IMPACT OF CORE BANKING SOLUTIONS ON BANK EMPLOYEES-A STUDY IN DAKSHINA KANNADA DISTRICT OF KARNATAKA

* MALATHY.K.  
Assistant Professor, Dept. of Commerce,  
G.F.G.C. HALEYANGADI.  
Research Scholar,  
Department of Post Graduate Studies and Research in commerce,  
Mangalore University, Mangalagangothri,

** DR. SUBHASHINISRIVATSA  
Associate Professor,  
University College,Hampankatta  
Mangaluru.

Banking has to work when and where you need it. The best advice and the best service in financial services happens in real time and is based on customers' behaviour, using principles of big data, mobility, and gamification

Brett King

ABSTRACT:
We know that technological advancements paved the way for rapid changes in the banking practices of both bank employees as well as bank customers. Introduction of Core Banking Solutions tremendously reduced the efforts of bank employees in meeting the diversified requirements of modern customers. With the introduction of Core Banking Solutions by almost all bankers today, it is expected that customers are treated uniformly at all the branches of the Bank. But the experiences of customers and bank employees tell us a different story. Both bankers and customers agree that CBS has become not just an enabler, facilitating integration of a range of services which can be provided anywhere and at any time through multiple channels like, ATM, NEFT, RTGS, Telephone Banking, Mobile Banking, Internet Banking, Unified Payments Interface (UPI) etc. but is also indispensable for the survival and growth of Banking institutions in the changing banking landscape. Besides helping the bankers to provide ecstatic services to the customers, it helps them in generating MIS reports to the top management and in submission of various reports to the regulators and the Government. In today’s banking scenario, CBS is a necessity as customers of today have no time and patience to wait in a long queue in a bank counter for conducting their banking transactions. Since CBS is the main driver of digital banking concept which is more relevant and prominent in today’s banking field, an effort is made in this paper to understand the impact of CBS on bank employees in a changing landscape of banking by considering the opinions of 100 bank employees of Dakshina Kannada district.
Key words: Core Banking Solutions, Digital Banking, Changing Banking landscape, ATM, NEFT, RTGS, UPI, Telephone Banking, Mobile Banking, Internet Banking

INTRODUCTION:

Technological advancements, particularly introduction of CORE Banking Solutions by the bankers brought transition in the banking landscape by shifting the bank employees from people-driven processes to machines controlled ones over the past many years. No doubt, Core Banking Solutions have made banking very easier and convenient for the customers. But by making manual data entry obsolete, it has also made banking a challenging job for bank employees. Unless they transform their traditional models and products and service delivery methods, they cannot meet the diversified requirements of changing customers. Moreover, the process of digital and technological transformation significantly affects the human resource requirements of banks. Many economists and researchers have already speculated negative impact on the workforce of bank employees because of automation by 2021. Economic Times already reported that, in the duration of one year between September 2016 and September 2017, HDFC Bank’s workforce dipped from 95,002 to 86,543. Yes Bank reported that it has already reduced its workforce by 10%. These Banks cited reasons such as redundancies, poor performance, digitalisation and technological changes as the driver for taking such a drastic step. SBI also claimed that there could be significant job cuts this year. In a report SBI chairman Rajnish Kumar said that public sector banks are likely to end the fiscal year with a smaller workforce than what they began the year with. It is a clear sign that nature of skill sets required for bank employees are changing with a more focus on front-end talent. Even among the people who are already employed in banks, many are in need of retraining in order to remain at par with the changing nature of work. This is also clear from the fact that many of the bank employees are redeployed across positions and functions in recent years.

With the introduction of Core Banking Solutions by all most all bankers today, it is expected that customers are treated uniformly at all the branches of the Bank. But the experiences of customers and bank employees tell us a different story. Both bankers and customers agree that CBS has become not just an enabler, facilitating integration of a range of services which can be provided anywhere and at any time through multiple channels like, ATM, NEFT, RTGS, Telephone Banking, Mobile Banking, Internet Banking, UPI etc, but is also indispensable for the survival and growth of Banking institutions in the changing banking landscape. Besides helping the bankers to provide ecstatic services to the customers, it helps them in generating MIS reports to the top management and in submission of various reports to the regulators and the Government. In today’s banking scenario, CBS is a necessity, as customers of today have no time and patience to wait in a long queue in a bank counter for conducting their banking transactions. Besides this, CBS is the main driver of digital banking concept which is more relevant and prominent in today’s banking field.
OBJECTIVES:

1. To understand the contributions and confusions caused by CBS
2. To study the major changes in the mode of banking operations which has lead to an extended banking coverage
3. To find out whether CBS has caused more satisfaction or dissatisfaction among bank employees.

SIGNIFICANCE OF STUDY:

Introduction of Core Banking Solutions by the bankers in India is compulsory as per the guidelines given by Reserve Bank of India. Moreover, MIS reports to the top management and submission of various reports to the regulators and Government necessitates Bankers to adopt CBS in all the branches. Technology is a boon to those who have adequate knowledge regarding its usage. But it causes lots of confusions among those who lack adequate knowledge and training. Since CBS is the main instrument of digitalisation and Digital banking which is a topic of relevance today, this study is undertaken to know its impact on bank employees in the changing landscape of banking by conducting a field study among bank employees of Dakshina Kannada District.

REVIEW OF LITERATURE:

Shirley J.Ho and Sushanta K. Mallick (2006) in their research paper on “The impact of Information Technology on the Banking Industry: Theory and Empirics” developed and tested a model to examine the effects of Information Technology (IT) in the US banking industry. They analysed both theoretically and empirically the impact of information technology related spending on bank profits by considering competition prevalent among the banks in providing financial services. According to them, the relationship between IT expenditure and bank’s financial performance and market share is dependent upon the extent of network effect. They also observed that the network effect is relatively high in the US banking industry and though banks use IT to improve competitive advantage, the net effect is not highly positive as normally expected. They concluded stating that Strategic responses of banks like, mega-mergers and internal cost cutting are likely to change the dynamics of banking industry.

Oluwagbemi Oluwatolani, Abah Joshua and Achimugu Philip (2011), in their research paper on “The impact of Information Technology in Nigeria’s Banking Industry” presented the current picture of banking industries in Nigeria and gave an insight into how quality banking has been enhanced through Information Technology, particularly through e-banking. They opined that Nigerian banks have been transformed from being just a bank to one stop-shop financial service providers. They found from their study that IT applications have created highest impact upon the banking environment in Nigeria and banks in Nigeria are well positioned.
Jawad Abbas, Asif Muzaffar, Hassan Khawar Mahabood, Muhammad Atib Ramzan and Syed Sibt Ul Hassan Rizvi (2014) in their research paper on the topic “Impact of Technology on performance of Employees (A Case study on Allied Bank Ltd. Pakistan) examined the effects of information technology on performance of Allied Bank employees. They found that technology greatly escalates the productivity of employees and reduces mistakes and frauds. Though Bank employees provide quality services, they stressed the need for providing adequate training to employees, because, failure to provide adequate training may result in poor services to customers.

K.Mala (2017) in her research article on the topic “An impact of technology in Banking Sector in India” opined that transformation from brick and mortar banking to technology driven banks is fairly rapid in India due to the emergence of several bank reforms during the mid 1990s’. According to her, Economic liberalization and the integration with international best practices in banking and finance gave the needed push to the Banking sector. She observed the prominence of Core Banking channels, like ATMs, Mobile banking, Internet Banking etc. to meet the requirements of customers’. But her study was based upon secondary data; no specific survey of bank employees was carried out by her to know the implications of CBS on changing banking landscape.

Though several studies are made by different scholars on the impact of technology on banking sector, no specific study is undertaken on Core Banking Solutions and its impact on bank employees. Hence this study is undertaken.

RESEARCH METHODOLOGY:

The study is partly descriptive and partly empirical in nature. Primary data is collected by conducting a survey among 100 bank employees of Dakshina Kannada District by using a structured questionnaire. Employees are selected from both public sector and private sector banks by using convenience sampling method. Information is also collected by directly interviewing the bank employees. Secondary data is from newspapers, journals and internet.

HYPOTHESES:

I. Impact of Core Banking Solutions on the bank employees

H₀: Introduction of CBS has no impact on bank employees

H₁: Introduction of CBS has impact on bank employees

II. CBS as a tool of Smart Banking

H₀: CBS will not last long as a tool of Smart Banking
III. CBS and Bank jobs

**H0:** Bank jobs are not reduced due to smartness of CBS

**H1:** Bank jobs are reduced due to smartness of CBS.

LIMITATIONS OF STUDY:

Primary data is collected by surveying 100 bank employees who have been chosen by convenience sampling method. Most of the respondents are from Haleyangadi, Surathkal, and Mangalore city. Respondents may not be the representatives of all bank employees across Dakshina Kannada district. Detailed study by covering more number of bank employees may be undertaken to gain more knowledge.

DATA ANALYSIS:

To derive meaningful information from the data collected by conducting a survey among 100 bank employees of Dakshina Kannada District, data analysis is carried out. 5-point Likert type scale questions were included in the questionnaire to know the level of satisfaction of bank employees on various aspects of CBS. Statistical tools like percentage analysis, weighted sum, Mean, Comparative analysis with ranking and Chi square tests are used for the purpose of interpretation of results.

Table 1: Demographic profile of Respondents

<table>
<thead>
<tr>
<th>Demographic factors</th>
<th>Classification</th>
<th>Number of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Age group</td>
<td>20 to 30 years</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>30 to 40 years</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>40 to 50 years</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>50 years to 60 years</td>
<td>07</td>
<td>07</td>
</tr>
<tr>
<td>Designation of respondents in banks</td>
<td>Clerk/ Office Assistant</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Officers</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Assistant General Manager</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Less than 5 years</td>
<td>05</td>
<td>05</td>
</tr>
</tbody>
</table>
It is inferred from table 1 that both male and female employees have been surveyed, and numbers of female employees are more forming 54 percent of total respondents surveyed. 43 percent of respondents belong to the age group of 30 to 40 years. 40 percent of respondents have 10 to 15 years of work experience at banks. 50 percent of respondents are rendering services as Bank Officers, 42 percent of respondents are clerks, and 4 percent each of respondents are rendering services as Assistant General Managers and Managers of their branch. And majority, 85 percent of respondents work on computer for 5 to 8 hours per day. It means that these respondents are already accustomed to the system of providing services through CBS.

Table 2: Significant changes noticed by the respondents in the banking landscape after the introduction of CBS.

<table>
<thead>
<tr>
<th>Sl .No.</th>
<th>Changes noticed by the respondents in the banking landscape after the introduction of CBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Long queues of customers in the bank counters for dealing with the Banks are not found</td>
</tr>
<tr>
<td>2</td>
<td>ATMs, Internet banking, Mobile Banking, NEFT etc are preferred by the customers. That means, generic customer services offered by the bank employees are no longer preferred. Customers are less willing to take the advice of the bankers for secondary products like mortgages and investments, instead they prefer to research themselves.</td>
</tr>
<tr>
<td>3</td>
<td>Customers expect a more tailored and personalised experience, when they rarely need to contact their banks in person at branches or by phone, or by other electronic means. Bankers are required to offer more ecstatic services to customers.</td>
</tr>
<tr>
<td>4</td>
<td>Because of cyber security issues, keeping financial information safe has become a biggest challenge for both bankers and customers. Banks make huge investment on data protection.</td>
</tr>
<tr>
<td>5</td>
<td>Information technology is playing a dominant role in Banking. Globalisation has opened up the banking horizon very wide, leading to severe competition among domestic and foreign banks. Many new players with strong muscle powers are</td>
</tr>
</tbody>
</table>

Source: Primary data
entering into Indian banking Industry with their own innovative products.

6. Because of complete automation, banks are giving preference to domain experts and technology specialists in their recruitment. Employees without technical knowledge are already trained or are being trained. People sitting with large bound ledger books are out of scene now.

7. Complexities of banking have risen, there is a paradigm shift from “conventional banking” to “convenience banking”, and from “mass banking” to “class banking.”

8. Submission of MIS reports to the top management and various other reports to the RBI, other regulators and Government is done online. It ensures efficiency and reduces the cost of operations.

9. Today, Banks recruit more number of officers and less number of clerks. It means that CBS has reduced clerical works at banks. Banks demand for more number of officers, who are technical experts with high computer knowledge.

Source: primary data

From Table 2, it is very clear that CBS has brought many changes and improvements in the Indian banking landscape. Contribution of CBS to the banking industry is noteworthy. In fact the present well developed banking system is the outcome of introduction of CBS by the banks in all most all the branches.

**Testing of Hypothesis:**

1. **Impact of Core Banking Solutions on bank employees**

   $H_0$: Introduction of CBS has no impact on bank employees

   $H_1$: Introduction of CBS has impact on bank employees

   From table 2, it is very clear that, CBS is the root cause for rapid developments in the field of banking. It has made banking a friendly exercise for the customers and made bankers technically advanced and smarter in rendering services. Hence null hypothesis is rejected and alternative hypothesis is justified.

   We therefore conclude that introduction of CBS has good impact on bank employees of Dakshina Kannada District.

**Table 3:** Level of satisfaction of bank employees with various aspects of CBS

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Weighted sum</th>
<th>Average level of satisfaction</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
From Table 3, it is very clear that, the average level of satisfaction of the bank respondents was much more than Agree state which is denoted by 4 with respect to factors like, Free from repetitive work, Improves co-ordination, Saves time, Speeds up the work and Reduces the work, Bank employees are highly satisfied with the CBS as regards to the above factors. On the basis of weighted sum, ranking was also done in the above table to know which factor contributed the most towards maximising the satisfaction of respondents. Table 3, also reveals that, the average level of satisfaction of the bank employees was much lesser than the Disagree state which is denoted by 2 with respect to factors like, Free from customers’ grievances, Free from security issues, and No Technical problems showing the strong dissatisfaction of Bank employees. Hence they are ranked accordingly. The Table clearly shows that CBS has both positive and negative impact on the services of bankers. But needless to state that, if proper measures are taken, CBS will produce wonders.
Table 4: Distribution of respondents on the basis of their perception regarding durability of CBS as a tool of smart banking

<table>
<thead>
<tr>
<th>Responses</th>
<th>Perceived that Core Banking is superior &amp; will last long as a tool of Smart Banking</th>
<th>Perceived that Traditional banking is superior &amp; Core Banking will not last long as a tool of Smart Banking &amp; Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>90(a)</td>
<td>10(b)</td>
</tr>
<tr>
<td>No</td>
<td>10(c)</td>
<td>90(d)</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 4, it is very clear that, 90 percent of respondents perceive that CBS is superior to traditional banking and it will last long as a tool of smart banking.

Testing of Hypothesis:

I. CBS as a tool of Smart Banking

H0: CBS will not last long as a tool of Smart Banking

H1: CBS will last long as a tool of Smart Banking

Chi square test:

Calculation of Chi square value from table 13

\[
\text{Chi Square value} = \frac{N \times (ad-bc)^2}{(a+b)(c+d)(a+c)(b+d)}
\]

Chi square Value = \[
\frac{200 \times (90 \times 90 - 10 \times 10)^2}{100 \times 100 \times 100 \times 100} = 128
\]

\[V=(r-1) \times (c-1) = (2-1) \times (2-1) = 1\]

For \(V = 1\) Table value of Chi square at 5% level of significance = 3.84

The calculated value of Chi square is greater than the Table value of Chi square; hence the null hypothesis is rejected. We therefore conclude that CBS will last long as a tool of Smart Banking.

Table 5: Perception of respondents about CBS as a factor responsible for causing reduction in Bank jobs

<table>
<thead>
<tr>
<th>Perception of respondents</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
</table>

CBS will increase bank jobs
CBS will decrease bank jobs
CBS has no impact on bank jobs
No opinion

<table>
<thead>
<tr>
<th></th>
<th>00</th>
<th>00</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS will increase bank jobs</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>CBS will decrease bank jobs</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>CBS has no impact on bank jobs</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>No opinion</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5, clearly indicates that, 95 percent of respondents perceive that CBS caused reduction in bank jobs.

**Testing of Hypothesis:**

I. CBS and Bank jobs

H0: Bank jobs are not reduced due to smartness of CBS

H1: Bank jobs are reduced due to smartness of CBS.

From table 5, it is very clear that, Bank jobs are reduced due to smartness of CBS. Now banks give preference to people with high technical calibre, who have specialised knowledge of computer software and computer applications, besides having other academic qualifications. Number of clerical posts has been already reduced by almost all the banks. More recruitment is for the post of officers. It is inferred from the opinions of respondents in our study. Hence null hypothesis is rejected and alternative hypothesis is justified. We therefore conclude that Bank jobs are reduced due to smartness of CBS. And it is advantageous from the point of view of bankers.

**FINDINGS:**

- Bank employees surveyed are already accustomed to the system of providing banking services through CBS
- CBS has brought many changes and improvements in the Indian banking landscape. Contribution of CBS to the banking field is noteworthy. In fact the present well developed banking system is the outcome of introduction of CBS by the banks in all most all the branches.
- CBS has made banking a friendly exercise for the customers and made bankers technically advanced and smarter in rendering services.
• The average level of satisfaction of the bank respondents was much more than agree state which is denoted by 4 with respect to factors like, Free from repetitive work, Improves co-ordination, Saves time, Speeds up the work and Reduces the work. Bank employees are highly satisfied with the CBS as regards to these factors.

• The average level of satisfaction of the bank employees was much lesser than the Disagree state which is denoted by 2 with respect to factors like, Free from customers’ grievances, Free from security issues, and No Technical problems showing the strong dissatisfaction of Bank employees.

• According to the perceptions of respondents surveyed, CBS will last long as a tool of Smart Banking.

• CBS is the main factor responsible for banks opting for reduction in their man power.

SUGGESTIONS:

• More user friendly CBS software in rural local languages must be introduced in rural and remote branches of banks.

• Though Banks have invested hugely for technology upgradation they have neglected to train the staff adequately. Employees, though they are using this CBS from many years, still they get into many confusions while adapting themselves to the changing environment in the industry. Employees must be taught the intricacies of the system and trained from time to time. Upgradation of their knowledge is a basic necessity of the industry.

• Banks must reasonably charge their customers for offering services through CORE banking channels like, ATMs, Telephone Banking, Mobile Banking, & Internet Banking. Customers in general are upset about ATM charges levied by the bankers.

• Issues relating cyber crimes should be properly dealt with.

FUTURE BANKING SCENARIO IN INDIA:

A glimpse ahead in the field of banking shows more emphasis on virtual banking, men less banking, paperless banking through digital banking by using new and innovative technologies. Business Analytics and Artificial Intelligence (AI) are expected to bring a major change. Robotics enabled by AI may be the future game changer in the banks. Growing competition in the field of banking may lead to major transformation leading to the survival of some banks and emergence of new banks which are highly competitive. Banks will deploy Robots for customer service, investment advisory and credit–approval process to enhance their customer base and to gain more from ecstatic services. Digital banking through highly advanced CBS will be the most preferred form of banking in the coming
years. Hence, candidates with high technical calibre will be in more demand in the banking industry in future.

Conclusion:

Business of banks has increased multi fold during the last two decades. Many ancillary services like Life/Non life Insurance, Mutual funds etc are provided by banks along with the traditional business. At the top level, separate workforce is available to take care of the new business, but at ground level only existing staff have to manage them. Increased business and drastic reduction in the staff strength is causing lots of confusions among them. However, some visible changes are observed among the staff, but there is much scope for improvement. Further bank charges are continuously on rise, which creates lots of hardships for the common men in the country. There is an urgent need for looking into this issue in the interest of common men. Technology when used wisely and appropriately will no doubt create wonders.

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