to be recalled from memory, there could be some memory bias.

- III. The variables taken for the study are limited to the significant variables in the pilot study and
- IV. The study was conducted during a limited period, which is from September 2009 to March 2010, and as such the findings may not be applicable to other periods, and other States in India.

### **Chapter Scheme**

The dissertation is presented in seven chapters, as detailed below:

Chapter I the introductory chapter, provides the meaning of Behavioural Finance, the link between psychology and behavioural finance and the key concepts in the field of behavioural finance.

Chapter II Presents the Literature Review

Chapter III presents the research design being adopted for this thesis, the rationale and the context of studying behavioural finance, various theories associated with the behavioural finance, a broad and extensive review of research work under taken so far regarding behaviour of the retail investors during bull phase in India. The Research problem, outlining the objectives, need for the study, the desired sample size, collection of data and the statistical tools employed in the study are also discussed in detail.

Chapter IV presents an overview of the security market in India, brief discussion about the behavioural pattern of the stock markets with special reference to Bangalore Stock Exchange and National Stock Exchange for a period of Ten years starting from 1999-2000 to 2009-2010.

Chapter V explores the profile of the respondents and their behavioural pattern with respect to the financial products in Bangalore, as has been highlighted earlier in order to achieve the objectives set forth for this study.

Chapter VI consolidates the important observations made in this study and definite conclusions are presented and

In Chapter VII valuable suggestions are presented, which would enable the stock exchanges to enhance the services and products being offered to the public.

## Analysis & Findings

Using the data collected by administering the questionnaire, analysis has been done and the results are presented here. The attitude and fluctuating behaviour of the investors have been studied. A detailed analysis of the respondents with respect to their demographic characteristics has been done and accordingly the same has been reported and interpreted. The variables considered for this study are Gender, occupation, age, educational qualification, marital Status, monthly income, percentage of monthly income for investment and period of investment.

### Capital Market: Respondents' Profile

**Objective 1:** To study the fluctuating behaviour of investors and its impact on market in general and during Bull Phase in particular.

The following are the findings and the conclusions arrived at based on the analysis of the data:

- All the respondents have earned an average profit of less than ten per cent of their investment as returns during the period of transaction.
- All the respondents have the motto of profit earning only when they invest in the capital market.
- Majority of the investors are worried about the implications of entry and exit from the market.
- Loss in capital appreciation, followed by the change in the market trend are main concern for worry for the investors at the time bull phase in the market.
- Most of the investors get advice from portfolio management services.
- Majority of the investors have plan to invest/ deposit in banks/ post office and the remaining 10 per cent have expressed that they are not sure about their decisions.
- Majority of the investors feel that a part of profit earned from trading in the market should be invested in a safer side, where as 35.6 per cent invest to avoid tax.
- 45 per cent of the respondents feel that it is always better to invest in recurring deposits in Banks.
- 70 per cent of the respondents feel better to invest in NSC in the post office than any other investments in Banks.
- All the respondents reported safe to invest in mediclaim, which indicates that investment in mediclaim is a safer one for the investors.
- 20 per cent preferred to invest in mediclaim, in the insurance company LIC, followed by 17.5 per cent preferred in GIC, 27.5 per cent preferred in ICICI, 25 per cent in Birla Sun Life and the rest of 10 per cent preferred in SBI Health.

**Objective 2:** To analyze the risk and stress taken by the investors

In order to study whether there is any association between two attributes namely socio-economic characteristics such as gender, age, marital status, education, family income, family size with area of residence/nature of activity among the respondents, Chi square analysis is performed and the results are presented as :

- The frequency of trading depends on the respondent's age group.
- The frequency of trading depends on the respondent's educational status.
- The frequency of trading depends on the respondent's marital status.
- The frequency of trading depends on the occupation of the respondents.
- The frequency of trading depends on the gender of the respondents.
- The frequency of trading depends on the monthly income of the respondents.
- The mode of trading depends on the period of investment by the respondents.
- The frequency of trading depends on the percentage of monthly income being invested in capital market.
- The study that the investment strategy depends on the respondent's age group of the respondents.
- The Investment Strategy depends on the educational status of the respondents.



- The Investment Strategy depends on the marital status of the respondents.
- The Investment Strategy depends on the occupation of the respondents.
- The Investment Strategy depends on the gender of the respondents.
- The Investment Strategy depends on the monthly income of the respondents.
- The Investment Strategy depends on the period of investment by the respondents.
- The Investment Strategy depends on the percentage of monthly income by the respondents.
- The source of information about the opportunities for the investment in the capital market depends on the age of the respondents.
- The source of information about the investment opportunities in the capital market depends on the educational status of the respondents.
- The source of information about the investment opportunities in the capital market depends on the marital status of the respondents.
- The source of information about the investment opportunities in the capital market depends on the occupation of the respondents.
- There is association between the gender and the source of information about the investment opportunities in the capital market.
- The source of information about the investment opportunities in the capital market depends on the monthly income of the respondents.
- The source of information about the investment opportunities in the capital market depends on the period of investment by the respondents.
- The source of information regarding investment opportunities depends on the percentage of monthly income being spent in capital market by the respondents.

**Objective 3:** To assess the effect of investors' emotions on their decisions to invest

and

Objective 4: To examine the tendency of investors to focus on pieces of information both relevant and irrelevant in their investment decision making process.

### **Discriminant Function Analysis**

Using Discriminant analysis it has been found that there are three groups namely respondents with lower Mean score, respondents with medium mean score and respondents with higher mean score and the group II is excluded from the analysis. Eight Predictor variables considered for the analysis are  $X_1$ -Age,  $X_2$ -Gender,  $X_3$ -Marital status,  $X_4$ -Educational status,  $X_5$ -Occupational status,  $X_6$ -monthly income,  $X_7$ -period of investment in the capital market and  $X_8$  percentage of monthly income from the investment.

### **Regression Analysis**

From the Step wise multiple regression analysis, it has been found that Age, Gender, Marital Status, Educational Status, Occupational Status, Monthly Income, Period of Investment, and Percentage of Monthly Income have significantly contributed to the satisfaction of the respondents with respect to their investment decisions made.

From the analysis it has been inferred that among the investment opportunities in the capital market available to the respondents, investment in Shares is seen as the top most priority followed by Insurance, Post office savings and Savings at banks in the same order.

### **Friedman's Test**

By Friedman's test, it is concluded that Government employees are interested in investing in capital market and self-employed group of respondents are less interested. Likewise, respondents with higher monthly income in the range of Rs.50-75 thousand are more interested in investing in capital market than all other group of respondents and the respondents in the least income in the range of Rs.10-25 thousand are less interested in investing in capital market.

### **Findings**

1. The study indicated that all the respondents invest in the market with the motto of earnings only and that the majority of the investors are worried

about the implications of entry and exit from the market. Moreover, a loss in capital appreciation followed by the change in the market trend is main concern for worry for the investors at the time bull phase in the market and most of the investors get advice from portfolio management services. All the respondents felt that investment in mediclaim is a safer avenue for them.

2. It has been established by the finding that the socio-economic characteristics have association with the frequency of trading and investment strategy adopted by the investors.
3. The same socio-economic characteristics have association with the source of information on investment opportunities, intermediaries who provide necessary information regarding the various investment avenues are to be strengthened further, so that the same intermediaries can further improve the investors' confidence.
4. The investment horizon of the respondents specifies that a majority of investors have an investment horizon covering a period of more than a year. Besides, the respondents did not increase their frequency of monitoring, which indicates that investors' investment objective is long-term and they think the market crash is a short-term phenomenon and will revive again. The composition of investments has changed to some extent after the market crash. The investors have reduced their allocation of investments in companies with high risk and high returns and moved towards companies with stable but lesser returns.
5. The abnormally high returns of stocks in the market experienced before the crash may have induced the investors to take higher risk but the decline in the market after January 21, 2008 has reversed this tendency. This change in investment strategies of investors was also confirmed in the statistical analysis, which indicates a significant difference between the investment strategies and the investments the respondents made since the bear market began after January 2008 market crash.
6. It is also found that a majority of the investors who responded to the questionnaire considered the market was overvalued during the period before the crash may help to clarify why the market sometimes acts in an irrational manner.
7. People thought they were following winner stocks blinded by easy profits and they abstained from contrary financial exposure even though faced with conflicting information. This phenomenon was further supported by herd behavior, which respondents admit as an important contributing factor to the overvaluation of the market. Investors who thought the market was overvalued during the crash think that the market is currently undervalued which is an instinctive result. This is also conformed through the statistical analysis. The statistical analysis also showed that there was a distinction in the behavior of investors towards investment in companies before and after the crash of 2008.
8. This study assumes that even though a majority of the investors realized the gravity of speculative bubble, they, however, continued their investment activities knowing that the risk for a collapse is imminent. This exemplifies as an irrational investor behavior. It is evident from the present study that if investors recognize the psychological factors which affect their decision-making process, they can avoid the occurrence of such speculative bubbles and enhance the efficiency of today's global financial market. From a long-term historical viewpoint, investing in the equity market has been profitable and the realization of behavioral factors affecting this market can help to better understand its periodic unpredictability.
9. Investors in the present study have invested in various investment vehicles in the BSE and NSE. Age, education, and income were found to be the most influencing factors of the individual investors' competence in the stock market activities and trading behavior.
10. The results of the study reveal that a person invests as per his/her own judgments once he/she perceives himself/herself more knowledgeable

about investing. Since this is a study of behavioral finance, the study tried to measure investors' competence by using the survey method rather than relying on assumptions about psychological biases. It is found that investors having high, high to moderate income and professional qualification are supposed to be more confident about their competence when it comes to trading in stock markets. It was observed that highly competent investors show more frequent trading behavior.

11. The study finds that level of education and income of individual investors are likely to have a significant impact on their behaviour, followed by factors, such as, age, investment and gender. Through this study, it was shown that investors who feel themselves more competent tend to trade more frequently than those with less perceived competence. This trading behavior is attributed to the competence effect. Thus, it can be said that competence effect rules the trading behavior of individual investors.
12. The psychological factors put forth in this study are two-fold. First, any factor leading an individual to believe in the occurrence of a drop is relevant because such beliefs will act as self-fulfilling prophecies. Those beliefs can stem, for instance, from herding, market rumors, fear of contagion or panic (or a combination of all these). We do not sort which one seems most likely, but rather point out that they are all relevant because they lead to the same phenomenon—a crash anticipation. Second, it must be true that all the agents in the economy agree on the anticipation (rumors have reached the whole market for instance). It implies that anticipations can have a significant effect on prices formation. This view is consistent where crashes are driven by successive releases of public information on the actual state of the economy.
13. In spite of the phenomenal growth in the security market and quality Initial Public Offerings (IPOs) in the market, the individual investors prefer less risky investments, viz., life insurance policies, fixed deposits with banks and post office, PPF and NSC. Occasions of blind investments are scarce, as a majority of investors are found to be using some source and reference groups for taking decisions. Though they are in the trap of some kind of cognitive illusions such as overconfidence and narrow framing, they consider multiple factors and seek diversified information before executing some kind of investment transaction.
14. Investors have made media as a part of their investment life. According to them, financial dailies, TV channels and peer groups can play a pivotal role in making investment decisions. Psychographics play an important role in determining investment behavior and preferences of individual investors. Brokers who are in direct touch with investors play a vital role in keeping the capital market lively by providing various services to investors. Furnishing update and relevant information, probably would be the major contribution of these middlemen. Consultants and analysts in the capital market could play a similar role.
15. Mental mistakes such as loss aversion and framing induce investors to make decisions that make intuitive sense, but produce inferior results. They are, in effect, mental shortcuts allow to make decisions ineffectively, without formal analysis.
16. With mounting complexity in investment decision making, behavioral finance has emerged as an important branch to provide answers to intricate financial puzzles. In harmony with behavioral finance concepts, our research validates that personality factors do affect individual investors' decisions and that he acts 'normal' and 'usual' and not always 'objective' and 'rational'. In the present research, scale has been created based on the examples from heuristics (rule of thumb) and frame dependency (the way problem is presented to investor that can affect his choice).
17. The results exhibited that the cognitive biases—heuristics and frame dependency are not independent. The tendency to conform to behavior finance scale that developed for measuring the phenomenon exhibited two dimensions. One dimension was strongly related to experience and the other dimension was strongly related

to the personality dimensions of openness and extraversion. The results show that extraversion scores have a positive relationship, and openness scores have negative relationship with tendency to comply with behavioral finance concepts.

18. This study has brought out interesting facets of the Indian retail investors. It identifies the existence of strong association between demographic characteristics and the risk bearing capacity of Indian investors.
19. This study confirms the relationship between age and income and the risk bearing capacity of investors. The financial product designers armed with this sort of fascinating information on the risk bearing capacity of investors can develop products to suit the risk characteristics of the investors. Also the financial product marketers can specifically target the prospective investors for the products instead of approaching every individual with an array of products which may not suit them at all.
20. The study revealed that most of the investors were highly educated and therefore, they considered own study and observation as an important factor for their investment decisions.
21. It was also found that most of the investors took own decisions regarding their investments. They get the information from sources like agents, newspapers and magazines.
22. The study revealed that only 16 per cent of the investors faced difficulties in buying or selling their investments and their difficulties covered the problems like inadequate prices, delay in transfer.
23. An interesting and important inference which emerged was that 36 per cent of the investors did not know about the safety of new issues of company shares, debentures and shares bought on stock exchanges. Though the middle class investors were highly educated, they lacked in skill and knowledge in deciding about their avenues in investing.
24. The study revealed that the female retail investors in Bangalore have higher monthly income than the male investors. The study also revealed that male investors were highly educated as compared to female investors. Most of the female investors also prefer to invest in risky securities for the future investments as compared to male investors.
25. The broader hypothesis in the study was that there is a massive shift towards Mutual Fund products. However, the study revealed that there is a moderate shift towards Mutual Fund products from present circumstances to the future investments. The hypothesis also stated that there is a moderate and continuing shift towards shares and debentures. However, the study revealed that the preference of the investors has shifted away for shares 24% and for debentures 66% from present circumstances to the future investments.
26. The preference for traditionally important financial instruments viz small saving, bank and company fixed deposits have also shifted away during the same period. However, there is a massive shift towards traditionally important financial instruments viz., life insurance policies, and Government securities.
27. The sub-hypothesis of the study was that the preferences of Middle class investors in Bangalore towards financial instruments differ according to the sex, age, education, occupation and income level of the investors.
28. The study revealed that the investors prefer various financial instruments uniformly for their next year's investments irrespective of their age, level of education and occupation. However, their preferences for various financial instruments for the next year's investments differ on the basis of their sex and level of income.

## Conclusion & Suggestions

The purpose of this study was to conduct an empirical research on factors that affect the investment behavior of retail investors. More explicitly, the objective was to study the retail investors' behaviour on various avenues in Indian market with special reference to Bangalore. Behavioral finance, which is a latest paradigm of finance seeking to enhance the standard of financial theories by introducing behavioral aspects to the investment decision-making process, providing the theoretical basis for the research.

In addition to behavioral factors, other structural and cultural factors essential for the speculative bubble have also been considered for further development of the theory to study the investor psychology. Stock market participants have, for a long time relied, on the perception of efficient markets and rational investor behavior when making investment decisions. However, the idea of rational investors and market efficiency is proved wrong in many researches. In practice the market inefficiency in the form of anomalies, and irrational investor behavior have been observed more repeatedly during the past decades. The results in this thesis, acquired from the questionnaire carried out, advocate that the investors' behavior was in fact to some extent irrational when considered from a standard finance point of view and that the composition of investments has altered as a consequence of the retail investors' speculative behaviour.

The study indicated that all the respondents invest in the market with the motto of earnings only and that the majority of the investors are worried about the implications of entry and exit from the market. Moreover, a loss in capital appreciation followed by the change in the market trend is main concern for worry for the investors at the time bull phase in the market and most of the investors get advice from portfolio management services. All the respondents felt that investment in mediclaim is a safer avenue for them.

It has been proved and established by this research that the socio-economic characteristics have association with the frequency of trading and investment strategy adopted by the investors.

Also, the same socio-economic characteristics have association with the source of information on Investment opportunities, intermediaries who provide necessary information regarding the various investment avenues are to be strengthened further, so that the same intermediaries can further improve the investors' confidence.

The investment horizon of the respondents specifies that a majority of investors have an investment horizon covering a period of more than a year. Besides, the respondents did not increase their frequency of

monitoring, which indicates that investors' investment objective is long-term and they think the market crash is a short-term phenomenon and will revive again. The composition of investments has changed to some extent after the market crash. The investors have reduced their allocation of investments in companies with high risk and high returns and moved towards companies with stable but lesser returns.

The abnormally high returns of stocks in the market experienced before the crash may have induced the investors to take higher risk but the decline in the market after January 21, 2008 has reversed this tendency. This change in investment strategies of investors was also conformed in the statistical analysis, which indicates a significant difference between the investment strategies and the investments the respondents made since the bear market began after January 2008 market crash.

From the analysis, it is also found that a majority of the investors who responded to the questionnaire considered the market was overvalued during the period before the crash. Heuristics, a process by which people find things out for themselves typically by trial and error, may help to clarify why the market sometimes acts in an irrational manner. How investors read information is a significant question to investigate. The uninterrupted increases in stock prices during the period from 2005 may have contributed a very optimistic enthusiasm among investors, which led security prices to overstate.

People thought they were following winner stocks blinded by easy profits and they abstained from contrary financial exposure even though faced with conflicting information. This phenomenon was further supported by herd behavior, which respondents admit as an important contributing factor to the overvaluation of the market. Investors who thought the market was overvalued during the crash think that the market is currently undervalued which is an instinctive result. This is also conformed through the statistical analysis. The statistical analysis also showed that there was a distinction in the behavior of students towards investment in companies before and after the crash of 2008.



This study assumes that even though a majority of the investors realised the gravity of speculative bubble, they, however, continued their investment activities knowing that the risk for a collapse is imminent. This exemplifies as an irrational investor behavior. It is evident from the present study that if investors recognize the psychological factors which affect their decision-making process, they can avoid the occurrence of such speculative bubbles and enhance the efficiency of today's global financial market. From a long-term historical viewpoint, investing in the equity market has been profitable and the realization of behavioral factors affecting this market can help to better understand its periodic unpredictability

The study examines the factors that determine the competence level of individual investors. Investors in the present study have invested in various investment vehicles in the BSE and NSE. The study also explores whether the competence level of individual investors affects their trading behavior. The study develops a questionnaire which included 19 items related to: age, education, gender, income, investment, and self perceived competence of the individual investors. Age, education, and income were found to be the most influencing factors of the individual investors' competence in the stock market activities and trading behavior.

The results of the study reveal that a person invests as per his/her own judgments once he/she perceives himself/herself more knowledgeable about investing. Since this is a study of behavioral finance, the study tried to measure investors' competence by using the survey method rather than relying on assumptions about psychological biases. It finds that investors having high, high to moderate income and professional qualification are supposed to be more confident about their competence when it comes to trading in stock markets. It was observed that highly competent investors show more frequent trading behavior.

This study, however, has certain limitations. The survey conducted was limited to a particular geographic location. This is because of resource and time constraints. Though the conclusions drawn from this study can be extended to general investor behavior, more extensive similar studies can be carried out with

a larger sample of individual investors. This may lead to more authentic results of individual investors trading behavior. This study measures the investor behaviour and its impact on investor trading behavior by using survey evidence.

The study finds that level of education and income of individual investors are likely to have a significant impact on their behaviour, followed by factors, such as, age, investment and gender. Through this study, it was shown that investors who feel themselves more competent tend to trade more frequently than those with less perceived competence. This trading behavior is attributed to the competence effect. Thus, it can be said that competence effect rules the trading behavior of individual investors.

The psychological factors put forth in this study are two-fold. First, any factor leading an individual to believe in the occurrence of a drop is relevant because such beliefs will act as self-fulfilling prophecies. Those beliefs can stem, for instance, from herding, market rumors, fear of contagion or panic (or a combination of all these). We do not sort which one seems most likely, but rather point out that they are all relevant because they lead to the same phenomenon-a crash anticipation. Second, it must be true that all the agents in the economy agree on the anticipation (rumors have reached the whole market for instance). This second point must occur so that anticipations can have a significant effect on prices formation. This view is consistent where crashes are driven by successive releases of public information on the actual state of the economy.

The preference for traditionally important financial instruments viz small saving, bank and company fixed deposits have also shifted away during the same period. However, there is a massive shift towards traditionally important financial instruments viz., life insurance policies, and Government securities.

### **Managerial Implications**

It has been seen that tendency to conform to behavioral finance was predicted by experience and personality. However, the position of behavior finance is not considered as an anomaly or as an error. It should be noted that the concepts that drive this phenomena has been evolutionary and based on natural selection.

However, one should be aware of these tendencies and the factors that are associated with them and adequate care should be taken during investment decisions. One has to be aware of ones' own (and of others!) heuristics and frame dependencies, which are generated by experience and personality.

A number of scientific researches focusing on the stock market have not only developed new theories on capital markets but refined existing ones which are considered sophisticated and efficient in the interpretation of relevant information.

### **Avenues for Future Research**

1. Future research could use variables assumed in this study and test more specific misevaluation from investors' biases. This study provides the empirical evidence that the information uncertainty amplifies the effect of psychological biases, but does not focus on any specific type of psychological biases. For example, the research on retail investors could use information uncertainty as an indicator to distinguish the investors' biases and rational behavior. If the trading of retail investors is motivated by overconfidence or narrow framing, then one should observe more such trading behavior on the firms with higher information uncertainty.
2. It would be difficult to explicitly distinguish information uncertainty from information asymmetry. A theoretical study in the context of cognitive process as well as rational reaction is required to clarify the different impacts of information uncertainty and asymmetry. The potential in this orientation is considerable in both expanding the area of understanding and practicing in real market. More disclosure of information would certainly lower the information asymmetry, while on the other hand, it may fill the market up with noise that increases the estimation costs and risks.
3. The present research shows individual investors as well as corporate managers tend to issue more equity when previous information uncertainty is high and market valuation is high. The behavioral finance suggests that the market timing phenomenon could be due to either irrational market traders,

or irrational managers' decisions. By comparing the usage of stock exchange proceeds between issuers with high and low information uncertainty, one may opine whether the market timing behavior can be explained by irrational investors or not. If an investor observes the overpricing and knowingly sell overpriced stocks, he should not use the proceeds to do investment because the true cost of equity is high. On the other hand, if investors believe that high market valuation indicate the low cost of equity or good market outlook; they may over invest the proceeds to non-profitable opportunities.

4. This study requires further research on information uncertainty. The study adopts several proxies for information uncertainty because there is no one universally agreed proxy in the literature. Each proxy may capture other firm's characteristics. For example, the idiosyncratic volatility is the main proxy in all the empirical observations. This proxy has been widely used to measure price synchronicity among the individual investors. Although each proxy alone may be questioned for its appropriation, they jointly would provide enough explanation power to indicate the influence of information uncertainty. The reason is that the data of stock market is limited to form other proxies, such as individual investor ages, and return expectations etc., are not comparable across the markets. Surely, with more understanding on the characteristics of information uncertainty, it may be possible to find one proper and unique proxy to test this issue in future.

### **Conclusion**

From the above discussion it can be observed that, the securities markets in India have made enormous progress in developing sophisticated instruments and modern market mechanisms. The key strengths of the Indian capital market include a fully automated trading system on all stock exchanges, a wide range of products, an integrated platform for trading in both cash and derivatives, and a nationwide network of trading through over 46,184 corporate brokers.

A significant feature of the Indian securities market is the quality of regulation. The market regulator, Securities and Exchange Board of India (SEBI) is an



independent and effective regulator. It has put in place sound regulations in respect of intermediaries, trading mechanism, settlement cycles, risk management, derivative trading and takeover of companies. There is a well-designed disclosure based regulatory system. Information technology is extensively used in the securities market. The stock exchanges in India have the most advanced and scientific risk management systems.

The growing number of market participants, the growth in volume of securities transactions, the reduction in transaction costs, the significant improvements in efficiency, transparency and safety, and the level of compliance with international standards have earned for the Indian securities market a new respect in the world.

First, it shows that the stock prices would suffer more mis-evaluation when the recent news to the market is hard to interpret. Therefore, investors should avoid investing in the underlying firms until the uncertainty is resolved by new information which has more precise indications off firm's fundamental value.

Also, this study suggests the increased arbitrage risk for institutional investors who may have better knowledge of firm's value. The mis-evaluation or arbitrage opportunity of stocks with information uncertainty is related to the investor's psychological biases. As Hirshleifer (2001) argues, the noise traders who believe in their personal evaluation could 'arbitrage away the arbitrageur' even without the knowledge of firm's true value. As long as the force of investors' biases is strong enough to impact the stock price, arbitrageurs should be cautioned to choose the right time of trading against the mis-evaluation. A proper indicator for arbitrageur to assess the mis-evaluation persistence could be idiosyncratic volatility or dispersions among analyst forecasts.

Moreover, the fund managers should be aware that information uncertainty imposes the cost of equity issuance in addition to adverse selection cost. The announcement effect is more negative for firms with larger information uncertainty which may off set the benefits from selling overpriced stocks. Previous

research shows that adverse selection cost could be lowered by disclosing more information to the market. However, information uncertainty could not be efficiently mitigated from the corporate side as it partially stems from the nature of business.

This study however, has some limitations and requires further research on information uncertainty. The study adopts several proxies for information uncertainty because there is no one universally agreed proxy in the literature. Each proxy may capture other firm's characteristics. For example, the idiosyncratic volatility is the main proxy in all the empirical observations. This proxy has been widely used to measure price synchronicity among the individual investors. Although each proxy alone may be questioned for its appropriation, they jointly would provide enough explanation power to indicate the influence of information uncertainty. The reason is that the data of stock market is limited to form other proxies, such as individual investor ages, and return expectations etc., are not comparable across the markets. Surely, with more understanding on the characteristics of information uncertainty, it may be possible to find one proper and unique proxy to test this issue in future.

Another potential limitation in this study is that empirical tests in only one stock markets have been carried out to test the influence of information uncertainty in stock price continuation, while behaviour of investors in other comparable stock markets within the state has not been covered. But an in-depth analysis of these two markets and the difference between them would be trivial for the future study. The reason for the study of Bangalore stock market is simply because the equity market has more issuance volume that has given greater access to statistics. Thus, nevertheless the impact of information uncertainty would be similar in other stock markets as well of course, with some degree of relative differences.

Human behaviour is the powerful, uncertain & irrational wild card in the equation for analyzing, understanding and predicting during bull phase. Insights from human history suggest the inverse that the human is the only real constant, and it teaches us patterns repeated across periods, cultures, wars and industries because

while the circumstances change, people do not. The investors who can engage in investment of various avenues at Bangalore can apply presence of mind while investing and thrive in long term.

## Drivers of Employer Motivation in Banking Sector - A Radar Design Approach

M.J. Subramanyam\*

### Prolegomena

Motivated employees play a significant role in the long-term success of any organization, as they substantially contribute to the overall organizational effectiveness and performance. Such employees provide organizations the sustainable competitive advantage. Therefore, motivating employees becomes critical to individual performance and organizational productivity. However, "Motivation as a concept represents a highly complex phenomenon that affects, and is affected by, a multitude of factors in the organizational milieu. ... An understanding of the topic of motivation is thus essential in order to comprehend more fully the effects of variations in other factors (such as leadership style, job and salary systems) as they relate to performance, satisfaction and so forth" (Richard M Steers and Lyman W Porter, 1979). But motivating an employee is not an easy job and poses a greater challenge to many managers as motivation depends both on the individual as well as on the outside forces. In other words, motivation comes from within an employee and also from external sources. The former is called the intrinsic motivation, which is internal or self-driven and the latter is called the extrinsic motivation, which is dependent on external forces.

Kruglanski, Alon and Lewis (1972) point out that "intrinsically motivated tasks are those that are interesting and enjoyable to perform – irrespective of possible external rewards" and "Extrinsic motivation, on the other hand, deals with behaviours that are motivated by factors external to the individual".

Further, an intrinsically motivated person requires only a little coaxing or cajoling, whereas the activity of an extrinsically motivated person is controlled by external rewards or outcome like, money, recognition, appreciation, force, pressure, social support, acknowledgment etc.

In most situations, intrinsic motivation is highly preferred as it is voluntary, internal, does not require any force to build more momentum in the individual resulting in higher quality output. Further, people with intrinsic motivation are more co-operative, less aggressive with other people, and sustain their interest in the subject for a longer period of time. Extrinsic motivation, on the other hand, is directly opposite to intrinsic motivation, because the motivation comes from outside an individual, such, for example, as from rewards, appreciation, money, praise, promotion, or grades. In other words, the rewards provide

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\* Based on the Ph.D. Thesis submitted to the Faculty of Management Science, Anna University, Chennai. This Research work was carried out under the guidance of Dr. N.S. Viswanath, Director, M P Birla Institute of Management Studies, Bengaluru

satisfaction and pleasure, but not the task itself. Thus, an extrinsically motivated person will work on a task, even when he has no interest in it, because of the anticipated satisfaction or rewards he will get from the outside sources.

**Need for Employer Motivation in Banks:** Although the use of technology in banks has revolutionized the working of banks by transforming them into a technology intensive and customer friendly institution, yet the importance of human capital is not reduced. "Human Resource Management is important for banks because banking is a service industry. Management of people and management of risk are two key challenges facing banks. How you manage the people and how you manage the risks determines your success in the banking business. Efficient risk management may not be possible without efficient and skilled manpower. Banking has been and will always be a 'People Business'" (Chakraborty, K.C. 2012). It, therefore, follows from this that organizational goals cannot be achieved without committed and motivated employers in the organization.

In the words of Allen, "poorly motivated people can nullify the soundest organization." (Grewal and Ahluwalia, 2008). Organizations, therefore, need motivated employers who, through their followers, are able to produce extraordinary results and bring high value to the organization. This strongly underscores *the need to motivate the people in charge of the branches of Banks* so that they, in turn, can motivate their staff to face the severe competition and challenges of the modern banking sector. "In order to have a cutting edge in this area, the right kind of technology is not sufficient – rather a proper organizational climate and the right PEOPLE COMPETENCIES BECOME MORE CRITICAL." (Rai, Vinod. 2008) "With most banks now adopting modern technology, including new delivery channels, technology no longer remains a major differentiator among banks. You must remember that the key differentiator amongst the banks in the decade ahead will be the ability to harness the human Capital and building a competitive advantage on the strength of their human resources" (Rai, Vinod, Ibid). Middle managers, in any organisation, act as the lynchpin

between the Top Management and the employees by themselves being facilitators, nurturers and motivators. They translate the organizational goals and strategy of the Top Management into concrete, comprehensive and recognizable business actions by performing a clever act of balancing the changing dynamics of the employees.

**Role of Branch Managers of Banks:** Branch managers in banks, among others,

- Shape and sharpen the skills of the employees to business needs of the bank and make them perform at their best.
- Act as effective facilitators and nurturers enabling their staff to provide excellent, courteous and pinpointed customer service to create 'a Wow! Customers' in the branches.
- Encourage the staff to come out with new and innovative ideas to cut down the unnecessary procedural delays to further improve business prospects of the branch.
- Engage, connect and motivate the employees to work willingly and happily by adopting a healthy, positive and flexible leadership style.
- Explore newer business opportunities for the bank branches in order to increase the bottom line of the bank branches.

**Problem Statement:** In any other organisations, "Middle managers are critical to improving overall engagement and corporate performance. They see the vision at the top of the organisation and the pain of the employees at the bottom. Middle managers, however, frequently do not have the support of senior management or effective levers to do their jobs and provide assistance to their employees. In fact, for the past decade, middle managers have been cast aside or neglected. The organisation of the future, however, requires this group to be strong, effective, and prepared. Middle managers, who supervise the majority of employees, are key to bringing engagement back" (BCG. 2010). Most of the Branch or Middle Managers, in Indian banking set up are also placed in a similar situation, where they play a critical role in

improving overall engagement and bank's performance, by translating the vision of the Top Management into definite achievable business plans. In other words, many Branch Managers successfully manage the business of the branch even when they do not get adequate support and encouragement from the top management. A study is, therefore, undertaken to ascertain the major drivers of employer motivation, which impels or forces these middle managers to carry on their jobs effectively to achieve the ever challenging business targets.

A Literature survey of more than 100 foreign professional journals shows limited research on this topic of **"Drivers of Employer Motivation in Banking Sector"**. A Study of business performance of these Branch Managers of banks, show they are able to produce, sometimes amazing but unheralded results, by improving productivity and performance of their employees. In other words, the branch heads are able to translate the Top Management's Vision into concrete achievable business plans in a professional way by taking ownership and accountability in them. Since not much research has been done on the major factors, which drive or motivate these branch managers to perform exceedingly well, and since the road, in this area, is less travelled, the present investigator is prompted to take up this subject for investigation and research with respect to banking sector in Bengaluru City, South India.

## Research Design

**Need for the Study:** Employees form the backbone of any organization as they perform all the essential tasks and help the company to successfully realize its goals. "Motivated people will overcome the obstacles, defy odds and accomplish more" (Bates, Suzanne. 2009). When employees are motivated in the right way, they will not only perform a good job but also bring success and good reputation to the organization, besides making the process of running business smooth and pleasant. Studies indicate that employees report more job satisfaction and motivation when managers lead themselves by example, motivate others, use a positive and healthy language to communicate, provide freedom to the employees in their work place and do not interfere in their work unless absolutely required.

Banks in India, at all levels, have an excellent pool of intelligent, smart, competent and computer savvy personnel, who need to be identified, groomed and motivated to accept challenging roles early in their career. "The main role of HR in Public Sector Banks (PSB) will have to be to continuously prepare the people to drive their organization to meet the aspirations of customers and help achieve the expectations of various stakeholders"(Rai Vinod. 2008. *ibid*). "The primary task of managers is to get to contribute activities which help to achieve the mission and goals of an enterprise or of any department or other organised unit within it. Clearly, to guide people's activities in desired directions requires knowing, to the best of any manager's ability, what leads people to do things, what motivates them" (Harold Koontz et al.2008).

Therefore, a study of the major factors, which motivate them to perform well and the use of the motivational techniques they use to inspire their subordinates and the HR practices they adopt, the leadership quality they display and the willingness they show in serving the customers with passion - all these makes the Study interesting and worth pursuing. The Study, it is hoped, may reveal remarkable insights, which may be helpful to other branch managers, who also want to be successful. Such branch managers can follow their method and techniques to replicate the results in their branches.

**Recruitment Practices in Banks in India:** The Institute of Banking and Personnel Selection (IBPS), which started its operation in 1975, has been conducting a mandatory common written examination (CWE), for any aspiring candidates to get selected as Officers or Clerks in banks in India. In other words, the recruitment and selection of personnel is taken care of by a separate independent body called IBPS. In view of this, *employers, for the purposes of our investigation, will be the Branch Managers of Public Sector Banks, who are, in a sense, a representative of bank management and also function, at the micro level, as the CEO of the branch.*

**Objectives of the Study:** The Objectives of the Study are to:

- Find out the major drivers of motivation that propel bank branch heads to perform effectively at the branch.
- Assess and analyze the effectiveness of the major drivers of motivation.
- Come out with suitable suggestions and recommendations for improving employer motivation.

**Research Methodology:** Keeping the objectives of the Study in view, a radar approach is considered appropriate for this research Study. For the purpose of exploration, the investigator will review existing literature in the relevant research area to determine corroborative studies and also identify the research gaps. Experience, existing knowledge and survey approach will be used for exploration. The entire study will be described using chapter scheme.

#### **Expectations of the Study:**

- The present Study is expected to provide an insight into the major drivers of employer motivation, i.e., factors that drive the Branch Heads of PSBs, Bengaluru City for the realization of the effective business targets.
- The present Study is expected to add to the existing literature of Employer Motivation in Banking Sector providing useful materials for bank people to effect further improvements or conduct future research in their motivational techniques.
- The Study is also expected unearth a few lacunae or deficiencies that may be existing or present in the current scheme of employer motivation.
- The Study is also expected to throw some useful suggestions and recommendations for improvement in the scheme of motivation.
- Since the present Study is limited a few PSBs and that too on employer motivation, future research awaits conducting of similar studies in other banks and on different aspects of motivation.

#### **Limitations of the Study:**

1. The present Study is confined to the Public Sector Banks only, though the Study could be extended to any other Industry.
2. Further, the Study is confined to the Branch Heads of a few Public Sector Banks only although it is possible to extend this Study to Branch Heads of other Public as well as Private Sector Banks also.
3. The Study further restricts itself to Branch Heads of Public Sector Banks (PSB) only in Bengaluru City, though Public Sector Banks have branches all over India.
4. PSBs have different categories of employees on its rolls such as General Managers, Deputy General Managers, Regional Managers, Branch Heads, Managers, etc. However, this Study confines itself only to the Branch Heads of these banks in Bengaluru City.

#### **Hypotheses to be Tested**

The following are the hypothesis of this study.

#### **Major Hypothesis:**

**H<sub>0</sub>: All Branch Managers as drivers of Employer (BM) are not strongly motivated.**

**H<sub>1</sub>: All Branch Managers as drivers of Employer (BM) are strongly motivated.**

The different sub-hypotheses are given below:

Sub Hypotheses	
H01	Branch Managers do not have convincing skills
H02	Branch Managers do not have skills of projection
H03	Branch Managers do not have instincts of performance
H04	Branch Managers do not have skills of getting work done
H05	Branch Managers do not have belongingness to the organization
H06	Branch Managers do not have best habits and practices
H07	Branch Managers do not have mastery of skills
H08	Branch Managers do not have skills of synergy



All these hypotheses are to be tested with respect to respective alternatives.

### **Statistical Tools used:**

#### **Sample Design**

Quota sampling method with a quota size of 200 was determined for the study. This method entails selection of respondents from sampling frame and move on from whom further leads are obtained after collecting data from them. The leads so obtained are then contacted, which would further lead to manifold or multiple leads. This process of sampling selection is continued until the determined sample sizes of 200 respondents are obtained.

#### **Research Design**

While many studies have focused on “Employee Motivation”, the present study, which is on a grey area of motivation, viz., “the Drivers of Employer Motivation in Banking Sector”, has been rarely addressed. Interestingly, in the Indian context, and in banking sector in particular, a Branch Manager (BM) or the Branch Head (BH) simultaneously plays the confounding role of an employer and an employee. The description of this role as a target needs critical outlook in the framework of banking system, where banking institutions were established in Public Sector, under Banking Regulation Act, 1949, and as amended from time to time. The design of research, mentioned here below, is detailed under several headings to bring in clarity under the framework within which the study is designed.

#### **Universe of Study**

The universe of study refers to the place where the study is conducted. In this study, the Branch Managers (BM) of the Indian Banking System, who carry out their allocated functions, responsibilities and certain defined duties in banks, form the universe. Each branch manager of a Bank in India ***acts both as an employer as well as an employee of the bank.*** In other words, the BM is the CEO of the branch, who leads his team of employees from the front, to achieve the allocated organisational goals. The BM will be given specific annual business targets by the Top Management to

plan, prepare and perform, within certain specific parameters, to achieve the allotted results. The formal structure of a branch organisationally, could be defined, according to the type of the branch and the BM will have, depending upon the type of the branch, a common role and responsibility. In other words, the BM works as the CEO of the branch, who performs his role, with officially delegated power and influence, which he gets, within the operational area, by virtue of his position in the bank. Simultaneously, the BM also works as an employee of the bank in the large organisational perspective, thus performing dual interest associated with the Branch. The BM, despite this dual role, will be held accountable for the performance of his unit to a higher level of hierarchy executives. The BM, in order to implement certain executive actions beyond the organisational frame work, draws his power from the circulars issued from their HO from time to time in this regard, which provide the necessary teeth for him to act. Further, to update his knowledge and skills, the BM is also periodically subjected to need-based training programs at the bank's respective training colleges of the bank and also in other training centres run concomitantly by other banking organisations. They are also deputed for need based advance training, in certain specialised areas, in reputed management training institutes of the country. His subordinates also, likewise, are trained and motivated to perform banking tasks by human interface with the bank customers. In view of all these things, the BMs need continuous and periodical reinforcement to further rejuvenate themselves for taking the branch business to an imposing position. While personal objectives of the BMs are to, further climb up the career ladder in the hierarchy, they should also, likewise, expected to help their subordinate employees to move up in their career path. Since the critical aspects of functioning of a branch in the overall growth of the organisation is crucial, BMs with dual responsibility and dual accountability, have to project themselves as an independent and inter-dependant leaders, within the organisational set up. The critical characteristics of the target group under study can be summarised as Dual Focus, Dual Leadership and inter-related multifarious relationships, manifested in terms of strategies actions and results.



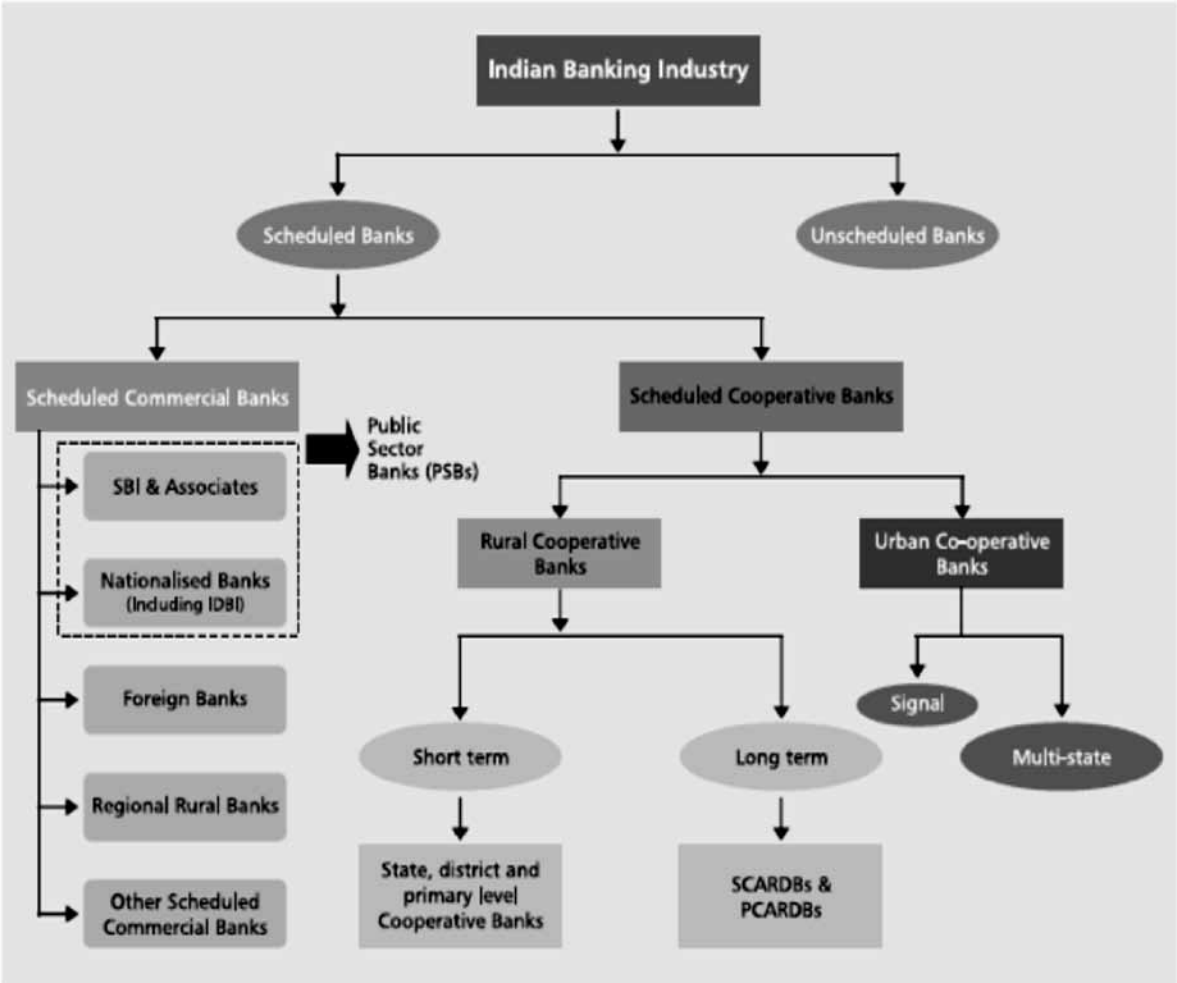
**Area of Study and Choice of Organisation**  
**Structure of Indian Banking Industry**

The Indian banking sector, being the barometer of the economy, has shown impressive growth and development over the years by adequately supporting the country's economic growth.

Commercial Banks, in India, are established as per the Indian Companies Act, 1913. These commercial banks are broadly classified into: 1. Scheduled Banks and 2.

Non-Scheduled Banks. A scheduled bank, according to the RBI Act, 1934, is a bank which is listed in the second schedule of the Reserve Bank Act, 1934. Banks not included in this list are called non-scheduled banks. State Bank of India and its associate banks, Nationalised Banks, old Private Sector Banks, the Regional Rural Banks (RRBs), Foreign Banks operating in India, and other private sector banks come under purview of Scheduled banks.

**Exhibit 2.2: Structure of the Organised Banking Industry**



Source: D&B Industry Research Service

[Source: Internet]

Commercial banks in India contribute around than 92 per cent of the entire banking business in India—occupying a dominant position in the Indian banking system. The

State Bank of India and its 5 associate banks along with another 20 nationalised banks and Bharatiya Mahila Bank (Bank for Women) are together called the public Sector Banks (PSB). All the PSBs have branches

in many States, where they expand and conduct their daily banking operations. Some of these banks have concentration of branches, where there is high density of industrial centres and also in specific rural pockets. The Bharatiya Mahila Bank, a newly established bank for women, has 103 branches all over the country at present, but they have plans to open more than 700 branches in the next 2 years. Although these banks are vested with functional autonomy, they are under the strict and close vigil of the Reserve Bank of India (RBI), which monitors their financial activity on a regular basis through its on-site and off-site mechanisms. All these PSBs operate in an environment of cut-throat competition due to globalisation, privatisation and liberalisation, technological innovations and cross-border financial inflows. They make all round efforts to increase their outreach through augmenting their customer base by effectively mobilising capital, leveraging technology enabled payment systems and introducing more innovative and useful loan and demand products for their demanding customers. The severe competition and technological advances and innovations have forced the banks to revise their policies and strategies frequently so that they can upgrade and diversify their skills to face the tough future challenges of their times.

**Population and Coverage:** The population of the target group consists of BMs of PSBs working in Bangalore city, South India. The purpose of selecting this target group is to capture variation, which were part of their banking activities and have led to certain levels of bank performance. The size of the population is, thus, restricted to Branch Managers (BMs) of the PSBs in Bangalore City, South India, which is also known as the IT capital of India. The PSBs cover about 70% of business transactions in India. Bangalore City, also nicknamed as Silicon City of India or Silicon Plateau of India, is ideally suited to conduct any market research in the area of business, education, and economic activity of global importance. Bangalore City, (now rechristened as Bengaluru), was chosen as the field of study since majority of the PSBs branches have well-qualified and experienced branch managers who have good exposure to various types of banking transactions. Further, all the PSB branches in Bangalore are IT enabled branches,

which provide the latest technology supported services. There are at present 25 PSBs in India, as already stated, roughly cover about 70% of the total turnover of all banks in India.

### Target Group

A branch manager, who has put in a minimum of three to five years of independent service in the position of a branch head, is the target domain or the incident for this study. It should be noted that before an Officer is promoted and posted as the Branch Manager, he should have sufficient experience, as Assistant Manager for at least a few years, where he will have ample opportunities to learn important banking transactions, acquire knowledge about various deposit as well as loan products, to know about the organisational climate and culture, the types of customers and their requirements as bank clients. Now-a-days, in majority of the cases, an Officer is promoted to the rank of Branch Manager when he is computer savvy and has a CAIIB (Certified Associate of Indian Institute of Bankers) qualification to his credit. This CAIIB exam is a standard bank employees' exam, which is conducted by an All India body, viz., the Indian Institute of Banking and Finance, to provide the bank employees, the latest knowledge and skills needed to run a sophisticated branch on scientific and modern lines. Thus it can be safely inferred that a Branch Manager will have sufficient exposure to important banking transactions and a CAIIB qualification (in most of the cases) before he is elevated to the position of Branch Manager of a bank. Further, it can again be safely assumed that an intelligent, computer savvy and experienced Officer will be posted as Branch Manager of a branch in Bangalore City.

### Operational Definitions

Some critical operational definition, in the context of Banking Sector in India, is given here below:

- **Bank:** A Bank in India, refers to a bank, which is included in the Second Schedule of the Reserve Bank of India. Act, 1934. Only those banks, which fulfil the conditions laid down, vide section 42 (6) (a) of the Reserve Bank of India, Act, 1934, are included in the second Schedule of the RBI Act, 1934. These conditions are given below:

- 1) The paid up capital and the collected funds of bank should not be less than Rs. 5 lakhs.
  - 2) Any activity of the bank should not detrimental to the interests of the depositors. Further, Public Sector Banks are those banks, in which, the Government of India has a majority stake i.e., more than 50% stake is held by the Government of India.
- **Organisation of a Bank:** is that bank, which is organised for its effective functioning with appropriate hierarchical levels.
  - **Target Group:** A Branch Manager of a Public Sector Bank, is a person, who has been assigned or delegated independent charge of a branch of a bank. This means that Branch Managers of Development bank, Foreign banks, Regional Rural Banks (RRBs), Urban Co-operative Banks, Primary Agricultural Co-operative Societies are **NOT** a part of the target group.
  - **Branch Manager:** A Manager, who has been promoted to the position of Branch Manager, by an appropriate internal promotion process of the bank.
  - **Qualification of a Branch Manager:** A graduate in any discipline, who has passed the CAIIB exam of Indian Institute of Banking and Finance and is computer savvy and has a prescribed minimum number of years of experience as an Officer of a branch. Sometimes, banks also directly recruit Officers of different banks for the post of Branch Managers, provided they meet certain prescribed conditions and pass the prescribed interview, which will screen the candidates applied, to select the best of the lot. In such cases, the Bank will provide a comprehensive in-house training before he is put on floor level as a Branch Manager of a Branch.
  - **Employer:** A Branch Manager, who has put in an independent service as the Head of a branch, is functionally considered as an employer for his subordinates in the branch of a bank.
  - **Employee:** The employer defined above is also an employee of the bank in the organisational hierarchy, from the macro point of view. This means the employer performs the role of an employee of the bank as well.
  - **Employer - Employee Relationship:** That functional relationship that empowers an employee to exercise his functional power for reaching the expected performance level in the branch.
  - **Drivers of Motivation:** Based on the foundational theory of motivation and habits of effective people, 8 drivers of motivation have been identified, which influence their organisational performance. Seven of these drivers are based on the Stephen Covey's famous "**Seven Habits of Highly Effective People**". One more driver - Influence - has been added, making the total Drivers of Motivation (DM) to eight. All these eight drivers are detailed as below:
    - I. Power of Informing: These attributes will influence an employee to perform better in an organisation.
    - II. Understanding the Mysteries of the Mind: These attributes or trait that facilitates functional efficiency.
    - III. Basic Instincts and its Influence: Basic Instincts are that part of the personality drawn from inheritance or derived from experience, which makes performance easy and effective.
    - IV. Employee's Characteristics: Attributes present in an employee, which are pronounced or exhibited in an operational situation.
    - V. Self-Belongingness: This is an 'inherent' desire present in a person which persuade a person to perform better.
    - VI. Workplace Habits: These are beneficial practices, which facilitates harmonious, proactive, healthy relationships leading to continuous improvement in the quality of work.
    - VII. Acquiring Mastery over Skills: That skills set, mastery of which will make a person stand out from all others in an organisation.
    - VIII. Synergy: The ability to release the potential, but hidden energy, to work together with enthusiasm and coordination, even under adverse and unfavourable situation and discomfort criticisms.

## Drivers of Employer Motivation:

Based on the fundamental behaviour theories of motivation and habits of successful people, 8 drivers, which may influence their performance have been identified. These eight drivers of motivation are is given below:

1. Power of Informing,
2. Understanding the Mysteries of Mind,
3. Basic Instincts and their Influence.

4. Employee's Characteristics.
5. Self-Belongingness.
6. Workplace Habits.
7. Mastery of Skills and
8. Synergy.

The attributes that influence each of these drivers are identified on the basis of observation, conversation and characteristics developed at the work place.

Sl. No.	Power of Informing	Understanding The Mysteries of Mind	Basic Instincts & its Influence	Employees Characteristics
1	A1 = Persuasion	A12 = Anticipation	A21 = Greed	A 36 = Appreciation
2	A2 = Convincing Ability	A13 = Cleverness	A 22 = Jealousy	A37 = Sacrifice
3	A3 = Influencing	A14 = Planning	A 23 = Fear	A38 = Helping Attitude
4	A4 = Coaxing	A15 = Strategy	A 24 = Depression	A 39 = Training/Teaching
5	A5 = Negotiation Skills	A16 = Game Plan	A 25 = Anger	A40 = Motivation
6	A 6 = Inner Urge	A17 = Tactics	A 26 = Curiosity	A41 = Leading by Example
7	A7 = Compel	A18 = Thinking	A 27 = Shyness	A42 = Empowering Subordinates
8	A8 = Appreciation	A19 = Vision	A 28 = Love	A43 = Delegation
9	A9 = Inducements	A20 = Mission	A 29 = Modesty	A44 = Risk Taking
10	A10 = Encouragement		A 30 = Inquisitiveness	A45 = Reactive
11	A11 = Proactiveness		A31 = Relationship	
			A 32 = Positivity	
			A 33 = Acquisition	
			A 34 = Responsiveness	
			A 35 = Devotion	

Sl. No.	Self-Belongingness	Workplace Habits	Acquiring Mastery of Skills	SYNERGY
1	A46 = Commitment	A56 = Making People Proactive	A64 = Communication	A76 = Working Together
2	A47 = Dedication	A57 = Goal Setting	A65 = Leadership	A77 = Creating an Environment without ambiguity
3	A48 = Perseverance	A58 = Time Management	A66 = Decision Making	
4	A49 = Trust	A59 = Practices	A67 = Conflict Management	
5	A50 = Co-operation	A60 = Understanding each other	A68 = Stress Management	
6	A51 = Responsibility	A61 = Synergy	A69 = Emotional Management	
7	A52 = Accountability	A62 = Sharpening Relationship	A70 = Inter-Personal Relationship	
8	A53 = Participation	A63 = Kaizen	A71 = Marketing	
9	A54 = Uplifting		A72 = Criticality	
10	A55 = Collaboration		A73 = Self-Awareness	
11			A74 = Conversational Skills	
12			A75 = Appraisal	

### Parameter of Study:

The sampling frame contains specific demographic characteristics such as the name, gender, age, qualifications, designation, total gross income, number of years of experience in the bank, since how many years the respondents were branch heads, etc. The average age of the sample is 55.25 years and the average length of service of the sample is 16.90 years. In other words, all the respondents to this questionnaire have put in almost a minimum of 17 years' of useful service in the bank as branch head, and as such, the data collected from the target group reflects their rich and varied banking experience in the Indian context. It has been empirically validated that experiential data set is essential in projecting aggregate human behaviour in

behavioural studies. The defined target group consists of people with demographic specifics and are accepted based on the characteristics.

**Sample Design:** Quota sampling method with a quota size of 200 was determined for this study. A list of branch heads of different banks in Bangalore City was obtained and the BHs of these banks were distributed the questionnaire, prepared specifically for this purpose, to elicit their opinion on the topic of research. Responses, complete in all respects, were collected from those BMs, who willingly responded to the questionnaire. This process of obtaining the filled in questionnaire in all respects was continued until the determined sample size of 200 respondents was reached.

**Instrument Development:** The development of the instrument, required for this study to collect the primary data from the respondents, was done in four phases. In the first phase, personal interviews of functional managers were done, where personal interviews were preceded by a checklist, which identified the list of attributes under each drivers of motivation.

In the second phase, field notes were prepared, containing 2 statements for each of the attributes identified under the 8 drivers of motivation. The draft instrument has two parts – the first part consisting of demographics of the target group and the second part covering statements on motivation. Likert's scale on 5-point reflection, from strongly disagree to strongly agree, were posted next to each statements with 1 denoting 'strongly disagree' and 5 denoting 'strongly agree'.

The third phase was initiated by conducting a study of first instrument "A", with a view to validate and compute reliability of the instrument, by distributing the questionnaire to 43 eligible respondents. The data so collected was then subjected to statistical analysis to assess the reliability of the instrument. Content analysis was, subsequently, done to modify and moderate the statements. The same exercise was, likewise, repeated for the second instrument "B" also. The pilot sample size for instrument B was 51. Statistically, these sample sizes are large in number to meet the criteria of consistency, sufficiency, efficiency and completeness of estimators. Each statement in the instrument represented a variable under the eight drivers of motivation. The Factor Analysis enable us to identify those components, variables and attributes, which explain the overall variability caused by drivers of motivation. The next step was to do content analysis enabling the efficacy levels of the instrument. The attempt was done by verbal interaction method, wherein the respondents were made to make an assessment of the instrument in terms of reflections and responses. The ease with which the respondents reflected on statements enabled us to conclude truthfulness of the reflections. The language of the respondents in terms of words, phrases, jargons, - frequently used in the banking business transactions

validated the instruments. The value of the reliability coefficient for instruments 'A' and 'B', as per the statistical analysis, were 0.909 and 0.922 respectively. Of the two instruments, the instrument which acquired high reliability coefficient and captured high level of variation in factor analysis, in this case, the instrument 'A', was finally selected for the final phase of data collection for the study.

### **Analytical Structure of the Study:**

The present study examines the central tendencies and the variations of the characteristics of the target group as also the relationships between the drivers of motivation. All the eight drivers of motivation are assumed to independently influence the overall performance of the Branch Managers and it is this main assumption of independent influence of each drivers of motivation that is tested in this study. The correlation analysis of the drivers of motivation demonstrates the statistical significance or otherwise of these drivers of motivation. Only those statistical variables – positive or negative – are considered for analysis by testing the null hypothesis of no significance. Simple linear and non-linear model is examined after the analysis of correlation. The choice of the model for the final analysis is based on the value of  $r^2$  = adjusted for redundant independent variables or attributes.

The test of significance of the predictor variables would be attempted by the small sample statistic "t". The value of "t" is given by the ratio,

$$t = \frac{\bar{x} - \mu}{s/\sqrt{n}}$$

Based on the acceptance or rejection of null hypothesis of no significance of mean values, the influence of independent driver of motivation is predicted. The model enables one to make a clear assessment of those drivers that make significant influence on performance of the individual and hence the organisation, i.e., bank branch.

ANOVA technique is used to examine equality of several means of the population as against the alternate hypotheses of at least one of them not equal. This statistical tool will help to find out the differentials of effects of drivers of motivation. That is to say, that all drivers of motivation may not equally influence the



overall performance of the banking organisation. The assumptions, under which ANOVA technique has been chosen, are given below:

1. The model performance is assumed to be fixed.
2. The model is additive.
3. The errors are assumed to be normally independently distributed with zero mean and variance.

**Determination of Sample Size:** The number of BMs to be interviewed is determined by the proportion of males and females arrived at the population. Assuming normal population, the sample size is worked out. Quota Random sampling method with a quota size of 200 was determined for the study. A list of BMs of various PSBs in Bangalore was obtained, to whom the questionnaires, specially prepared for this purpose, was distributed to elicit their opinion on the topic of research. This method entails selection of respondents from sampling frame and move on to other BMs of other bank for collecting data from them. This process of sampling selection is continued until the determined sample sizes of 200 respondents are obtained. A sample size of 200 was determined under dichotomous population for this study, but ultimately 321 responses were collected as against 200 fixed. The BMs were selected, as already said, from the list of Branches of PSBs located in Bengaluru City. The data obtained from the questionnaires, is statistically analysed using Statistical Package for the Social Sciences (SPSS) version 21 for drawing valid conclusions.

### Pilot Study Results

When Superior Officers (SO) motivate their BMs by giving real life examples, then BMs learning becomes easier and faster, as they understand things better. Telling through live examples has far more powerful and easy influence on the BMs than by other means. The correlation coefficient in this case is 0.657, which is significant at 1% level.

As regards, the problem solving skills, there is a strong relationship between the levels of problem solving skills and dependence on SOs by BMs. Skills of problem solving are also associated with the support of the SOs to the Branch Manager. ( $r = 0.666$  at 1% level of significance). Suitable training programs has, therefore,

to be arranged to see that BMs are adequately trained to find solutions to branch problems without often disturbing their SOs.

The best way to lead BMs to success is to strike positively using positional power ( $r = 0.483$  at 1% level of significance). "Employees value supervisors, who have influence in the organisations". (Mann and Hoffman, 1960). SOs should, therefore, lead the BMs in such a way that BMs must feel that they can easily access their SOs, not for the position they enjoy, but because of their professional knowledge, rich experience, helping and encouraging attitude. Further, SOs should conduct themselves in such a way that BMs must respect them for their honesty, knowledge, rich experience, guidance and impartiality in dealing with all BMs.

BMs consider reaching the business targets given by the TM as a challenging task, as is evident from the negative correlation. ( $r = -0.243$  at 1%). One reason for not being able to reach the target given by the TM may be due to unreasonable or tall order targets given to the BMs. Targets given to the BMs should be reasonable, achievable and based on the potentiality of that particular area. SOs should, therefore, pay attention towards these aspects as otherwise, the BMs may get demotivated by such an illogical and irrational exercise of target allocation.

BMs, after years of experience, find that inculcating positive attitude in their staff helps in converting them into better workers. ( $r = 0.368$  at 1% level of significance). Hence BMs should be careful while communicating the behaviour to their staff and use a positive, healthy and proactive language to their Officers, which will result in desired outcomes.

BMs when they co-operate, with their SOs in the formulation and implementation of business plan, do learn many new things, which adds to their repository of knowledge, expanding and enriching their experience, mental horizon and branch level experience. ( $r = 0.287$  at 1% level of significance). Involving the BMs in such exercises will also motivate the BMs to learn new things, which will help them in facing their day-to-day challenges of banking operations.



Surprisingly, the BMs, do not feel that self-awareness gives effective lens to realise others. ( $r = -0.239$  at 5% level of significance). This is a little bit shocking and therefore, this aspect needs to be further investigated.

The relationship between encouragement and exchange of ideas has a negative value of  $-0.080$ , which is significant at 1% level. This indicates that SOs do not encourage exchanging of ideas by their BMs. This is a little bit disturbing because such an attitude does not augur well for the banks. SOs should, henceforth, strongly encourage the BMs to share new ideas and their experiences, so that they will help the other BMs in enlarging their knowledge and experience. Such new knowledge also helps the BMs to manage their branches effectively as lots of changes are taking place at a fast pace in the banking industry. Arrangements may be made for BMs to meet once in a month at a common place to share their new and unusual experience, latest development, latest procedure adopted, the success stories of respective branches. Such a platform will provide a meeting point for the BMs to update their knowledge, increase their confidence and gain new experience. This highly useful practice was being carried out in one of the public sector banks – Syndicate Bank- at their training college in Bengaluru, where the BMs of all branches of Syndicate Bank in the City would meet once in a month on a Saturday afternoon and share their experiences and success story. The response to this new experiment was really overwhelming. It would, therefore, be worthwhile, if this type of sharing of information, experience and innovative ideas is replicated by BMs of other PSBs in Bengaluru to profit by it.

Negative correlation exists between the BMs referring the disputes to their SOs for solutions and the number of disputes settled by the SOs, who expect good performance from his/her employees. ( $r = -0.007$ , which is significant at 5% level). The SOs, who expect good performance from BMs, should also make it a point to lend a helping hand to the BMs in resolving complicated customer complaints referred to them. Such a positive support will create a feeling of good will, besides boosting the confidence levels of the BMs to handle future complicated customer complaints at the branch level.

Bank employees, despite genuine efforts by the BMs, fail to take even moderate amount of risk at the branches. ( $r = -0.053$ , at 5% level of significance). At present, only BMs are taking risks as most of the Officers are risk averse and don't want to shoulder any responsibility, probably fearing accountability, in case things go wrong. However, this tendency of evading the responsibility has to be arrested and reversed so that enough confidence is built in the Officers to take, at least, calculated risk. Proper training, counselling and helping attitude of SOs will definitely boost the confidence of the Officers in this regard.

Good performance and adhering to the rules and regulations and practices of the bank are, likewise, negatively associated. ( $r = -0.217$  at 5% level of significance). BMs should avoid often quoting rules and instead cajole and coax Officers to work, driving their point through realistic live examples.

Recognition of good work and awareness of duties and responsibilities intuitively or automatically appear to be positively correlated, but in bank situations these two are negatively correlated, which is statistically significant at 1% level. ( $r = -0.206$  at 1% level of significance). SOs should, henceforth, start recognizing and appreciating the good work of BMs, which will motivate the BMs further to walk an extra mile.

Strong, negative correlation also exists between recognition and encouragement. One of the problem areas is with regard to writing of the Annual Performance Appraisal of BMs by their SOs, who, most of the times, are not objective. While writing the PAs of the BMs, many of the SOs never discuss the performance of BMs with them. In other words, the PAs of BMs, as per the respondents version, are treated as a mere routine affair by Superior (Reporting) Officers and often the performance of the BMs are evaluated subjectively as per the likes and dislikes of the Superior (Reporting) Officers. Majority of the BMs, precisely because of this reason, have orally confirmed this to the researcher that they do not have faith in the annual PAs. This is a serious charge, which needs to be corrected, as otherwise many BMs will be completely demotivated and disappointed, causing a serious repercussion on the morale of the BMs even

affecting the bottom-line of the bank. Superior Officers should, therefore in the larger interests of the bank, be very honest and objective in their evaluation of the Performance Appraisals of the BMs, which will help the Bank Management to promote the really deserving Managers to the next higher cadre.

Strong, negative correlations also exist between walking an extra mile and non-interference in personal affairs of the staff members, practice of values and conversion of employees towards better working employees, - all these are strongly, negatively correlated, the value of  $r$  being, -0.007, -0.016, 0.060, -0.236, -0.381 all at 1% level of significance. The Top Management should take note of all these things and create an appropriate positive, healthy and congenial environment at the workplace to adequately motivate the BMs so that they, in turn, can motivate their Junior Officers to work together as a team to realise the organisational goals.

BM's should, as far as possible, avoid prying into the personal matters of their employees. They should use their positive and healthy communication skills and get additional work done by their Officers.

### Correlation Analysis

The analysis of relationships between variables were analysed, two at a time by computing correlation coefficient and testing for its significance. Correlations, which were significant either at 1% level or at 5% level, were considered for analysis. The relationships between variables, which are not statistically significant, were not analysed at all. The purpose of this analysis was to assess the degree of linear relationships between any two variables. The significance of relationships was indicative of the strength of the motivators through its identified variable. The impact of designation on the motivation correlates dictates us the positive or negative significance. The question of correlation between designation and motivation correlates were twofold. The first – there was a strong positive correlation and the second - strong negative correlation.

### Development and Testing of Hypotheses.

#### Major Hypothesis:

**H<sub>0</sub>: All Branch Managers as drivers of Employer (BM) are not strongly motivated.**

**H<sub>1</sub>: All Branch Managers as drivers of Employer (BM) are strongly motivated.**

Sub Hypotheses	
H01	Branch Managers do not have informing skills
H02	Branch Managers do not have skills of projection
H03	Branch Managers do not have basic instincts of performance
H04	Branch Managers do not have skills of getting work done
H05	Branch Managers do not have self-belongingness to the organization
H06	Branch Managers do not have best work place habits and practices
H07	Branch Managers do not have mastery of skills
H08	Branch Managers do not have skills of synergy

All these hypotheses were tested with respect to respective alternatives.

#### 4.18 Limitations of Study;

1. The present Study is confined to the Public Sector Banking Industry only, though the Study could be extended to any other Industry.
2. Further, the Study is confined to Branch Heads of a few Public Sector Banks only, although it is possible to extend this Study to other Public as well as Private Sector Banks also.
3. The Study further restricts itself to Branch Heads of Public Sector Banks (PSB) only in Bengaluru City, though Public Sector Banks have branches all over India.
4. PSBs have different categories of employees on its rolls such as General Managers, Deputy General Managers, Regional Managers, Branch Heads, Managers, etc. However, this Study limits itself only to the Branch Heads of these banks in Bengaluru City.

## Findings

The findings of the study are summarised as follows:

1. Strong correlations are observed across all the variables, which constitute eight drivers of employer motivation (DEM). These correlation are statistically significant at 5% or at 1% level.
2. Generally, there is, a strong influence of the TM on the BMs to perform well.
3. The BM is independent to perform his job in his branch, but this performance is subject to within the framework of vision, mission, goals and objectives of the organisation.
4. The TM is robust enough to perform their duties, within the framework of the Banking Regulation Act, 1949. (BR Act, 1949).
5. The business plans are prepared at two level
  - (a) At the branch level and
  - (b) Corporate level.The BMs are supposed to establish camaraderie amongst their bottom line and with the TM.
6. Examples from real life situations form the base for the TM to influence BMs.
7. A tendency is noticed among the BMs, who feel that their contributions to the growth and development of the bank are conveniently forgotten by their SOs.
8. The BMs train their staff at the branch level while, they themselves get trained at regular intervals through their bank's respective training centres.
9. Problems of interference between the TM and the BMs do exist. The main issue is that of not properly recognising the good work of BMs by the TM. The BMs expect a pro-active and a healthy approach by the TM in solving the bank related problems.
10. The BMs per se think that their staff members do not have analytical thinking. As such they train them in solving naïve problems.
11. All the customer oriented issues are being solved by the staff members and the BMs together.
12. The BMs walk an extra mile while solving their staff and the customer issues.
13. Allocation of work is done on the basis of gender characteristics and ease of work to women employees.
14. Generally, the TM help the BMs in rendering courteous, quick and pin-pointed customer service.
15. Generally, the BMs take moderate amount of risks in solving branch problems.
16. The Annual review of Performance Appraisals of BMs is viewed with suspicions by the BHs, as they feel it lacks objectivity, resulting in utter disappointment and sometimes frustration to the BMs. Although the TM support the BHs, the BHs perceive that the working bias is initiated from the top level.
17. The best banking practices are being shared among the BHs and with the TM.
18. A positive work culture is noticed in banking institutions, which is really heartening. However, this should get re-induced and re-engineered from the TM.
19. The BHs, at the branch level, make sincere efforts for creating harmonious relationships in the branch.
20. The BHs, when customers do not complain, perceive it with a little suspicion.
21. The TM continuously recognise the good work of the BMs. Yet, the general perception of the BHs, is that the TM often forget the contributions of the BMs to the growth and development of their bank.
22. The factor analysis reveals, as already mentioned, that sampling adequacy as per Kaiser-Meyer-Olkin (KMO) Measure is 0.822, implying that the data set has captured variation among the variables. The  $\chi^2$  value of 1,247.128, point out to acceptance of alternative hypotheses, that the variables are independent of each other.

The total number of factors identified are 29 in number which together captures 64.249% of the total variation. This spread indicates the identification of major factors based on data sets. In general, it can be said that there are only four major factors covering 29.637% variation.

23. The important Drivers of Employer Motivation (DOEM) are Power of Informing, Understanding the Mysteries of mind, Basic Instincts and its Influence, Employer Characteristics, Self-Belongingness, Work-place Habits, Mastery of Skills and Synergy (Benchmarking).
24. There is a strong relationship between the gender and the DOEM. The relationship is statistically significant at 3.03% level.
25. There is no statistical relationship between qualification of the BMs and motivational variables. In this case, the null hypothesis is accepted.
26. Income of the respondents is not an influencing factor for motivation of BMs. In other words, there is no relationship between the income of the BMs and the motivational variables.
27. The number of years of experience that BMs have put in, is not related to motivational variables. This means that mere experience one acquires does not influence the motivational variables.
28. Age, in this case, influences learning and therefore, it in turn, strongly influences motivational variables, at 7.2%.
29. There is no significant relationship between designation and motivational variables.
30. The Professional Qualification (PQ) of the BMs and motivational variables are strongly related at 3.2%. This reflects on the high value addition of professional courses conducted by the banking system.

### **Policies**

Given the list of findings, which in general, substantiates top down relationship between the TM and the BH. In the following, policy measures are listed:

1. Equal opportunity base should be created by legalising opportunity covering all sections of the society.
2. Professionalization of banking is to be attempted by making professional qualification mandatory condition of eligibility.
3. Gender and regional biases are not to be the base of any policy. However, in Indian Banking System, fortunately, no such bias exists.
4. Training and development should be a part of policy and governance. Continuous training, over a span of career, should be initiated to empower BHs to continuously learn, update, perform and grow. Training for growth policy can be initiated.
5. Empowerment of BHs, which is the hallmark of a proactive policy, should continue.
6. BHs are employees per se, but they should be treated as employees within the framework of organisation. BH employer should be in the policy for the organisation to vertically and horizontally to grow.
7. Employer relationship management should be the policy base of the Indian Banking System. The BR Act, 1949, need to be suitably amended to empower BHs in a relationship framework.

### **Strategies**

Strategies that emerge from the findings and policies are listed below:

1. The proactive policies of the Indian Banking System in conjunction with the Policies of the Government of India need to continue. The policies of recruitment at the BH level should be extended to all commercial, foreign and Regional Rural Banks (RRB) across India.
2. The Indian Banks are equal opportunity banks for genders. The competency is the only criterion for selection. This competency base will enable banks to resource, select, train and make them performing leaders.
3. The TM support, which is currently happening at the branches, must continue. The support from the TM will, however, be in the form of frequent meetings, performance enabling workshops, short-term seminars, conclaves, and consortiums.
4. The BH should be continuously motivated for effective transmission at the Branch level.
5. Continuous up-dating of knowledge and skills should be a part of the training centres under each bank.
6. New Skills sets, based on usage of internet technology, need to be introduced on a continuous basis.

7. Cluster approach to empower BHs, in order to train them in the case of decision making may be attempted.
8. Regional specific strategies should be evolved to convert BMs into empowered BHs.
9. The personality of BHs should be assessed regularly by changes in demographics and psychographics. This will lead to strategic thinking of changing personalities of the BHs.

## ANNEXURE 1 QUESTIONNAIRE

**Dear COMRADE,**

### **Sub: Collection of Data from Branch Managers for Research Purpose.**

I am doing research leading to Ph.D. on **“Drivers of Employer Motivation in Banking Sector, Bengaluru City – A Radar Design Approach”** from Anna University, Chennai. In this regard, I have to collect primary data from Branch Managers. For this purpose, I have enclosed a questionnaire and request you to please give **your free and frank responses** to the statements contained in this questionnaire and return it to me.

I assure you that the data so collected will be exclusively used only for the purpose of research and will not be disclosed to anyone.

**I look forward to your co-operation and assistance in this regard.**

**M.J. Subramanyam**

Sl. No.	STATEMENTS ON EMPLOYER MOTIVATION	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My Superior Officers influence my work through real life examples.					
2	I am adequately motivated by my Superior Officers for extra load of work.					
3	My Superior Officers encourage me to 'Walk an Extra Mile'. (= to take extra load of work).					
4	My Superior Officers help me in rendering courteous customer service.					
5	My Superior Officers seldom settle any customer disputes referred to them.					
6	I need to work hard to get transferred to a place of my choice.					
7	My hard work is recognized and appreciated by my Superior Officers.					
8	Superior Officers prompt their Branch Managers to give their best to the growth of the branch.					
9	Top Management recognizes and appreciates my good work at the branch.					

10	I get honest and committed guidance for my work from my Superior Officers.					
11	My Superior Officers always expect good performance from me.					
12	I smartly deal with the problem-employees to get the work done.					
13	My Superior Officers arrange special meetings to discuss and avert crisis at the branch.					
14	I implement my business plan seriously.					
15	I help my colleagues to develop work plan for the branch operations.					
16	As I do not have problem-solving skills, I depend on my Superior Officers.					
17	I do not make hasty decisions.					
18	My staff members lack conceptual thinking ability.					
19	My staff do not have the analytical thinking capacity.					
20	The promising future of my branch motivates me to do exemplary work.					
21	My right focus on my branch motivates me to do good work.					
22	I always crave for achieving business targets.					
23	Jealousy among Superior Officers demotivates me.					
24	My Superior Officers will not cause panic if the business targets are NOT met on time.					
25	I get depressed if my Superior Officers do not appreciate my good work.					
26	I tolerate the inappropriate behaviour of my Superior Officers.					
27	It surprises me when my customers do not complain.					
28	I feel uncomfortable if my Superior Officers do not encourage me.					
29	I put my heart and soul into my bank work.					



30	Positive inter-personal behaviour is a good behaviour that should be practised by branch managers.					
31	I do not interfere with the personal affairs of my colleagues.					
32	I feel very happy when my colleagues demonstrate innovative practices in their workplace.					
33	Positive culture converts employees into better workers.					
34	Branch Managers should be deputed to Reputed Management Institutes for advance training.					
35	Superior Officers should be more sensitive to the personal needs of Branch Managers.					
36	Loyal officers are the real assets to the bank.					
37	I feel elated when my Superior Officers say good things about me.					
38	My Superior Officers conveniently forget my contributions to the growth and development of the bank.					
39	Satisfied customers bring in more customers through word of mouth advertisement					
40	I train my staff to effectively face the day to day challenges in banking operations.					
41	I do get enough support from my Superior Officers to explore innovative banking practices.					
42	My Superior Officers should practically demonstrate how to perform various tasks at the branch.					
43	I encourage my colleagues to perform challenging tasks independently.					
44	I allocate duties to my colleagues without any bias or discrimination.					
45	I encourage my colleagues to take moderate amount of risk in banking operations.					
46	Superior Officers should adopt proactive approach to solve difficult tasks.					

47	Top Management should facilitate the staff to cultivate organizational commitment.					
48	I appreciate the engagement of my staff in their work.					
49	I achieve the business targets given to me with zeal and vigour.					
50	Harmonious relationships among the staff members depends on the mutual trust.					
51	Branch Managers should cooperate with Superior Officers in the formulation and implementation of the business plan.					
52	Branch Managers should be aware of duties and responsibilities of their staff members.					
53	I do not like to become a Branch Manager.					
54	I involve all my staff members in banking activities.					
55	Senior Officers' support and encouragement helps the Branch Managers to enhance the effective functioning of the branches.					
56	Collaboration among the staff leads to exchange of ideas and effective communication.					
57	Branch Managers are effective in achieving business targets.					
58	Reaching business targets is a challenge to the Branch Managers.					
59	Effective time management reduces the stress of the Branch Managers.					
60	Positive attitude of Staff helps the Branch Managers to manage difficult tasks at the branch.					
61	Gaining an insight of the Top Management is a difficult task.					
62	Internal marketing is equally important for Branch Development.					
63	Continuous improvement of products and services are important from the view point of customers.					

64	I always emphasise and focus on effective communication skills .					
65	Learning the art of succeeding is necessary to steer the branch operations.					
66	I expect my Top Management to make decisions in an unbiased manner.					
67	I objectively resolve inter-personal conflict of my staff members.					
68	I control my senses and exercise self-restraint when I am angry in the branch.					
69	I enhance my power of emotions in response to customers' needs.					
70	People skills help to cultivate positive relations with customers.					
71	Effecting implementation of Marketing skills help to increase profits of the bank.					
72	Reasoned and balanced judgment, with regard to staff disputes, helps the branch managers to avoid frictions among staff.					
73	Self-awareness gives Branch Managers an effective lens to realize others.					
74	Effective conciliation by Branch Managers helps to reduce open conflicts in the branches.					
75	Performance appraisal bridges the gap between goals to be realized and the actual performance.					
76	Team cohesiveness promote effective collaboration at work.					
77	I delegate best suited tasks to women employees.					
78	My Superior Officers should avoid discrimination of all kinds between staff members.					
79	I do control my own outcomes.					
80	I do possess social skills which are necessary to get along with my staff members.					
81	I do not have the ability to give different strokes to different folks.					

82	I moderately believe in my ability to perform various tasks.					
83	I do not hold negative impressions about myself.					
84	My staff members also yearn for success.					
85	I do not focus on Organisational Behaviour Modifications.					
86	I do believe that reputation management is a good motivator.					
87	I do not benchmark the best banking practices.					

## ANNEXURE 2

Bank-Wise Responses		
Sl. No.	Bank's Name	No of Responses
1	Allahabad Bank	5
2	Andhra Bank	9
3	Bank of Baroda	11
4	Bank of India	16
5	Bank of Maharashtra	9
6	Canara Bank	23
7	Central Bank of India	18
8	Corporation Bank	29
9	Dena Bank	11
10	IDBI Bank	9
11	Indian Bank	21
12	Indian Overseas Bank	18
13	Oriental Bank of Commerce	15
14	Punjab National Bank	14
15	Syndicate Bank	64
16	State Bank of India	14
17	State Bank of Travancore	5

18	State Bank of Hyderabad	5
19	Vijaya Bank	23
20	Bharatiya Mahila Bank	2
<b>Total</b>		<b>321</b>

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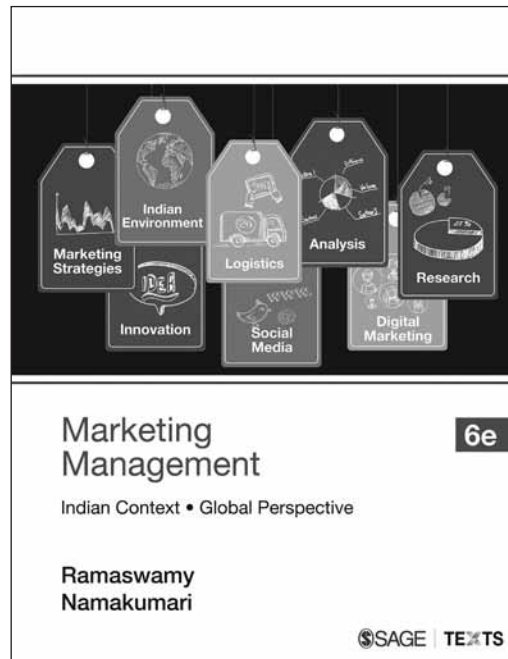


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## BOOK REVIEW



**Ramaswamy V.S. and S. Namakumari:** Marketing Management: Indian Context- Global Perspective; **SAGE** Publications, Mathura Road, New Delhi, India 110 044; 6th Edition, 2018 PP 1 to 798 + XL.

- Reviewer: **N.S. Viswanath**

The book under review now has credit of yet another edition – 6th edition – for students and practitioners of marketing. First, it enriches domestic readers, students and people, who crave for success stories in different facets of marketing and in different sectors of the economy/industries. Then, it influences those readers outside India in enabling them to assess, appraise and understand Indian customers and consumers who form about 14% of the world population. The purpose of this review is to objectively appraise the book in its dimensions so that the utility of the book, for its users, would get highlighted.

The book is covered in terms of contents in 798 pages + XL presented in nine parts and twenty five chapters in a readable font, well structured across the whole text. It is well documented and classified for international references with details of the subjects and ISBN number.

Further penetration of the book leads a reader to as

many as twenty two mini cases and 136 'insights' & 109 charts. Realizing what marketing is all about is not easy because any activity after production, in the processing of selling, is marketing. This function is understood in several ways such as individuals, consumers, functions, institutions, hierarchy and its levels, networking, supply chain, commodity and so on. Marketing is examined from need point of view – availability, acceptability, quality, value delivery and exchange of ownership. Now, the treatment of marketing has changed. There is a shift from functions and institutions to situations and contexts. The present book under review begins with understanding of consumers in an environment where creation, positioning, delivery of value and continuity form the base. Change in settings can happen when a change in the environment is initiated through technology, packaging, online transaction and on the speed of physical delivery. The change in consumer laws has lead to reformation of programmes, practices, projects and strategies for creating value.

The present book has lucidly presented the value delivery task of marketing. The use of Apps in education, the Byju's case in India in capturing value and delivery, is a classical example. Innovation is creation of value (Maruthi, Nano and Coca Cola). This is presented in different formats in the context of perception of value by the complex Indian consumer. The concept of value, its expectation and its realization after buying the product is best learnt by the way a consumer thinks in owning a product. Value has to be understood in initiation, creation, pricing, owning and sustaining it, in spite of a changing process in a society where societal values set the mind space. The authors present a total view of marketing from value-delivery standpoint.

Having set the base for studying marketing environment in Indian context, the theme is presented in chapters 2 and 3. A study of the marketing environment with respect to institutions, law, competition, state of the competition, people as stakeholders and stock holders and acquired perception with respect to companies are critical and essential. Cases pertaining to Toyota and GM are only a tip in the iceberg. Some diagnoses have been made on the 'just in', 'deglobalisation' and 'digital darwinism' and are pointers to long term change. Some of the statistics need updating.

References to Aadhar and Digitalization on pp.72 and 73 are insightful and informative. This is followed by positive insights of demonetization and GSTs in exhibits 3.3 and 3.4 (pp.74-76). Recapitalization of banks and ease of doing business are presented in exhibits 3.5 & 3.6 (pp.77-79). The introduction of utility oriented projects such as Swachh Bharat, Jan Dhan, Ujala, Ujjwala, JAM and the like are presented as highlights. The book provides contextual and application oriented insights by enumerating policy changes and shifts in policy stance of the government for domestic as well as global markets (3.1 to 3.12). Charts are the highlights of chapters 3 through 7. Charts are the pathway to analyze patterns and practices. The authors very lucidly bring out the way companies mark out their methods of facing competition by creating competitive advantage over others. Policies and planning, strategies and actions, leading to envisaged goals are enumerated. The cases of Lifebuoy, Maruthi Suzuki, Xiaomi, Ujala, Rin, ITC, Coca-Cola, Samsung, Maggi, Reliance Jio, Raymond

and Patanjali are examples. The cases cover high value (Maruti Suzuki) to low value products (Gillette) & from consumer durables to FMCGs. The working of STP model, in marketing to variety of Indian consumers, by positioning and promotional methods is highlighted. References are drawn from Tanishq, Titan, Raymond, Tide, Samsung, Nokia, Amazon and Google. Interesting is the fact that failure cases are discussed (Nano case) in marketing exercises to demonstrate changing perspectives of Indian consumers' consumption behavior. Understanding a consumer needs critical knowledge of the individual, family (Indian context), neighbourhood, peers, status (at various levels) hierarchy, culture, social factors. These are discussed in style. The most complex nature of a consumer arises from confounding of values with set trends in buying a product. Here the contribution of Paul Krugman and Angus Deaton in Economics could have been included. Many manufacturing and marketing institutions have failed because of myopic understanding of consumers (Theodore Levitt) and by not capturing their process of moving up in social ladder leading to acquisition of products to improve quality of life. In essence, psychographics and socio-graphics of consumers are to be sketched. The chapter 9 can be expanded by adding from knowledge acquired above.

Strategic planning for business and formulating strategies form the core of a business leading to performance and value delivery. Marketing insights in chapter 4, 5 and 6 will form the base for any reader to expand his knowledge horizon. Value delivery can be achieved by planning, formulating and implementing strategies, mixing of functions of marketing and converting STP model into practice. Evolution of all these steps happens by need, context and location of companies. Further, product characteristics and features dictate the process of planning, strategies and actions. A reader can gain knowledge and skills of planning and strategy by reading cases and going back to charts or vice versa. The cases of Dabwalas, Ghadi Detergent, ITC's e-choupal are some classics from India where distribution as a strategy is in operation. The need for assessment and analysis of state of competition, its potential, are well written in chapter 6. Charts and mini cases supplement understanding of industry and

its operational performance. Emphasis on services enable a reader or a practitioner to decide on new or emerging areas in services. Highlights on competitive advantage and positioning are in chapter 7. The case on repositioning is sufficient to demonstrate continuity of exercises to position a product for long term repeat buying until it becomes a life style product.

In Chapter 8, details of consumer behavior in making buying decisions are discussed, projecting the irrationality of consumer behaviour. Thaler's Nudge Theory discussed, is an insight into mental accounting. Enumeration of Indian consumer is well elucidated in chapter 9. This is a chapter that makes a reader or practitioner plan and operate on the basis of nuances of Indian consumer by demographics, psychographics, socio-graphics, life style and geo-graphics in terms of consumers of Bharat-Rural India and consumers in urban India. Operation of STP model in a dynamic Indian setting is seen here. FMCGs of high, low and moderate value products are presented. Some typical niche products such as Ayurveda products, soft drinks and so on can be presented to demonstrate how strong niche product markets are.

On new product development and need for innovations, the chapter 13 makes an interesting and vivid reading. The cases of Google, Walkman, Emami are classic examples from outside and within India. The idea of co-creation is a novel one. Develop a product, get IPR and time it at several places for marketing whenever it is needed. Thus, marketing in an exercise on readiness, availability, value discovery and sustainability. The authors discuss the process of innovation in influencing marketing functions.

Emerging economies demand the service- products to be identified, elucidated, and evaluated to stabilize value creation. The fact is, it is difficult to prematurely assess emergence of a service product. Some products in education, Medicare and Infrastructure have been identified, defined and positioned. Some service positions in IT sector have been identified and defined. The uses of computers, mobiles and technology have influenced development of services. The use of apps such as YONO, Quikr, and OLX, and rebuilding of Taj are discussed as experiments in Indian market.

Some of the latest extensions of *serv-qual* model in healthcare, can be included in the chapter on services. Critical findings in review-literature on service product categories may help authors to make further value addition to their Tata's case in rebuilding Taj and experience of premiumisation (new word invented by authors) at Starbucks.

Part 5 in the book provides a wide range of experience in logistics, channel, retail chain, direct and digital marketing. Literature in these mentioned areas are abundant that distinct books may be written exclusively for people to learn and specialize in them. Networking is so critical now that powergrids and supply chain activities are being established for continuity and delivery. Value logistics is an area to be explored in all areas of human activity. Elimination of intermediaries was naïvely considered a solution. Now, however, it is realized that value experience will retain intermediaries as essential in marketing. The size and spatial distribution of customers will determine the evolution of channels and networking designs. The cases of Asian Paints, Samsung and Titan will provide enough knowledge on integration of channel activity. The efforts of authors in compiling these cases deserve a special mention. Retailing, of late, is another domain activity with formal retailing growing faster than non-formal ones. Lots of investments are being made in Pantaloons, Big bazaar, etc. Product and composite retailing are shaping up consumers' shopping experience. The references to special retail chains (Future Group, Raheja, Reliance, Tata Etc.) are to be appreciated. Some thoughts on grid retailing can be added to this chapter.

A separate chapter unfolds the beginning of direct and digital marketing exercises with special reference to India. Digital and direct selling experiences are being accumulated in India with reference to low involvement products. 'Trust' and camaraderie between the deliverer and end user plays a critical role. Direct and digital selling will become a sector when a 'click' transforms into quality delivery. Effective legal support may help consolidate this activity. Some enterprises have started off well such as Amazon India, Big Basket and E-bay India. The future of this sector- function is not clear yet at this juncture.

The most critical and yet subtle function in marketing management is promotion. The whole gamut of marketing exercise is associated with the way a product is introduced, appraised, presented, positioned and promoted. Chapters 19,20 & 21 present the role of promotions in marketing by mass communications, media such as Advertising, Sales Promotion, Digital communications, one to one selling, and Customer relationship management. The marketing communication mix, types of media, influencing factors and measurement of impact of an advertisement are all delightfully presented through facts, insights and charts. Any interested reader in promotion area can vividly read through these chapters and acquire updated mastery. All commercial as well as 'Not for Profit' Organizations (NPOs) need promotion to introduce, grow, sustain and manage for longevity. The case of the *Akshaya Patra Foundation* (TAPF) can be added as an insight to demonstrate the way to donors and publics. The core of selling is in establishing rapport with a prospect. The context is well enumerated. The concept of CLV acquires an enlarged meaning in the context of social marketing.

The authors have devoted a complete and enlarged revision of discussions on 'Pricing' which is critical in capturing customer / consumer value for a product or service. Discovering right value, right price and right level of happiness after use is a complex phenomenon. Pricing and value offering is more a mental accounting. An attempt has been made to appraise readers on the complexity of value discovery and delivery through the price.

Factors affecting pricing, price landscape through logic of fixing pricing at the production level, characteristics of product – both physical and service, objectives and

methods of pricing are well exposed through real life situations (eg., Apple vs Xiaomi, & HUL). Methods of pricing by interventions in agriculture sector can be added to further enrich this chapter. Public distribution pricing, minimum support pricing, Levy pricing, Dual pricing etc. have confounded pricing in the agricultural sector.

Sustenance of marketing efforts need support systems through MIS, Marketing Research and Forecasting. Two distinct chapters are devoted for this segmented knowledge. The role of Big Data Analytics in data mining, data processing and data revelation could have been discussed in greater detail. In chapter 23, qualitative MR, Social Media Research and ZMET are discussed; this is useful in knowing present trends in marketing research.

The most difficult area in marketing is prediction and forecasting. Methods and techniques used will be a forerunner for capturing right numbers for insights. However, it is not easy to capture what numbers reveal as facts. This chapter is an introductory chapter for those who present reports for decision making.

Rural consumer marketing – an emerging field in India – is presented in chapter 25. Modern Format retailing vs Kirana retailing is presented. Rural grid marketing with an insight on PURA concept in the context of money flow to rural areas in India is shaping up. The contents are informative.

**I wish to commend the authors for their painstaking efforts in bringing out a compendium of this magnitude. I recommend this book for the MBA students as a text book, for practitioners as a reference, and for researchers as a resource material.**



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