

## AN EMPIRICAL INVESTIGATION OF E-BANKING IN INDIA: EMPLOYEE PERCEPTION

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### ABSTRACT

Of late the banking industry has undergone rapid changes characterised by a series of fundamental developments all over the world including India. Most significant among them is the advancement in information technology as well as communication systems. The major objective of the study has been to analyse the perceived level of satisfaction of the employees with the introduction of ICT in the banking sector. This study is restricted to the employees in the banks and the geographical area is confined to Dakshina Kannada (DK) District in Karnataka State. The employee respondents from the Corporation Bank, the Karnataka Bank Ltd and the Axis Bank Ltd., chosen at random have been interviewed aiming at gathering primary information. The primary data were gathered through a field survey, using structured Interview Schedules, from the bank employees working in the study area of DK district. The employees in the banks are satisfied with the development of the ICT in the banks. The employee respondents prefer E-banking over traditional banking.

### KEYWORDS

Employees' satisfaction, product diversification, training

### 1.0 Introduction

Banking system constitutes the core of the financial sector of an economy and plays an important role in overall development. Of late the banking industry has undergone rapid changes characterised by a series of fundamental developments all over the world including India. The growing internationalisation of financial markets, increased competition due to the emergence of new generation banks, entry of foreign banks, adoption of Information and Communication Technology (ICT) are the major developments in Indian banking. Most significant among them is the advancement in information technology as well as communication systems. ICT and networking systems have

revolutionised the functioning of the banking industry. The new technologies have radically altered traditional ways of carrying out banking business.

### 1.1 Review of Literature

Considerable research has been carried out and is still continuing on the adoption of Information and Communication Technology (ICT) in banking in India and elsewhere in the world and also in other fields like banking productivity, banking sector reforms and so forth, by economists, academicians, researchers and institutions individually outside the banking system and also by institutions within the field of banking system. A review of the existing literature on the subject has been useful in getting an insight into the topic of study.

In a study Moutinho and Phillips (2002) found that increased efficiency and enhancement of customer service are the two perceived advantages of internet banking. In yet another study Kamal and Sengupta found that the employees are burdened with the same working environment and technology to cope up with the competition from the private and foreign sector banks.

In a joint study Kaleem and Saima (2008) found that the bankers in Pakistan perceive electronic banking as a tool for minimising inconvenience, reducing transaction costs and saving time. It is also found that minimisation of transaction cost as the most important benefit of e-banking and reduction in human resource requirement as the least important benefit of e-banking. Bankers in all segments considered government access to data as the biggest risk associated to electronic banking.

In a joint study Jegan and Gnanadas (2011) found that those employees who are involved in e-banking services for a longer period have high level of job satisfaction compared to those involved in e-banking services for a short period. The study concluded that there are some problems due to which employees feel uncomfortable to work electronically. The study recommended that there is need to solve these problems and effective implementation of some practical strategies to make e-banking more popular and friendly among the employees.

The investigation of the employee perception by Shaikh (2014) found that the employees consider 'saving time', 'minimisation of the risk of carrying cash' and 'minimisation of transaction cost' are the benefits of electronic banking. The study also found that 'need for expertise and training', 'legal and security issues' and 'chances of fraud' are the serious concerns of electronic banking.

In a joint study Ganguly, Ajay Kumar and Chattopdhyay, Subrata (2020) focused on the employees' perception towards the adoption of new internet and mobile technologies in banks. In this study, they have found that, almost all the employees of the banks, found the overall performance of tech-banking as satisfactory.

A brief review of the studies undertaken indicates that many studies have been conducted in different aspects of technology-adoption in banking in different countries of the world including India. But no comprehensive study has been undertaken regarding the employee satisfaction of technology driven-banking service offerings and hence this study is devoted to fulfill this research gap and add up to the existing knowledge.

## 1.2 Statement of the Problem

Though technology brought relief to banks and customers, its entry into banking system was initially sluggish. The resistance to change is always a challenge. In September 1983 an agreement was made between the Indian Banks' Association and the All India Bank Employees' Association on the installation of electronic machines (other than computers), microprocessors and mainframe computers, to support specified functional areas in branches, zonal offices, and head offices. The successive bipartite agreements of 1988, 1989 and 1993 between Indian Banks' Association and All-India Bank Employees' Associations, banks were able to computerise some or all operations in branches and administrative offices. Further the banks could use ATMs, note-counting machines, signature verification equipment, pass-book printers, and demand draft printers and use the latest communication facilities available under BANKNET, SWIFT etc. The settlements also provided for single window concept at branches and networking within branches. Since then, the process of implementation of ICT has picked up momentum. In this paper an attempt is made to summarise employee perspective and satisfaction during post reforms ICT adoption in the banking industry in India.

## 1.3 Objectives

The major objective of the study has been to analyse the perception of the employees with the introduction of ICT in the banking sector in the study area. However, the specific objectives of the study have been-

- To analyse the benefits of e-banking.
- To analyse the areas of concern under e-banking.
- To investigate the employee satisfaction in the technology era
- To investigate the employees' preferred delivery channel.

## 1.4 Hypothesis

In order to achieve the objectives this study has set the following hypothesis for testing/verification.

- The employees in the banks are satisfied with the ICT adoption in the banks.
- The employees prefer traditional channels over electronic channels.

## 1.5 Scope and Limitations of the Study

This study is restricted to the employees in the banks and the geographical area is confined to Dakshina Kannada (DK) District in Karnataka State. The employee respondents from the Corporation Bank, the Karnataka Bank Ltd and the Axis Bank Ltd., chosen at random have been interviewed aiming at gathering primary information. The study has been extended to rural and semi-urban areas besides urban areas. Since the study has been planned to cover the perception of the ICT based banking products in urban, semi-urban and rural areas, samples of the employees have been drawn from all the three types of centers.

## 1.6 Methodology

The study required the inputs from the employee respondents providing ICT based banking services. The study is confined to employees in the banks of select scheduled commercial banks and the geographical area is confined to DK District in Karnataka State. The employee respondents from the Corporation Bank, the Karnataka Bank Ltd and the Axis Bank Ltd., chosen at random have been interviewed aiming at gathering primary information. The primary data were gathered through a field survey, using structured pre-tested Interview Schedules, from the bank employees working in the study area of DK district. The survey/ interview was designed and developed after research reviews and consultation with experts in the banking field. Pre-tested interview schedules were used for survey of the respondents.

The respondents are selected at random and the final sample used for analysis in the study has been 110 employee respondents of sixteen branches of the select banks. The respondents were 45 employees from the public sector banks, 42 employees from the old private sector banks and 23 employees from the new private sector banks. The proportion of branches has been 18.4 per cent of the total number of branches. The sample of employees has been 10.9 per cent of the total employees. The primary data gathered were tabulated and analysed with the help of SPSS Ver-13. Descriptive statistics is used to learn about the characteristics of the respondents. Kaiser-Meyer-Olkin (KMO) and Bartlett's Tests were used to measure sampling adequacy and factor analysis was made for the components to reduce large number of variables into smaller number of factors.

## 1.7 Results and Discussion

The distribution of the employees on the basis of branch location shows that of the 110 respondents 13 are from rural branches, 39 are from semi-urban branches and 58 are from urban branches.

### 1.7.1 View on Banker- Customer Relationship

In order to understand the employee perspective the respondents' view has been sought on the

banker-customer relationship under E-banking era. Of the 110 respondents 102 (92.7%) respondents consider that the relationship between the customer and the employees has improved during ICT era.

### 1.7.2 Perception on Product Diversification

It is believed that technology has enabled the banks to diversify the products. Now the banks could provide a larger range of deposit and loan products to the customers. The descriptive statistics on product diversification has been presented in Table 1

**Table 1: Descriptive Statistics on Product Diversification**

| Type of Bank            | N    | Mean | Std. Deviation | Median |
|-------------------------|------|------|----------------|--------|
| (01)                    | (02) | (03) | (04)           | (05)   |
| Public Sector Bank      | 45   | 4.29 | 0.626          | 4.00   |
| Old Private Sector Bank | 42   | 3.98 | 0.841          | 4.00   |
| New Private Sector Bank | 23   | 4.00 | 0.000          | 4.00   |
| Total                   | 110  | 4.11 | 0.668          | 4.00   |

The response of the respondents to the issue of product diversification has been done on the basis of the mean score. If the mean score is equal to 3 they are assumed neutral, if the mean score is less than 3 they are assumed to disagree and if the mean score is greater than 3 they agree. Further, if the mean score is greater than 4 it is assumed they strongly agree. The level of agreement of the respondents to the question on product diversification with the introduction of ICT is  $4.11 \pm 0.668$ , which shows the respondents strongly agree with the statement that ICT has enabled the banks to provide a variety of products. The level of agreement of the respondents of public sector banks was  $4.29 \pm 0.626$ , which shows that the respondents strongly agree to the statement. The level of agreement of the respondents of the old private sector banks was  $3.98 \pm 0.841$ , which shows that the employees agree with the statement. The level of agreement of the employees of the new private sector banks is  $4.00 \pm 0.00$  and it shows that the employees strongly agree with the statement.

### 1.7.3 View on Competition

In the sample of 110, 89.1 per cent of the respondents agree with the statement that ICT has intensified the competition among the banks. Therefore, the issue has been on the role of technology in improving the competitiveness of the bank compared with the other banks and in providing state of the art facilities.

#### 1.7.4 Employees' Satisfaction

All time uninterrupted availability and ease of use are the major factors that determine employee satisfaction. Employee satisfaction is measured on a 5 point scale where 5 means highly satisfied and 1 means highly dissatisfied. The level of satisfaction of the respondents is shown in Table 2.

**Table 2: Descriptive Statistics on Employee Satisfaction**

| Type of Bank            | N    | Mean | Std. Deviation | Median |
|-------------------------|------|------|----------------|--------|
| (01)                    | (02) | (03) | (04)           | (05)   |
| Public Sector Bank      | 45   | 4.47 | 0.815          | 4.00   |
| Old Private Sector Bank | 42   | 4.43 | 0.737          | 4.00   |
| New Private Sector Bank | 23   | 3.87 | 0.344          | 4.00   |
| Total                   | 110  | 4.33 | 0.743          | 4.00   |

Assessment of the level of satisfaction of the employees with ICT delivery channels is done on the basis of mean score, where if the mean score is equal to 3 they are supposed to be neutral, if the mean score is less than 3 they are supposed to be not satisfied and if the mean score is greater than 3, they are satisfied. Further, if mean score is greater than 4 they are supposed to be highly satisfied. The level of satisfaction of the employees towards ICT delivery channels is  $4.33 \pm 0.743$  shows that they are highly satisfied. In the case of public sector banks the level of satisfaction is  $4.47 \pm 0.815$  and the level of satisfaction of the employees of the old private sector banks is  $4.43 \pm 0.737$  which show that the employees of the old generation banks are highly satisfied and the level of satisfaction of the employees' of the new private sector banks is  $3.87 \pm 0.344$  showing that they are plainly satisfied. The hypothesis that the employees in the banks are satisfied with the development of the ICT in the banks is tested, proved and accepted.

#### 1.7.5 Benefits of ICT Adoption in Banking

The E-banking is an area where the banks try to gain an advantage. The various benefits of E-banking are summarised in the Table 3.

**Table 3: Benefits of E-Banking**

| Advantages of E-banking       | Public Sector Bank             | Old Private Sector Bank        | New Private Sector Bank        | Total                          |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
|                               | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) |
| (01)                          | (02)                           | (03)                           | (04)                           | (05)                           |
| Reduction of transaction cost | 42 (93.3)                      | 39 (92.9)                      | 23 (100.0)                     | 104 (94.5)                     |
| Accurate information          | 44 (97.8)                      | 40 (95.2)                      | 23 (100.0)                     | 107 (97.3)                     |
| Increases efficiency          | 41(91.1)                       | 40 (95.2)                      | 23 (100.0)                     | 104 (94.5)                     |
| Reduces labour requirement    | 44 (97.8)                      | 40 (95.2)                      | 20 (87.0)                      | 104 (94.5)                     |
| Saves time in doing work      | 45 (100.0)                     | 40 (95.2)                      | 23 (100.0)                     | 108 (98.2)                     |
| Increases service quality     | 43 (95.6)                      | 41 (97.6)                      | 23 (100.0)                     | 107 (97.3)                     |

Minimisation of the transaction cost is a benefit of E-banking for about 94.5 per cent of the respondents, availability of accurate information for 97.3 per cent of respondents, increase in efficiency for 94.5 per cent of respondents, reduction of labour requirement for 94.5 per cent respondents, time-saving for 98.2 per cent of respondents and service quality enhancement for 97.3 per cent respondents.

### 1.7.6 Areas of Concern for the Banking Industry

The E-banking is not an unmixed blessing and it has certain serious issues of concern. The major problems have been presented in Table 4.

**Table 4: Problems in ICT Based Banking Services**

| Problems                            | Public Sector Bank             | Old Private Sector Bank        | New Private Sector Bank        | Total                          |
|-------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
|                                     | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) |
| (01)                                | (02)                           | (03)                           | (04)                           | (05)                           |
| Chance of data loss                 | 29 (64.4)                      | 18 (42.9)                      | 17 (73.9)                      | 64 (58.2)                      |
| Chances of cyber crimes             | 39 (86.7)                      | 27 (64.3)                      | 20 (87.0)                      | 86 (78.2)                      |
| High initial cost of technology     | 29 (64.4)                      | 29 (69.0)                      | 20 (87.0)                      | 78 (70.9)                      |
| Rigorous training required          | 33 (73.3)                      | 26 (61.9)                      | 20 (87.0)                      | 79 (71.8)                      |
| Insufficient knowledge in using ICT | 32 (71.1)                      | 28 (66.7)                      | 16 (69.6)                      | 76 (69.1)                      |
| Lack of information security        | 28 (62.2)                      | 27 (64.3)                      | 17 (73.9)                      | 72 (65.5)                      |

Among the respondents in the banking sector about 58.2 per cent considers chances of data loss, 78.2 per cent of respondents for the chances of cybercrimes, 70.9 per cent high initial cost of technology, 71.8 per cent rigorous training requirement, 69.1 per cent insufficient knowledge in handling ICT and 65.5 per cent lack of information security as the major issues to be addressed.

### 1.7.7 Employees' Preference

The view of the respondents on the preference of the traditional and E-banking models will have a strong impact on the future of the channels. The responses regarding the preference are presented in Table-5.



**Table 5: Employees' Preference**

| Method              | Type of Bank                   |                                |                                | Total                          |
|---------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
|                     | Public Sector Bank             | Old Private Sector Bank        | New Private Sector Bank        |                                |
|                     | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) | No. of Respondents (Employees) |
| (01)                | (02)                           | (03)                           | (04)                           | (05)                           |
| Traditional Banking | 6 (13.3)                       | 3 (7.1)                        | 0 (0.0)                        | 9 (8.2)                        |
| E-banking           | 39 (86.7)                      | 39 (92.9)                      | 23 (100.0)                     | 101 (91.8)                     |
| Total               | 45 (100.0)                     | 42 (100.0)                     | 23 (100.0)                     | 110 (100.0)                    |

In the sample of 91.8 per cent of the respondents prefer E-banking over traditional banking. Thus, the hypothesis that employees prefer traditional channels over electronic channels is tested, disproved and rejected.

### 1.8 Major Findings

The major findings of the study are-

- ☐ The respondents consider that the relationship between the customer and the employees has improved during ICT era.
- ☐ The employees agree with the statement ICT has enabled product diversification.
- ☐ The employees prefer E-banking over traditional banking.

### 1.9 Conclusion

The respondents strongly agree with the statement that ICT has enabled the banks to provide a variety of products. It is also found that the banker customer relation has improved during ICT era and employees are satisfied with the E-banking services which they have been using and they prefer such services over the traditional channel. Therefore, the technology has enough potential in the study area in the days to come.

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