SYNOPSIS OF THE THESIS

PREFERENCE OF RETAIL SELF-SERVICE CUSTOMERS TOWARDS SELF-SERVICE TECHNOLOGY IN INDIAN BANKING SECTOR: A COMPARATIVE STUDY OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS IN JHARKHAND

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By

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1. Introduction

Customer has always been considered as the most important part of business. It is the customer who determines what a business is, what it produces, and whether it will prosper (Drucker, 1954). It is therefore important to understand that the purpose of business is to create and keep customers (Levitt, 1961). Shah et al (2006) also emphasize the significance of customer centricity as a critical aspect for business success. Companies have to understand their customers, to know where their business sector is going as well as to anticipate what systems their customers will need in order to remain at the very forefront of competition, often to work with them both on future planning and on rapid implementation. To meet customer value expectation, companies have to keep an eye on their competitor’s performance. A company must therefore develop a competitively superior value position and a superior value delivery system (Michael J Lanning, 1998). As many innovation activities involve adding new services, expanding existing ones and/or improving the service delivery process, the success of an organization hinges on how well it implements its service innovation (Berry et al. 2006) to create new markets. Technology readiness developed in order to explain how people achieve their goals by adopting technologies (Parasuraman, 2000).

Nowadays all banking activities like opening a new account, checking the account balance, fund transfer, depositing or withdrawing money, payment of bills online, buying insurance or any financial products etc can be done through e-banking. Customers can easily perform the various banking transactions by just a click on the system at any point of time i.e. 24x 7 facilities available. Self-service facilities have reduced the rush of deposit and withdrawal kiosk in bank. What exactly the customers perceive regarding the usage of self-service technology has to be tapped.
2. Research Objectives

Research Objectives have evolved from research problem statements, research gaps and have been developed for this research, after an in-depth study of the domain and review of literature, detailed in chapter 3. The research objectives have been developed accordingly are as follows:

- The first objective is to study and analyze the demographic factors influencing preferences for Self-service technology with reference to banking sector in Jharkhand. The various demographic factors taken into consideration are gender, age, educational qualification and occupation. Categorization of demographic variables has been done with the help of review of literature survey and valued opinion of experts from the banking sector:

- The other objective is to find the difference in preferences between public and private sector bank, in terms of self-service technology offered by the Indian Banking customers. The aspects of self-service technology such as Convenience to use with reference to location, Time, Cost, Comfort, Safety and user friendliness of public and private sector banks is also compared to find the difference between the preference level of customers of both the banks.

3. Relevance of the topic

The needs and reference of customers have been analyzed to benefit the customers as well as the banks. While the study would help reconfigure e-banking strategies by making self-service facilities more customer-centric, it would help understand customer needs and enhance customer satisfaction successfully. A comparative analysis between public and private sector
banks would also help to appreciate the newer perspectives w.r.t. self-service and meet emerging customer needs most effectively. The study also provides recommendation on how these self-service facilities can enhance customer perceptions regarding quality and satisfaction so that customers move less to banks thereby decreasing the operational cost of bank.

As usage of self-service facilities would reduce the cost of operations and rush in bank since lesser customer would visit bank for the various services, this study would be helpful to the banking industry with regards to Self-service facility.

The study would also enable bank officials in identifying the appropriate demographic segments where the Self-service facility is widely adopted. The practicing bank managers and officials can frame effective strategies for making the adoption level of Self-service facility high. The study will help to make the Self-service facility more customer-centric in relation with customer quality and satisfaction. It will help to examine how these self-service facilities can enhance customer perceptions regarding quality and satisfaction.

4. Contributions from survey of Existing Literature

Studies have been done regarding self-service facilities or technologies. Even a large number of researches have already been conducted regarding the factors that affect customer’s preference regarding online banking in India. The research works that was related to my topic which helped me in my research work was regarding expectation on what customers expect in the technology of self-service facilities by Bitner, M.J. (2001), “Self-service technologies: what do customers expect?”, (Marketing Management, Vol. 10 No. 1, pp. 10-11.) Another study related to my topic was “Role of customer personality in determining preference for online banking in India” NijagunaRudrayyaBhusnur, Richa Sharma, May 2006. Another study was on Implementation of effective self-service technologies has been dealt by Bitner, M.J., Ostrom, A.L., Meuter, M.L., (2002) –“Implementing successful self-service technologies”, Academy of Management Executive 16 (4), pp 96–109; which was quite relevant to my topic. Another study regarding comparison of public sector and private sector bank was done by N Bajpai, D Srivastava - Singapore Management Review, 2004; PS Budhwar, G Boyne - The International Journal of Human, 2004; TTR Mohan - Economic and Political weekly, 2002; have also been done regarding the comparative study of several areas and
services like HR, performance management of public sector and private sector banks. In the recent years there has been explosion of Internet based electronic banking applications (Liao & Cheung, 2003). Becket, Hewer & Howcroft (2000) states that the emergence of new forms of technology has created highly competitive market conditions for bank providers. However, the changed market conditions demand for banks to better understanding of customers' needs.

In today’s hyper-competitive e-commerce environment, while customer’s trust increasingly becomes an essential factor, empirical studies reveal that the presence of trust alone may not be universally sufficient for triggering customer transaction intentions (Gefen and Pavlou 2006; Liu and Goodhue 2012; Van der Heijden et al. 2003). Business enterprises must seek to reach out to the customers and offer products and services that people want and value them at prices that are more attractive than those of the competitors (Levitt, 1961), in the most innovative and best possible manner. It is equally important to understand customer expectations as a pre-requisite for delivering superior service (Parasuraman A, Berry LL. Zeithaml V A, 1991). The customer chooses between different offerings on the basis of which is perceived to deliver the most value (Kotler, 1999). Customer delivered value is the difference between the total customer value and total customer cost (Simon Knox and Stan Maklan, 1998). Customer Value can be expressed as a ratio (Christopher, 1996): Customer value = Perceptions of benefits. The functional benefits could be in terms of products, services, response of personnel or image and is the worth in monetary terms of the technical, economic, service, and social benefits a customer company receives in exchange for the price it pays for a market offering. (James C et al, 1998). This value delivery system also includes all the communications and channel experiences. To meet customer value expectation, companies have to keep an eye on their competitor’s performance. A company must therefore develop a competitively superior value position and a superior value delivery system (Michael J Lanning, 1998). The service organization has to identify customer expectation, correctly perceive customer’s wants and select the best service delivery channel (Parasuraman, Zeithaml and Berry, 1985). Ease of use is the extent to which a user finds the usage of a technology-enabled service free of effort as propounded by Davis et al. (1989). In his work, Davis extended the attitude towards behavior (B) and behavioral-intention (BI) relationship established in Theory of Reasoned Action (TRA), to the adoption of computers in workplace (Davis et al., 1989)
Literature review indicates several areas which deserve immediate attention with respect to the self-service facilities in Indian banking sector. These gaps may be enumerated. The review of literature suggest that most of the studies have been done on issues related to Internet banking in countries like Australia (Sathye, 1999), Malaysia (Mukti, 2000; Chung and Paynter, 2002; Sohail and Shanmugham 2004), Singapore (Gerrard and Cunningham, 2003a, 2006b) and Turkey UK (Sayar and Wolfe, 2007). Research has been done on role of customer personality in determining preference for online banking in India. (NijagunaRudrayyaBhusnurRicha Sharma, May 2006) but what customers prefer in Indian banking sector has still been untouched.

Many studies (N Bajpai, D Srivastava - Singapore Management Review, 2004; PS Budhwar, G Boyne - The International Journal of Human, 2004; TTR Mohan - Economic and Political weekly, 2002) have also been done regarding the comparative study of several areas and services like HR, performance management between public sector and private sector banks.

The present research intends to know the preference of the customers for Self-service technologies in banks. This research helps in identifying appropriate demographic segments where the self-service facility is still not widely adopted in Indian Banking Sector. It also helps in finding the difference in preferences of customers, if any, between public sector banks (SBI and Bank of India) and private sector banks (HDFC & ICICI) in Jharkhand regarding the self-service facility.
5. Data Collection and Methodology

5.1 Data Collection

The present research utilizes both primary and secondary data sources. The primary data was collected through a sample survey using structured pre-tested questionnaire from bank customers residing in the following urban and semi-urban branches of Jharkhand – Ranchi, Jamshedpur, Hazaribagh, Bokaro, Deoghar, Dumka, Dhanbad, Koderma, Ramgarh and Giridih.

According to RBI classification population groups are defined as under:

a. ‘Rural’ group includes all centres with population of less than 10,000.

b. ‘Semi-urban’ group includes centres with population of 10,000 and above but less than 1 lakh.

c. ‘Urban’ group includes centres with population of 1 lakh and above.

The Secondary data sources consisted of the published studies. Population or universe for this study is Three crore twenty nine lakhs one thousand and fifty. (Report provided by 43 rd Meeting of State level Bankers’ Committee, Jharkhand). The final usable sample size obtained in the research is 400 i.e. 100 from each bank- State Bank of India & Bank of India; HDFC & ICICI Bank.

5.2 Data Analysis

The data was first presented in tabular form representing the different responses’ given by the respondents. The first part of the questionnaire consists of all the general demographic features of the respondents and their identity. The other part includes questions relating to the awareness, frequency of usage and the duration of usage of the ATM services, internet banking services and tele- banking services. The frequency of branch visits is asked as it is assumed that customers using electronic banking services visit bank branches less frequently.

The last part measures the customer satisfaction level with the bank using a five point Likert- scale with 5 equals highly satisfied to 1 equals highly dissatisfied which covers various aspects of a banking service. The questionnaire was designed after pilot study, an extensive literature review and
consultation with experts in the banking area. The primary data collected from the respondents were tabulated and analyzed using the Statistical Package for Social Sciences (SPSS 19).

6. Findings

The research was done to identify appropriate demographic segments where the self-service facility is still not widely adopted in Indian Banking Sector. It also studies the difference in preferences of customers, if any, between public sector banks (SBI and Bank of India) and private sector banks (HDFC & ICICI) in Jharkhand regarding the self-service facility. Five hypotheses were proposed during the research and were tested using appropriate statistical tools. The statistical inferences were drawn at 5% level of significance (p=0.05).

One-Way ANOVA is done in order to know whether the gender, denoted as v1, has significant impact on the usage of Self-Service Technology. For the purpose, the respondents studied have been segregated into two categories; a) Male B) Female

Hypothesis on Gender

H0: Gender does not have a significant impact on the adoption of self-service facility.

H1: Gender has a significant impact on the adoption of self-service facility

The findings states that:

- Gender does not influence the customers’ preference towards ATM.
- Gender does not influence the customers’ preference towards Internet Banking.
- Gender does not influence the customers’ preference towards Tele-Banking.

One-Way ANOVA is done in order to know whether the age group, denoted has significant impact on usage of Self-Service Technology. For the purpose, the respondents studied have been segregated into five categories. They are:
Hypothesis on age-group

H0: Age does not have a significant impact on the adoption of self-service facility.
H1: Age has a significant impact on the adoption of self-service facility.

The findings states that:

- Age group influence customers’ preference on usage of ATM.
- Age group influence customers’ preference on usage of Internet Banking.
- Age group does not influence customers’ preference on usage of Tele-Banking.

Like the other demographic variables, for level of education also, One Way ANOVA is done in order to know whether the level of education, denoted as v1, has significant impact on the use of Self Service Facilities. For the purpose, the respondents studied have been segregated into five categories:

a. 10th
b. 12th
c. Graduate
d. PG and above
e. Professional degree

Hypothesis on Educational Qualification

H0: Educational qualification does not have a significant impact on the adoption of self-service facility.
H1: Educational qualification has a significant impact on the adoption of self-service facility.

The findings states that:
• Educational Qualification influence customers’ preference on usage of ATM.
• Educational Qualification influence customers’ preference on usage of Internet Banking.
• Educational Qualification influence customers’ preference on usage of Tele-Banking.

One-Way ANOVA is done in order to know whether the different types of occupation, denoted as v1, has significant impact on the use of Self Service Technology. For the purpose, the respondents studied have been segregated into five categories;

a. Salaried  
b. Self-Employed  
c. Student  
d. House-wife  
e. Others

**Hypothesis on Occupation:**

H0: Occupation does not have a significant impact on the adoption of self-service facility.

H1: Occupation has a significant impact on the adoption of self-service facility

The findings states that:

• Occupation influence customers’ preference on usage of ATM.
• Occupation influence customers’ preference on usage of Internet Banking.
• Occupation influence customers’ preference on usage of Tele-Banking.

The preference of customers for using Self-service Facility in both the banks has been analyzed by comparing the frequency of the usage of the facility. For the purpose, the respondents studied have been segregated into five categories:

1. Everyday
2. Once or twice a week
3. Fortnightly
4. Monthly
5. Rarely
6. Never used

**The hypothesis for comparison of preferences of public and private sector banks are:**

- H0: The preferences of customers of public sector bank are same as the preferences of customers of private sector bank.
- H1: The preferences of customers of public sector bank are different from the preferences of customers of private sector bank.

Independent samples T-Test is done in order to know whether the preferences of customers of public sector bank are same as the preferences of customers of private sector bank.

The findings states that:

**For ATM services:**
- the preferences of customers of public sector bank are same as the preferences of customers of private sector bank regarding the usage of ATM

**For Internet banking**
- the preferences of customers of public sector bank are same as the preferences of customers of private sector bank regarding the usage of Internet Banking

**For Tele banking**
- Preference of customers of public sector bank is different as the preferences of customers of private sector bank regarding the usage of Tele Banking.
The preference of customers for using Self-service technology in both the banks has been analyzed by comparing the frequency of the usage of the facility. For the purpose, the respondents studied have been segregated into five categories:

1. Everyday
2. Once or twice a week
3. Fortnightly
4. Monthly
5. Rarely
6. Never used

**Hypothesis for Convenience:**

H0: Convenience does not have a significant impact on the adoption of self-service technology.
H1: Convenience has a significant impact on the adoption of self-service technology

**Hypothesis for Cost:**

H0: Cost does not have a significant impact on the adoption of self-service technology.
H1: Cost has a significant impact on the adoption of self-service technology

**Hypothesis for Time:**

H0: Time does not have a significant impact on the adoption of self-service technology.
H1: Time has a significant impact on the adoption of self-service technology

**Hypothesis for Comfort:**

H0: Comfort does not have a significant impact on the adoption of self-service technology.
H1: Comfort has a significant impact on the adoption of self-service technology
**Hypothesis for Safety:**

H0: Safety does not have a significant impact on the adoption of self-service technology.

H1: Safety has a significant impact on the adoption of self-service technology

**Hypothesis for Human Interface:**

H0: Human Interface does not have a significant impact on the adoption of self-service technology.

H1: Human Interface has a significant impact on the adoption of self-service technology

The finding also reveals that parameters like convenience to use with reference to location, time; Cost, Comfort, Safety and user friendliness significantly impacts the preference of both private as well as public bank customers towards preference of self-service technology.

**Other Findings**

- The sample population comprised of 55% males and 45% females indicating that men might use self-service technology more than Women
- Age-wise distribution of the sampled respondents reveals that majority of the respondents are below 36 years which points out the fact that the Self-service technology is more used by the younger population
- Education qualification wise distribution of the sampled respondents reveals that, it is the graduate and above using more of self-service technology.
- Occupational wise distribution of the sampled respondents reveals that, it is the salaried category using more of self-service technology.
The reason for not using internet banking or tele-banking as found from Literature review, discussion with banking experts and respondents are as follows:

1. Customers avoid using Internet Banking due to lack of trust and fear of security
2. Lack of training by the bank to use internet banking or tele-banking
3. lack of knowledge about the steps to be used
4. Unaware about the benefits of using the services
5. Lack of personal touch

7. Conclusion

The findings of the research will help the banks to identify the key factors leading to more acceptability of the Self-service facilities in the Indian Banking sector, more specifically in Jharkhand. Also, it will help all the concerned persons to identify the factors which act as barriers for Self-service facility’s popularity and take corrective actions to overcome these barriers. The customers can be made more aware about the positive aspects of the Self-service facilities as a result of which the acceptability of the services will increase. Some specific suggestions are listed below:-

1) More effective promotional campaigns to be undertaken to inform about the positive effects of Self-service facilities.

2) When customers hold hesitant attitudes towards using Self-service facility, high effort should be given by the banks to remove the discomfort of the customers using Self-service facility. So, while going for Self-service facility advertising, the banks should assess the doubts or dilemma of their target customers’ attitude towards using Self-service facility

3) Effective demographic segmentation should be implemented so that the different categories of Self-service facility can be targeted according to the selected segment of the market.

4) The research also helps to understand the varying behavior pattern between the public and private sector bank customers.

5) Overall all, these steps will help the organization to promote Self-service facility better, which will ultimately increase the number of Self-service facility customers and reduce the pressure and operational cost of banks.
8. Limitations of the research study

1. Only ATM, internet banking and Tele-banking services have been considered.

2. Only Jharkhand have been studied and the rural parts of Jharkhand are not being studied. Urban branches were chosen for the study as the customers of urban branches of banks are more adaptive to newer technology-enabled banking services.

3. The responses of the respondents can be biased and, some Findings can be incorrect.

9. Scope of Future Research

The current research provided answers to the research questions; it also highlighted its limitations in the previous section. This section provides brief directions for future researchers to pursue, in the domain of Indian Banking sector on popularizing and successfully increase customer’s preference towards Self-service technology.

1. Future studies can be done by changing the sample size of all the categories
2. Future research can improve the Findings of this research by extending this study to include the following: a. comparing rural and urban areas For occupational hazards b. other geographies like different states
3. Retail banking has been studied. Corporate sector could be studied
4. Future research can take place to enrich the research work by incorporating the following additional factors which are expected to change over time:
   - expected increase in awareness of customers regarding Self-service technology
   - change in involvement due to increase in customer exposure to Self-service technology
5. Future research of similar type can be extended to other service sectors like: Hospitals, Hotels, etc.