"Internet Banking Services usage in Indian banks: Security Issues" - A Meta Analysis

*Mr.M.Ezhumalai & **Dr.C.Vatchala

*Research Scholar,Department of Commerce,Pachiappas College,Aminjikarai,Chennai.
**Asso.Professor &Research Supervisor, PG&Research Department of Commerce,
Pachiappas College,Aminjikarai, Chennai.
Contact: mezhumalai18@gmail.com

Abstract:

Technology banking is order of the day. The usage of technology is in the initial stage in rural areas. Some of the services like ATMs and Credit cards are widely used in both rural and urban areas. The issues in the usage of Internet Banking Services of banking are multiple due to lack of awareness, availability and access of the technology by the customers. In this scenario, it is necessary to have a Meta analysis on various dimensions of the study. The study results exhibit that, there is a highly significant difference between the mean scores of the level of awareness of technology enabled services, Problems in Using Technology Enabled Services, reasons for not using the Internet Banking Services in banking, and Factors influencing the usage of level of Internet Banking Services among the sample is significant at 1% level of significance.

Keywords: technology; lack of awareness; costs; confidence; trust factor

1.0: Introduction

In the five decades since independence, banking in India has evolved through Traditionalphase,(1786-1969),Nationalaizationphase(1969-1980),PostNationalaization phase (1980-1991), Reform phase(from 1991).During Fourth phase, also called as Reform Phase, Recommendations of the Narasimhan Committee (1991) paved the way for the reform phase in the banking. Important initiatives with regard to the reform of the banking system were taken in this phase. Entry of new banks resulted in a paradigm shift in the ways of banking in India. The growing competition and growing expectations led to increased awareness amongst banks on the role and importance of technology in banking. The issues in the usage of Internet Banking Services of banking are multiple due to lack of awareness, availability and access of the technology by the customers. In this scenario, it is necessary to have a meta analysis on various dimensions of the study.

2.0 Statement of the Problem

Internet Banking Services are become essential to improve the service quality and customer attractiveness in the banking sector. Deployment of Internet Banking Services in banking has lot of concerns. Most of the times banking is a business depends on trust factor. Technology deliverables should be in a position to meet the customer expectations and should create trust among them. Usage of technology requires awareness,

availability and change management nature among the customers. For a long period of time, Indian banks are trying their level best to deliver Internet Banking Services to their customers. Some of the user friendly services are reached customers with in no time where as some other are hardly trying to reach the customers. The poor usage and impediments of the Internet Banking Services in banking are because of lack of uniformity, integrity and hidden costs. Above all trust factor and the myth of safety on security among the customers. Hence, it is necessary to know the level of awareness, usage patterns and reasons for not adopting and problems in availing Internet Banking Services in banks can be of good interest and beneficial to the banks to take necessary action to improve the reach and delivery of Internet Banking Services to the customers and to the society at large.

2.1 Objective of the study:

1. To find out the dimensions of issues in the usage of Internet Banking Services in banks.

2.2 Need for the study:

For a long time, Indian banks faced very little competition and operated in a protected economy. Now, well-computerized foreign banks are beginning to compete seriously with the nationalized banks. Banks which use IT mainly focus on three areas viz. Meeting a customer's service expectations, cutting down the costs, managing dynamic competitive environment. But to be really competitive, banks need to think beyond just basic automation. In this context this study has become very vital to find out the service-satisfaction level of the customer. Therefore the researcher decided to study the impact of Information Technology on the functioning and productivity of Commercial Banks in Chennai City of Tamil Nadu.

2.3 Research Methodology

The present study has adopted both descriptive and analytical methodologies. The descriptive methodology has been focused on review in the literary evidences that are available through external and internal sources. Measurement of satisfactory level is with respect to various service ingredients. Hence the analytical process has become inevitable, resulting in the adoption of analytical methodology. A questionnaire has been designed in four segments consisting of personal data, determinant of customer satisfaction, services provided by the bank. This research has primarily been based on the primary data collected from the select respondent customers of the selected commercial banks in Chennai. The oral interview has also been conducted wherever necessary to add clarity to certain key issues.

2.4 Data Collection tool and reliability

The data required for the study is collected through a structured questionnaire. The overall reliability of the questionnaire is represented by the Corn Bach's alphas is 0.8653 and found reliable to proceed with the data collection. 462 customers were met in convenient way and segregated on the basis of each segment viz, age, income and gender, and their occupation. All the 462 respondent customers have been served with printed questionnaire. The respondent views have been considered for further analysis.

3.0 Analysis of Data using Friedman Test

Null Hypothesis-Ho: There is no significant difference between the mean ranks of the level of awareness of Internet Banking Services in banks among the sample.

3.1: Mean Rank of the technology enables services awareness levels along with Test Results

Technology enabled services	Mean Rank	Chi-Square	P-Value
Internet Banking	**8.76**		
Electronic bill payment	**7.91**		
Online brokerage	6.54		
Online delivery of financial products	6.42		
Downloading transaction information	**7.25**		
Loan Applications	6.62		
Mobile banking	**7.55**	335.577	0.000**
Tele Banking	6.98		
Electronic Fund Transfer (ETF)	**7.51**		
The Electronic Clearing System (Credit)	6.81		
The Electronic Clearing System (Debit)	6.78		
National Electronic Fund Transfer (NEFT)	6.22		
Real Time Gross Settlement (RTGS)	5.65		

Since p value is less than 0.001, the null hypothesis, There is no significant difference between the mean ranks of the level of awareness of Internet Banking Services in banks among the sample. Hence, it is concluded that there is a highly significant difference between the mean ranks of the level of awareness of Internet Banking Services in banks among the sample. Based on the mean value, high level of awareness is observed among the services in the order of priority as follows. Internet banking, electronic bill payment, mobile banking, electronic fund transfer and downloading the transaction information using ATMs respectively among the sample. It indicates the need to spread and create the awareness among the customers for effective implementation of Internet Banking Services and for the optimum usage of the services offered through technology.

Null Hypothesis-Ho: There is no significant difference between the mean ranks of the Problems in Using Internet Banking Services in Banks among the sample.

3.2: Mean Rank of the problems in using Internet Banking Services along with Test Results

Problems In Using Internet Banking Services In Banks	Mean Rank	Chi-Square	P-Value
Technology do not ensure privacy	**6.07**		
Safety to the funds is at stake due to trapping	**5.35**		
Technology failures	**6.05**		
Poor level of awareness on modus operandi	5.30		
Frequent change of technology	5.15		
No uniformity in operations and services	5.31	79.402	0.000**
E-banks charge more hidden cost	**5.37**		
More formalities in updating the changes	5.23		
Network related issues	**5.84**		
Lack of availability in many places (Credit)	5.32		

Since p value is less than 0.001, the null hypothesis, There is no significant difference between the mean ranks of the Problems in Using Internet Banking Services in Banks is rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference between the mean ranks of the Problems in Using Internet Banking Services in Banks. Based on the mean value, the primary problems observed in availing the Internet Banking Services in banks are in the order

of priority is technology do not ensure privacy, technology failures, network related issues, hidden charges, and safety to the funds due to trapping respectively. The need for trust factor is clearly mentioned in the above observations. This can help to gain the momentum of using Internet Banking Services in banks.

Null Hypothesis-Ho: There is no significant difference between the mean ranks of the reasons for not Using Internet Banking Services in banks.

3.3: Mean Ranks of reasons for not using Internet Banking Services along with Test Results

Reasons for not using technology enabled services	Mean Rank	Chi-Square	P-Value
Poor availability and accessibility	**6.39**		
Myths on privacy of information and safety issues	**5.57**		
Lack of awareness on operating mechanism	**5.47**		
Fear of mistakes in operation and charges	5.36		
No uniformity among the services offered	**5.48**	91.069	0.000**
Complex Process and infrastructure availability	5.17		
No linkage with all banks and differential charges	5.21		
Frequent change in modus operandi	5.27		
Technology frauds and cyber crimes	**5.82**		
Delivery failures and implications	5.25		

Since p value is less than 0.001, the null hypothesis, There is no significant difference between the mean ranks of the reasons for not Using Internet Banking Services in banks is rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference between the mean ranks of the reasons for not Using Internet Banking Services in banks. Based on the mean value, poor availability and accessibility, technology frauds and cyber crimes, myths on the privacy of information and safety of funds, lack of uniformity in the services offered by the banks and lack of awareness on operating mechanism of Internet Banking

Services in banks in the order of priority respectively. Hence, creating awareness, design and development of simplified systems can enable the customers to go forward and avail the Internet Banking Services in banks.

Null Hypothesis-Ho: There is no significant difference between the mean ranks of the Factors influencing the usage of level of Internet Banking Services in banks.

3.4: Mean Ranks of the factors influencing the technology enabled services along with Test Results

Factors influencing the usage of level of technology	Mean	Chi-Square	P-Value

enabled services in banks	Rank		
Level Awareness of Technology services	**6.58**		
Availability of Technology services	5.28		
Handling customer Grievances	**5.48**		
Improving Security Standards	**5.39**		
Developing and deployment of user friendly service	**5.58**	120.176	0.000**
Graphical Screens with user interactive nodes	5.29		
Proper Connectivity / Maintenance	5.44		
Easy operating systems and procedures	5.12		
Strong security to the electronic data of a customer	5.49		
Updating of the customer service information	5.34		

Since p value is less than 0.001, the null hypothesis, There is no significant difference between the mean ranks of the Factors influencing the usage of level of Internet Banking Services in banks is rejected at 1% level of significance. Hence, it is concluded that there is a highly significant difference between the mean ranks of the Factors influencing the usage of level of Internet Banking Services in banks. Based on the mean scores it is noted that the primary factors influencing the level of usage of Internet Banking Services in banks are level of awareness on technology enabled services, commitment of banks in handling customer services, improving security standards, design, development and deployment of user friendly Internet Banking Services in the order of priority respectively.

Null Hypothesis-Ho: There is no significant difference between the mean ranks of the suggestions to improve the usage level of Internet Banking Services in banks.

3.5: Mean Rank along with Test Results

Suggestions to improve the usage level of Internet Banking Services in banks.	Mean Rank	Chi-Square	P-Value
Conduct more awareness programmes	**9.80**		
Demo-fairs on Tech services modus operandi	8.06		
Information / demo at the counter	**8.37**		
More advertisements on technology services	**8.19**		
Personal Contact programs	7.44		
Circulation of user manual in the initial stages	7.68		
Help desk provision in a bank	**8.24**	185.222	0.000**
IVRS information system / Toll free service	8.02		
Simple and Flexible technology services	**8.21**		
Inbuilt guide manuals in the product	7.62		
Time log facility for slow users	7.23		
Providing free availability in many places	7.87		
User friendly operational mechanism	**8.16**		
Inducting the Artificial intelligent systems	7.26		
Customer information systems	7.84		

Since p value is less than 0.001, the null hypothesis, There is no significant difference between the mean ranks of the suggestions to improve the usage level of Internet Banking Services in banks is

rejected at 1% level of significance. Hence, it is concluded that, there is a highly significant difference between the mean ranks of the suggestions to improve the usage level of Internet Banking Services in banks. Based on the mean scores it is identified that, conducting awareness programmes, providing Internet Banking Services demo in the counter, help desk at the bank, deployment of simplified technologies, advertisements on technology

services and its usage benefits, user friendly operational mechanism are in the order of priority. One can improve the usage level only after realizing the benefits out of usage. Hence, making the customer to use at least once can be a good achievement in the process.

4.1: Analysis of Data using Correlations

Table 4.1: Correlations between the selected Dimensions

		1	2	3	4	5
Awareness of Services	Pearson Correlation	1	.231(**)	.137(**)	.324(**)	.219(**)
	Sig. (2-tailed) N	.	.000 462	.003 462	.000 462	.000 462
Problems in availing services	Pearson Correlation		1	.484(**)	.275(**)	.336(**)
	Sig. (2-tailed) N			.000 462	.000 462	.000 462
Opinion on reasons for not availing services	Pearson Correlation			1	.185(**)	.178(**)
	Sig. (2-tailed) N			.	.000 462	.000 462
Influencing in usage of services	Pearson Correlation				1	.331(**)
	Sig. (2-tailed) N				.	.000 462
Improve the quality of services	Pearson Correlation					1
	Sig. (2-tailed) N					

From the above table it is found that the level of awareness on the Internet Banking Services are directly correlated with problems in availing technology enabled services, (r= .231,P= .000) this implies that the level of awareness affects the usage of technology enabled services, similarly level of awareness is directly correlated with the opinion of not reasons for not availing, factors influencing the usage, and

suggestions to improve the level of usage of the Internet Banking Services among the customers with 13.7 ,32.4 and 21.9 percent respectively.

Similarly, the problems in availing the Internet Banking Services is directly correlated with the reasons for not using Internet Banking Services in banks with 48.4 percent, factors influencing the usage

level of Internet Banking Services with 27.5 percent and the suggestions for improving the Internet Banking Services with 33.6 percent in the sample. The correlation between the reasons for not using the Internet Banking Services in banks and the factors influencing the usage level of Internet Banking Services is observed at 18.5 percent and on the suggestion to improve the Internet Banking Services usage in banks with 17.8 percent. Finally the correlation between the factors influencing the usage of Internet Banking Services is correlated at 33.1 percent with the suggestions to improve the usage of Internet Banking Services in banks.

5.0 Suggestions

Technology infrastructure is no longer a luxury for developing countries and they are already creating new ways of communicating, doing business, and delivering services. through extending access and use of technologies, the world bank aims to stimulate sustainable economic growth, improve service delivery, and promote good governance and social accountability.

Technological progress is a considerable driving force behind economic growth. Technology infrastructure in particular has attracted much investment, and generated significant fiscal revenues and employment opportunities in developing countries. The number of mobile phone subscriptions in developing countries has increased from 200 million in 2000 to 3.7 billion in 2010, and the number of internet users has grown more than tenfold.

Connect: financing broadband infrastructure: the world bank recently stepped up its financing of innovative public-private partnerships (PPPs) as catalytic vehicles to attract additional private

sector investment in broadband infrastructure. This includes regional communications infrastructure programs to accelerate the rollout of terrestrial backbone networks and submarine cable systems. This can connect all the banks under one roof. Uniformity is the feature can be enhanced without additional cost.

Innovate: supporting the growth of the ITES industry: such support helps develop and align people skills relevant to the ITES industries and knowledge economy. It includes a small but growing portfolio of it industry development projects required by a bank.

6.0 Conclusion

Banks face a serious challenge. The basic structure of the bank is increasingly in conflict Technology with the changing product, delivery, and service needs of the customers the future belongs to financial service provider's not traditional banks. The vast majority of large banks will create value networks. Doing so presents tremendous challenges. Banks will have to first develop a comprehensive distribution system that will enable customers to touch them at multiple points. Banks must also create performance measurement systems to assure the mix products and services they offer are beneficial to both the customer and the bank. They must determine whether to deploy new technologies themselves or with other service providers. Nevertheless, technology alone will not solve issues or create advantages. This technology needs to be integrated in an organization, with the change management issues linked to people resisting new concepts and ideas. It also needs to support a clearly defined and well communicated business strategy.

References

1. Arasli H., Mehtap-Smadi S., and Katircioglu S. T., 2005,"Customer Service Quality in the Greek Cypriot Banking Industry". Managing Service Quality. Vol. 15 No. 1. pp 41-576.

2. Gounaris S. P. Stathakopoulos V. Mand Athanassopoulos A. D., 2003, "Antecedents to Perceived Service Quality: An Explatory Study in the Banking Industry", International Journal of Bank Marketing, Vol. 21 no. 4, pp. 168-190.

3. Khalifa, M. and Liu, V. (2003), "Determinant of satisfaction at different adoption stages of internet –based services" Journal of the association for information systems Vol.4 NO. 5, PP. 206-232/October

4. Kotler, P. (2000), Marketing Management, International Edition, Prentice-Hall, Englewood Cliffs, NJ.

5. McKinney, V., Yoon, K., Zahedi, F.M., (2002) "The Measurement of Web-Customer Satisfaction: An expectation and Disconfirmation Approach "Information System Research, Vol.13, No. 3, September, pp.296-315.

6. Aaron, T. and Robin, S. (2010). FESTPERF: A Service Quality Measurement Scale for Festivals, Event Management, Volume 14, Number 1, 2010 , pp. 69-82(14).

7. Abdullah, M.A.A. (2005). Security, Perceptions, and Practice: Challenges facing Adoption of Online Banking in Saudi Arabia, A Dissertation Submitted to partial Fulfilment of Ph.D. in Applied Sciences to The School of Engineering and Applied science of The George Washington University.

8. Akiran, N.K. (2002). Credibility and Staff Conduct Make or Break Bank Customer Service Quality', Journal of Asia-Pacific Business, 3: 3, pp. 73-91.

9. Andronikidis, A. and Bellou, V. (2010). Verifying alternative measures of the service-quality construct: consistencies and contradictions, Journal of Marketing Management, Volume 26, Issue 5 & 6 May 2010 , pp. 570 – 587.

10. Asif Khan, M. (2010). An Empirical Study of Automated Teller Machine Service Quality and Customer Satisfaction in Pakistani Banks, European Journal of Social Sciences – Volume 13, Number 3 (2010).

11. Barnes, S.J. and Vidgen, R.T. (2002). An Integrative Approach to the Assessment of E-Commerce Quality, Journal of Electronic Commerce Research, VOL. 3, NO. 3.