

## **Executive Summary**

### **Impact of Technology on Marketing of Bank products: A critical study**

Before 1969 Banking in India was Character Banking – where lending's hallmark was on the grounds of respectability. After 1969, the next two decades saw the phase of Nationalized Banking where activity of banks was more focused on social sectors and Government directions. In the third phase, which started in 1991-92, 'Prudential Banking' was the key word. Now, in the fast changing economy, Banking in India has moved over from Prudent to a Liberalized and Competitive Banking, thanks to the globalization process that has set in. The Indian Banking system is unique and perhaps has no parallel in the banking history of any nation in the world. The system has been both private and public sector banks contributing for the well being of the nation. It has passed through three major stages: 1. Pre-nationalization period banks 2. Post-nationalization period banks 3. Working of the banks in liberalization era. In the first stage, the banks were under the control of private management and not caring for social obligations of the nation. In the second stage, banking was provided with totally protected and highly regulated mechanism and concentrated on target achievement for the development of the country. As a result, they were fulfilling the social obligations of the nation. Later in the light of LPG initiation there was shift towards technology innovation and marketing philosophy in the function of the bank and thereby the concept of banking has lost its relevance. The only factor that matters is the performance and excellence of banking sector.

In the beginning of the 1990's there were many deficiencies prevailing in the banking sector. The major deficiencies were productivity and efficiency of the system in turn, these influence on the profitability of banks. Even some of the public sector banks were financially weak and incurred heavy losses. During this period, many private sector banks including foreign banks entered the arena of Indian cross border; result in the public sector banks started fierce competitive threat from private and foreign banks. In addition, these private banks have undergone several changes made in the pattern of working, those are, an advancement in technology and change in their marketing philosophy towards customer orientation, these changes influenced on the banks productivity, profitability, employee efficiency and customer satisfaction. These reasons paved the way to take innovative steps to bring in fourth reforms in banking sector and in financial sectors. The Government of India and RBI took initiation to

improve or minimize the distortion impinging upon the profitability and efficiency of the bank reformation.

The Narasimham committee appointed to examine loopholes in the public sector banks and submitted its report suggesting increasing autonomy from Government direction, the restructuring of unviable banks allowing a greater entry of private sector banks, licensing capital market, further improving the operational flexibility, competition among financial institution and setting up of proper supervisory system in first phase during 1991. In the second phase of reforms, the emphasis was given towards strengthening procedure upgrading technology and human resource department. As a result, public sector banks took initiation for modernization and technological up gradation to meet the new marketing challenges.

Indian Banking, influenced by the financial sector reforms and globalization is witnessing a shift away from meeting social priorities to the confronting market forces. The power of technology has fuelled this change and made profound impact on the banking business. From being enabler, IT is gradually emerging as a driver and key differentiator of business performance and competitive superiority. The dire competition in the banking industry between the public sector banks, old private sector banks, new generation private sector banks and the foreign banks is mainly through technology innovation, up gradation and modernization.

New private sector and foreign banks emerged - equipped with the latest technology. These banks opted for a different model of having a single centralized database through a network infrastructure, instead of having multiple databases for all their branches. These changes were market driven, having the influence especially of globalization. The tremendous advancement in technology and the aggressive infusion of information technology had brought in a paradigm shift in banking operations. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability.

For customers, it is the realization of their anywhere, anytime, anyway banking dream. This has prompted the banks to embrace technology to meet the increasing customer expectation and face the tough competition. Banking in the earlier years involved very little role of technology. It was more of maintenance of ledgers and registers and minimizing risk by venturing into only well known traditional areas. Usage of technology was confined to simple

devices such as telex machines, funds and message transfers, electronic typewriters and telephones with fax connections.

Technology has become very important for banks to carve a plane for themselves and become leaders in their respective fields; to achieve this; banks have to improve their margins and profits by conducting transactions at low costs besides being lean in size. Towards this direction, recently, many PSBs have shed their excess staff through a Voluntary Retirement Scheme. Computerization of operations and networking would also aid to reduction in transaction cost. Capital base and resources are crucial for adopting technology changes fastly; this can be noticed with the advent of e-banking and core banking services being offered by various banks

The new technology insist upon banking sector by Reserve Bank of India as per the recommendations of the Narasimham committee a banking sector has adopted the technology and it has become very important for banks to carve a plane for themselves and become leaders in their respective fields; to achieve this; banks have to improve their margins and profits by conducting transactions at low costs besides being lean in size. Towards this direction, recently, many PSBs have shed their excess staff through a Voluntary Retirement Scheme. Computerization of operations and networking would also aid in reduction of transaction cost. Capital base and resources are crucial for adopting technology changes fastly; this can be noticed with the advent of e-banking and core banking services being offered by various bank Besides, Automated Teller Machines, electronic smart cards, EFTT., telephone banking, magnetic ink character reader, electronic fund transfer, electronic data interchange, bankers automated clearing services, plastic cards, LAN, VAN, remote banking services, online banking and so on developed as a means of providing quality services to customers at their doorstep. E-banking is one which provides the provision of information about bank and its marketable products and services. Technology deals with the physical devices and software that leads various computer hardware components and transfer from one physical location to another ( Louden and Louden). Recent advancement in technology have created a surge in Technology based self services. (Dabholkar et al. 2003).

In the present set up, Competition and Profitability have become key words for banks in India. Though these are mutually contradictory, banks have to balance the severity of the

competition and continue to be in the reckoning by improving their profits. Marketing has suddenly become a buzzword in the banking sector. Customer becomes centric for marketing of bank products and services. The philosophy of the marketing is to satisfy the customer wants and desire. The key objective in all marketing activities is creating value for the customers, that is, clients, with the aim of providing their long-term loyalty. The positive perception and value addition of the customers result into high performance of bank. One has to reckon the fact that the old loyalty can no longer be taken for granted. Banks have to make effort to retain existing customers and also use new strategies to attract new customers within their fold. The banks will survive only when they face acute competition with help of effective ways of marketing approach.

Technology is undoubtedly one of the most important and crucial ways in which it influences on marketing of bank products and services in the present era. Many of our modern ways of life is made possible by the rapid development of new technologies. Marketing practices have been shaped to the greater extent by the existing level of technology. One of the key aspects for modern banks is to find ways and means for creating sustainable competitive advantage in the financial markets. The role of marketing within this task is beyond doubt, especially in bank services quality area. The quality is reached through putting clients in the epicenter and by giving them special treatment. Marketing has been a little slow in taking part in this financial arena, that is, banking area

Public sector banks, started their marketing innovative practices by introducing new technological products or services decides the agricultural and industrial benefit schemes in line with private sector banks and foreign banks. They are providing retail banking services such as savings bank account, current bank account, fixed deposits and recurring deposits. In addition, there are investment services like bonds and stocks, tax-benefit schemes, mutual fund benefit schemes, Annuities, insurance products, retirement plans, financial and estate planning and loans like, housing, education loan, vehicle loan, personal loans like loan for purchase of car, furniture, and durables jewelry. The major challenge for the Bankers is to introduce newer products, which are innovative in nature yet be brought in multiple areas to reduce the overall transaction cost for the ultimate benefits of the customers. The Indian Banks are not working in a closed environment any more. Resistance to advancing technology is no longer a solution.

In India, opening up of the banking sector in terms of entry of foreign entities and easing of restrictions on international transactions took place within the broader process of reforms. The constant policy concern in this respect has been that of preparing the banking sector for global competition and taking preventive measures for the potential vulnerabilities that it might engender.

In short, India's banking sector has made rapid strides in reforming itself and aligning itself to the new competitive business environment. While the operational and supervisory practices in the sector have progressively approximated international best practices, the process of convergence is not yet complete. Greater conformity to prudential norms of international standards and also adoption of better systems of risk management will enhance the stability of the banking system even as banks expand the range and volume of their operations.

## **1.1 Review of literature**

The object of this research is to ascertain a theoretical base for the survey of this study. To achieve this, the brief literature review was conducted in the field of technology and marketing of the bank. Apparently, to identify and examine the impact of technology on banks' performance, employee efficiency and customer services, the researcher exploded various articles/journals, relevant literature and existing practice of technological banking. Many expert committees and social scientists on several aspects relating to the subject made a plethora of studies, which are most relevant to this study and are presented in three broad headings:

- a. Extent of technology use in banks.
- b. Marketing practices in banks... [Service quality,  
Customers satisfaction, marketing relations and customer retention]
- c. Impact of technology on banks profitability, customers service and employee efficiency.

## **1.3 Objectives of the Study**

The present study has been planned with the following specific objectives:

- i. To study the nature and degree of adoption of technology in the strata banks.
- ii. To evaluate the existing marketing practices followed by sample banks.
- iii. To study the profile of products and services offered by sample banks.

- iv. To examine the impact of technology on customers' services, employees efficiency and profitability.
- v. To compare private sector banks with that of public sector banks in the study area.
- vi. To streamline the appropriate strategic measures for the enhancement of technology driven marketing of bank products.

## **Hypothesis**

The study intends to test hypotheses based on several criteria such as Bank technology, Bank Marketing and impact of technology on bank marketing.

## **Research Methodology**

The present research study is based on descriptive and empirical in nature; which focuses on the various challenges faced by the selected public sector banks and the private sector banks to market their bank products and how best the customers of those banks are benefited with technological services provided by the banks. It also focuses on how these technologies helpful in improving performance of selected banks. The study confines itself to investigate into technological impact on marketing of bank products in this study area. The methodology adopted in this study is presented under the following heads:

- i. Data base
- ii. Sampling design
- iii. Analytical techniques Used

### **i. Data base**

The data so collected used for evaluating objectives of the study in respect of the area under research conducted in Belagavi District. The data used in this study are based on primary and secondary sources, and are discussed below:

## **Primary Data**

In order to gather the Primary data, exploratory interviews were conducted with customers of selected banks. These data were collected through a structured and pre-tested questionnaire from the bank managers, customers and employees of the selected public sector and private sector banks.

## **Secondary Data**

Secondary data was collected from Lead District Office, Syndicate Bank, Belagavi and websites related to public sector and private sector banks in the district, number of branches, ATMs, amount of deposits and advances. Information related to banking profile of the district was collected from NABARD (PLP 2016, NABARD). Websites of Reserve Bank of India, Ministry of Finance, Government of India, and many more portals were used to collect published information about banking. Information pertaining to banking aspect were collected from ‘Belagavi District at a Glance -2015-16’ information booklet published by the office of District Statistical Officer, Belagavi.

## **Area of Study**

To address the defined objectives of the study, five taluks (Belagavi, Chikkodi, Gokak, Athani and Bailhongal) were taken on the basis of carrying the highest banking transactions and having more bank branches (Annual Credit Plan-Belagavi District 2017-18, Lead District Office, Syndicate Bank, Belagavi) in Belagavi District of Karnataka State, India. Belagavi District is taken as a Case Study to carry out this research work

## **Details of Data Collection Instruments**

### **Questionnaire to Bank Managers/officers/employees**

Well-structured pre-tested questionnaire was prepared to elicit data and was served to the managers/officers, customers and employees of the selected public sector and private sector banks in the study area and interview were held in case of doubtful information. The questionnaire consists of 36 questions for bankers, 45 questions customers and 35 questions for employees and these questionnaires have three sections; the first section seeks information on technology and volume of banking business, the second section, concentrates on marketing

practices adopted by banks like segmentation of market, buying behavior of customers, demand forecasting, marketing strategies, customer relationship, brand building activity and third section attempted to seek information on impact analysis.

### **Sampling Frame**

#### **Sampling Frame of Selected Public Sector Banks**

The list of all bank branches in Belagavi district as on 28.02.2017 published in Annual Credit Plan-Belagvi District 2017-18 by Lead District Office, Syndicate Bank, Belagavi was considered for sampling frame for identification of public sector banks for data collection.

#### **Sampling Frame of Bank account holders of 5 Public Sector Banks**

The bankers, customers and employees from 125 public sector bank branches and 115 private sector bank branches across five talukas of Belagavi District are considered for the survey.

### **Sampling Technique**

For bank managers, non-probability Judgemental Sampling method was used to identify the respondents. The data was collected from the bank mangers/officers of five selected public sector and private sector banks (respondents) through a structured questionnaire. Six customers and two employees from each public and private sector bank branches were considered in the study.

### **Sample Size**

#### **Public Sector Banks**

Out of 21 public sector banks of Belagavi district, 5 public sector banks were chosen for study *viz.*, Syndicate Bank, State Bank of India, Canara Bank, Corporation Bank and Union Bank of India, based on the number of branches. These five banks selected account for 75.8% of the total public sector banks in the district (251 out of 331 banks) in terms of number of branches. Further, out of 10 talukas of Belagavi district, five major talukas *viz.*, Belagavi, Chikkodi, Gokak, Bailhongal and Athani were considered based on the number of branches in these talukas. These five talukas together have 188 branches and account for 74.9% of all ten talukas.

For public sector banks 25 bankers, 150 customers and 50 employees were chosen for study, aggregating the number to 225 from public sector banks and in case of private sector banks 23 bankers, 138 customers and 46 employees were taken for study through questionnaire, adding up the total number to 207 in case of private sector banks.

## **Measurement Scales**

Five point Likert scale was used in all three sets of questionnaires viz., for bankers, bank customers and bank employees with strongly agree and strongly disagree options at the extreme ends of the instruments.

## **Tools of Analysis**

- Arithmetic Mean, percentage, Standard Deviation, correlation coefficient, coefficient of determination and regression analysis tools was used.
- In order to test the hypotheses set in the study statistical tools like t test, z test, chi square, U value etc., are used. The level of significance of the hypotheses was tested at 5% level confidence.

## **Chapter Scheme**

The present study is an attempt to emphasize the technology in banking in India in general and understanding the technology penetration and its impact on various aspects of banks in the public and private sector banking in particular. The research work has been systematically carried out, breaking down the entire work in to five chapters as shown below;

The first chapter, covers Introduction, review of literature, need for the study and statement of problem, scope of the study, Research Methodology, Methods of data collection, limitations of the study, measurement scales, tools used chapter scheme.

Second chapter is banking technology includes, the facilities like ATM, online banking, mobile banking, Telephone banking, RTGS, NEFT, etc. The bank technology has certain operations that it performs in the routine course, which are focused in this study are pay utility bills, balance enquiry, print statement, account opening, fund transfer etc. Benefits to employees, customers, and banking sector and problems faced by them are covered.

The third chapter deals with marketing practices adopted by sample banks, segmentation, demand forecasting, marketing mix variables like products, price, promotions, and distributions, the customer relationship, brand building, customer satisfaction, employees effort to use marketing strategy.

The fourth chapter focused on impact of technology on banking operations, customer satisfaction and employee efficiency from the view point of banks, customers, and employees are discussed with regression analysis.

The fifth chapter deals with the findings on Bank technology, bank marketing and impact of technology on bank marketing and suggestion thereon to streamline the appropriate strategic measures for the enhancement of technology driven marketing of bank products and services.

## **Findings based on Impact of Technology – Chapter 2**

- **Bankers' Perspectives:**
- \* The penetration of technology services in banking with respect to ATM, Online banking and RTGS/NEFT have been to the fullest extent in public sector banks. And even the same is true in case of private sector banks except for ATM, wherein the penetration rate is at 94%.
- \* The penetration of technology services in banking with respect to telephone banking and mobile van ATM have been very disappointing with less than 45% respondents in the study opting for the same.

- \* There is very strong positive relationship between advancement of technological services in all types of banks under study and variables like expenses, assets, liabilities, profit/loss and income.
- \* There is moderate positive correlation between advancement of technological services in all types of banks under study with CD ratio and advances of the banks.
- \* Public sector banks have faced more problems compared to private sector banks in the study in implementing the core banking services.
- **Customers' Perspective:**
- \* It was found that branch banking, ATM services, debit card and electronic fund transfer (ETF) services are the most sought after services by both public and private sector customers with almost 100% of the respondents opting for the same. Telephone banking services are the least sought after services by both public and private sector bank customers with less than 50% of them opting for the same.
- \* It was found that the frequency of using branch banking, online banking, ATM services, mobile banking and electronic funds transfer (ETF) in both public and private sector banks is 1 to 3 times in a month. But, the frequency of using telephone banking in both types of banks is found to be 1 time or not used by the respondents.
- \* Study reveals that almost 100% customers of both public sector and private sector banks use ATM machine to avail services of cash withdrawal, checking account balance, mini statement and pin change.
- \* It was revealed by the study that more than 75% of the customers of both public sector and private sector banks were using ATM facilities since last 3 years or less than that.
- \* The study reveals that online banking services are used by almost 100% customers of both public sector and private sector banks in the study to check bank statement and change password. Paying utility bills was the least sought after service availed through online banking by less than 10% customers of public and private banks.
- \* It was found that mobile banking operation was used by more than 90% of the customers of public and private sector banks to check account balance or recent transactions and to download bank's app on their mobile.

- \* The reasons for not using mobile banking were lack of security and lack of trust on technology, as stated by more than 90% of the customers of public and private sector banks.
- **Employees' Perspective:**
- \* It was found that there has been a significant difference in public and private sector banks' employees' perception towards factors influenced on E-Banking with respect to Electronic Fund transfer and credit card system.
- \* Majority of the employees of public sector banks have expressed that the factors to introduce E-banking facility is due to own willingness of the bank and due to requirements of the customers. Some employees of both public and private sector banks felt that cost effectiveness is also one of the reasons to implement E-banking facility in the banks.
- \* It was felt by the employees of public sector banks that the way to improve E-banking in the banks is by assuming greater trust in the staff and by reducing complexity of software. The similar opinion was shared by the employees of private sector banks also.
- \* The employees of private sector banks expressed that the factors influencing benefits of E-banking include increase in bank productivity, innovation in products and services and facilitates quick response to customers. The employees of public sector banks differ in these opinions.
- \* There was a difference of experiences shared by the employees of public and private sector banks in terms of difficulties faced due to technology with respect to lack of operating knowledge, lack of trust on technology, problems of security, mental strain to use technology etc.
- \* Employees of both public sector and private sector banks felt that efficiency of employees will increase in relation to cultural factors like it brings cohesiveness, it brings collaborative culture and behavioral factors like reducing work stress, reduction of chaos and confusion, increased motivation and satisfaction.

- **Findings related to Bank Marketing**
  - \* It was found in the study that **private sector banks** have adopted **better marketing practices** compared to public sector banks with the former having mean value of 38.64 and standard deviation of only 2.31, while the latter has lower mean value of 35.88 and higher standard deviation of 4.25.
  - \* The study has revealed that there are different **market segmentation strategies** adopted by public and private sector banks with regard based on Measureable sample size, Effective reach of services, Large & profitable effort and Different Market mix elements.
  - \* There has been a considerable difference in **buying behaviors of customers** of public and private sector banks in terms of **cultural factors** like nationalities, religions, racial groups, social class and geographical regions.
  - \* There is a significant difference between public sector banks and private sector banks with regard to **consumer buying decision** at pre-purchase stage attributes motivation of the consumer at the time of purchase.
  - \* It was found there was a considerable difference in terms of the **market research process** on sale of bank products and services conducted by public sector banks versus private sector banks in the study.
  - \* It was found that there is a significant difference between public sector banks and private sector banks in terms of the factors like **product adoption process** for marketing of bank products used as a product strategy in **marketing mix** variable.
  - \* The **products and services** marketed by public and private sector banks differ substantially.
  - \* There is a lot of difference in approach of banks in offering **innovative banking products** and services to customers by public and private sector banks.
  - \* It was further found out that the strategies adopted by public sector banks and private sector banks do not differ much in terms of attributes of pricing strategy in the study area.
  - \* In case of the promotion strategy attributes like motivating customers through sales promotion techniques, promotional strategies that adopt for circulating the product

among the various customers, there has been a significant difference between public sector and private sector banks.

- \* Both public sector and private sector banks have adopted similar distribution strategy including the channels of distribution like use of representatives, bank employees acting as sales force, call center, direct marketing, tele-marketing and many other channels of distribution.
- \* Using middlemen as channel of distribution has been a differing factor between public and private sector banks but however there has been a similar approach followed by both public and private sector banks in terms of using factors like products, company and market as distribution channels.
- \* The similar practices were followed by both public sector and private sector banks in terms of formulating and implementing strategy for customer relationship and technology use in customer relationship management.
- \* In terms of brand building activity, there has been a significant difference between public sector and private sector banks in terms of the factor of common ideas bring an effective brand leadership. In terms of other factors related to brand building activity, both the banks did not differ in their approach.
- \* Customers of public sector banks have demonstrated better knowledge about marketing mix knowledge of their bank with higher mean values, compared to the customers of private sector banks with respect to the factors like knowledge about products and services, knowledge about innovative products & services, information about word of mouth promotion and satisfied with mobile banking services. In case of other factors related to marketing mix customers of both banks have exhibited almost similar knowledge.
- \* In terms of customer satisfaction, the customers of public sector banks have behaved more satisfied compared to customers of private sector banks in terms of assurance and security. Further, there has been a strong difference experienced by customers of both banks which is evidenced with a very high t value (4.6979). But however, in terms of other variables like tangibility, reliability, empathy and efficiency, the customers of private sector banks have expressed a better experience compared to the customers of customers of public sector banks in the study.

- \* There has been a significant difference in terms of pricing and promotion as marketing mix strategy, between the customers of public sector banks and private sector banks. However, the customers of both banks have perceived similarly when it comes to product strategy and distribution strategy as a part of marketing mix strategy.

- **Findings based on Impact of Technology**

- **Bankers' Perspectives**
- \* Technology has made a very high positive impact on the Deposits, Advances, Income, Expenditure, Assets and Liabilities in all banks in the study. Change in technology has made more than proportionate changes in these variables for all the banks.
- \* Technology has made a low positive impact on CD ratio and profit/loss in all banks in the study. Change in technology has made little positive changes in these variables for all the banks.
- \* Technology has made a very high positive impact on the Deposits, Advances, Income, CD Ratio, Expenditure, Assets and Liabilities in public sector banks in the study. Change in technology has made more than proportionate changes in these variables for public sector banks.
- \* Technology has made a low positive impact on profit/loss in public sector banks in the study. Change in technology has made little positive changes in these variables for public sector banks.
- \* Technology has made a very high positive impact on the Deposits, Advances, Income, Expenditure, Assets and Liabilities in private sector banks in the study. Change in technology has made more than proportionate changes in these variables for private sector banks.
- \* Technology has made a low positive impact on CD ratio and profit/loss in private sector banks in the study. Change in technology has made little positive changes in these variables for private sector banks.

**Customers' Perspectives**

- \* Technology has made a very high positive impact on the customers of all the banks with respect to Tangibility, Accuracy and Easy & Convenient Banking in the study.

Change in technology has made more than proportionate changes in these variables for customers of all the banks.

- \* Technology has made a low positive impact on the customers of all the banks with respect to Reliability, Responsiveness, Assurance, Empathy, Efficiency, Security and Customer Service in the study. Change in technology has made proportionate changes in these variables for customers of all the banks.
- \* Technology has made a very high positive impact on the customers of public sector banks with respect to Tangibility and Easy & Convenient Banking in the study. Change in technology has made more than proportionate changes in these variables for customers of public sector banks.
- \* Technology has made a low positive impact on the customers of public sector banks with respect to Reliability, Responsiveness, Assurance, Empathy, Efficiency, Accuracy, Security and Customer Service in the study. Change in technology has made proportionate changes in these variables for customers of public sector banks.
- \* Technology has made a very high positive impact on the customers of private sector banks with respect to Tangibility, Accuracy and Easy & Convenient Banking in the study. Change in technology has made more than proportionate changes in these variables for customers of private sector banks.
- \* Technology has made a low positive impact on the customers of private banks with respect to Reliability, Responsiveness, Assurance, Empathy, Efficiency, Security and Customer Service in the study. Change in technology has made proportionate changes in these variables for customers of private sector banks.
- \* Technology has made no impact on the customers of private sector banks with respect to pricing strategy in the study.

#### **Employees' Perspectives**

- \* Technology has made a very high positive impact on the employees of all the banks with respect to Knowledge and skills, Technology facilitate improvisation and Behavioral efficiency in the study. Change in technology has made more than proportionate changes in these variables for customers of all the banks.

- \* Technology has made a low positive impact on the employees of all the banks with respect to Cultural efficiency, Product strategy, Promotion strategy and Distribution strategy in the study. Change in technology has made little impact on these variables for customers of all the banks.
- \* Technology has made no impact on the employees of all the banks with respect to pricing strategy in the study.
- \* Technology has made a very high positive impact on the employees of public sector banks with respect to Technology facilitates improvisation, Behavioral efficiency, Product strategy and Distribution strategy in the study. Change in technology has made more than proportionate changes in these variables for customers of public sector banks.
- \* Technology has made a low positive impact on the employees of public sector banks with respect to Cultural efficiency and Promotion strategy in the study. Change in technology has made little impact on these variables for customers of public sector banks.
- \* Technology has made no impact on the employees of public sector banks with respect to pricing strategy in the study.
- \* Technology has made a very high positive impact on the employees of private sector banks with respect to Knowledge and skills, Technology facilitates improvisation and Behavioral efficiency in the study. Change in technology has made more than proportionate changes in these variables for customers of private sector banks.
- \* Technology has made a low positive impact on the employees of private sector banks with respect to Product strategy and Distribution strategy in the study. Change in technology has made little impact on these variables for customers of private sector banks.
- \* Technology has made negligible impact on the employees of private sector banks with respect to Pricing strategy and Promotion strategy in the study.

## ● Suggestions

### Bank Technology

- \* Efforts have be made by both public sector and private banks to increase the penetration into telephone banking services to enhance the effectiveness of technology in

banking. Ease, security and speed of transactions using telephone banking will ensure the higher penetration, which is essential for the long term sustainability of all banks.

- \* Technology relationship with CD ratio of both public sector and private sector banks has been not impressive in the study. Hence, it is advised to both types of banks to make use of technology in their transactions related to CD ratio. Greater adaption of technology in all spheres of their transactions will enable the banks to increase efficiency and accuracy.
- \* Public sector banks are strongly advised to conduct training programs to its employees on bank technology. The study has revealed that public sector banks have faced more problems in implementing core banking services in the banks, which clearly indicates the lack of technical literacy among the employees of public sector banks. Frequent training programs on educating the employees on latest technology would help public sector banks to serve their customer better and earn higher revenue for their banks.
- \* Less than half of the respondents in the study from both public sector and private sector banks have expressed that they use telephone banking services to carry out their banking transactions. The banks should encourage customers to use telephone banking services, in order to ensure lower cost of customers visiting branches and taking out important time of bank employees.
- \* More than half of the customers in case of public sector banks and almost half of them in private sector banks are not using online banking and mobile banking services, which indicates the lack of popularity of these services by both types of banks. Both banks are advised to work on making these services popular among the customers.
- \* As it was found that less than 10% of the customers from both public sector and private sector banks were using online banking to pay their utility bills, there is an acute necessity on the part of both types of banks to take it seriously and work on making the customers use online banking to pay their utility bills. Lot of awareness has to be created by these banks among customers about this service.
- \* The management of both public sector and private sector banks are required to keep faith in their employees while implementing technology in the banks and reduce or avoid the complexity in using technology in banking. This is the way to improve E-banking services in banks, as felt by the customers of both types of banks.

- \* The employees of public sector banks that are too aged and those who are about to retire will have least motivation to learn new things like technology. Hence, banks need to consider them as special cases and motivate them to adapt technological changes in the banks and to convince them without making the issue more complex and their life difficult.
- \* While implementing the technology in banks, their need to consider factors like lack of operating knowledge, lack of trust on technology, problems of security, mental strain to use technology by the employees. Winning the confidence of all customers is the key to success in aspects of the new initiatives, including technology adoption in banks.
- \* Banks are suggested to strongly consider the aspects of cultural factors like cohesiveness among employees, collaborative culture and behavioral factors like reducing work stress, reduction of chaos and confusion, increased motivation and satisfaction etc. This approach by the banks would certainly increase the morale of the employees and result in higher productivity and self-contended work force in the banks.

### **Marketing of Bank Products**

- \* Public sector banks in the study are advised to adopt good marketing practices, as they are lagging behind in comparison to private sector banks in the study.
- \* Banks are suggested to consider the factors that influence the customers' buying behavior in both public sector and private sector banks.
- \* Banks are advised to adopt prudent marketing research process in order to gauge the pulses of the customers. A strong and scientific marketing research process ensures the correct prediction of the sales for the banks.
- \* Bank employees are required to develop cordial relationships with their customers. A dissatisfied customer will cost a huge business to the bank, while a contended customer is like an asset to the banks.
- \* Public sector banks are advised to come out with innovative banking products and services like door pick up of cash if it is bulk amounts, waiving of some bank charges for the premier customers of the banks.

- \* Public sector banks need to seriously work on improvisation of promotion strategy attributes like motivating customers through sales promotion techniques, promotional strategies etc. in order to have a good market hold.
- \* The front desk executives and front line sales executives of the banks have to be trained properly, as they are face of the banks who interact with the customers at the first hand and endorse the image of the banks.
- \* Public sector banks in the study have used Business Correspondents (BC) and Business Facilitators (BF) to carry out some of the banking transactions in remote areas where banks cannot afford to open a branch or ATM. Enough care has to be taken by the banks while appointing such BCs and BFs, as they carry cash deposit and cash withdrawal activities on behalf of the banks. The possibility of frauds and manipulations has to be avoided.
- \* Banks need to adopt a friendly approach with some customers who are not tech savvy or not comfortable in using bank technology. Bankers have to educate such customers and if need arises need to help them do transactions using technology.
- \* Some premier public sector banks who are well established need to maintain a cordial relationship with their customers, as brand building and sustenance of brand value calls for a long term, steady and friendly approach towards customer relationship.
- \* Private sector banks in the study are advised to strengthen their marketing mix strategies and awareness among the customers about their marketing mix.
- \* Customers of private sector banks in the study have not shown satisfaction in terms of banks' assurance and security. These are essential features of banking and hence private sector banks need to work to improvise on these factors.
- \* The public sector banks in the study are required to focus on revitalizing their approach towards tangibility, reliability, empathy and efficiency related to their customers, as they have not shown much satisfaction related to these factors.
- \* Banks are advised to streamline their efforts in relation to pricing and promotion as marketing mix strategy, as this ensures retention of customers and acquisition of new customers for the banks.

### **Impact of Technology on Bank Marketing**

- \* Maintenance and up gradation of technology has to be taken as a prime motto of all the banks as technology has made a very high positive impact on the Deposits, Advances, Income, Expenditure, Assets and Liabilities in all banks in the study
- \* Technology interface with the customers should be made easily available and it should be hassle free as technology has made a very high positive impact on the customers of all the banks with respect to Tangibility, Accuracy and Easy & Convenient Banking in the study.
- \* Banks should make sincere efforts in exploiting technology in to untapped areas of the banks. As the study has revealed that technology has made a low positive impact on the customers of banks with respect to Reliability, Responsiveness, Assurance, Empathy, Efficiency, Security and Customer Service in the study, banks need to think innovatively to use technology to better these variables.
- \* There has been no impact of technology on pricing strategy of private sector banks in the study. Hence, they are advised to penetrate technology services in to pricing strategy of the banks.
- \* Banks should strive to make use of technology in all spheres of their functioning as the study has revealed that technology has made a low positive impact on the employees of all the banks with respect to Cultural efficiency, Product strategy, Promotion strategy and Distribution strategy in the study.

### **● Conclusion**

Banking sector has a long standing history of development from chartered banking status to liberalized and competitive form of banking. Indian banking is unique and has parallel in banking history of any nation in the world. Banking is the means in providing the financial assistance of all the sectors of economy.

Belagavi district is taken as sample study area, for the research purpose on impact of the technology on marketing of bank products. The district is potential area for carrying banking business, as the agriculture, industry and service sectors are important sectors

which played predominant role in the development of district's economy. This gave scope for the rise in the need for the finance for smooth functioning of these activities. So the role played by the banking sector in this area is critically significant.

To cope with increasing financial requirements and new technology insists upon banking sector by Reserve Bank of India on recommendations Narashimam committee, for production of innovative to match with global scenario. In the recent past gradual and steady advancement in technology brought a paradigm of shift from traditional banking system to technological banking system, which is most convenient to all like banking sector, customers, employees of banks and society as a whole.

With an advent of E-banking and core banking system the technological services like ATM, online banking, tele-banking, mobile banking, RTGS, NEFT,EFT,etc., are the important services among technological facilities invented in banks. These facilities help in performing banking operations like pay utility bills, online shopping, bank bal. enquiry, bank statement print, account opening, fund transfer, loan enquiry,depositing,etc., these have enabled the banks to bring the significant change on net based technology.

The existence of fierce competition among private, public and foreign banks, the paradigm shift is found in the new concept towards market philosophy which came into existence as transformation in banking system called market oriented bank. The very purpose of this type of banking style is to attract customers, because the customers are the focal point of banking system, now a days all banks in globe have to concentrate on customer satisfaction so the banker has to build up strong rapport with customers. The employees of bank are pillars of bank progress in bank development in very much with purposive of bank and bank technology helped to enhance their skill and ability and work culture to enable them to increase their efficiency in turn this helps to increase their productivity.

The study shows positive impact of technology services provided by the banks on different variables of the banks like deposits, credit, profit, income, expenditure, assets and liabilities. These variables are increasing due to increase tech. facilities, similarly with that of the customer satisfaction and relationship and employee efficiency. The result shows positive relationship b/w these variable. Besides there are problems faced by bankers in facilitating these services, they also encounter the problem of quick service, procedural hurdles technology knowledge hinder the progress of banking and employees are also facing problems of bank technological ops, burden of work and fatigue. Therefore the govt. and Reserve Bank Of India should have positive approach towards genuine problems of bank to set right banking activities in right perspective on par with global scenario.

