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## MEASUREMENT OF SERVICE QUALITY IN MOBILE BANKING: AN EMPIRICAL STUDY IN SELECT NATIONALISED BANKS

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#### Abstract

This study examines the real time usage of mobile banking services in nationalised banks. In this era of technology, Mobile Banking is accepted as part of daily life. Mobile banking is an emerging application of mobile commerce that could become an additional revenue source to both banks and telecom services providers. It is a form of service convergence enabled by innovative technologies. With improvement of mobile banking technologies and devices, banking customers are able to operate banking services at anywhere and anytime. The aim of this study is to investigate the service quality performance of mobile banking in Nationalised Banks. This study was carried out by using both primary and secondary data. Simple random sampling method was adopted, using structured questionnaire. ANOVA was used to test the hypotheses of this study. This study found that customers appreciate the intervention of mobile banking in their daily life and at the same time, they are not still satisfied with the efficiency of mobile banking services in this study area.

#### Keywords: Mobile banking; Electronic banking; Mobile Devices; Service Quality

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#### INTRODUCTION

The term mobile banking means to operate banking transactions from mobile devices, such as smartphone, note book or tablets. Customers can access their e-banking facility from a browser or a special app, enabling customers to view their account balance, remittances and set up standing orders. Electronic banking delivers banking services through the internet to the customer at a reduced cost by the banking industry and improved convenience to the customer. It provides services such as information, maintaining accurate records, also restricts unauthorized access and provides relevant information. However, there also exists problem such as, low internet connectivity, inadequate knowledge about the usage of e-channels, poor network and forgotten password. Mobile banking services need to be brought closer to the population to enhance utility of the services.

In India, internet penetration and its use are relatively low, whereas mobile phone infiltration is much higher and growing rapidly 47% to 51% (World Bank, 2015). Mobile phone subscribers (638.4 million) in India are more than the number of bank account holders (400 million); therefore, mobile banking is a successful channel for the banks to establish a fast connection between the bank customers and the banks. The penetration of mobile in India has made rapid change in communication system. Places that are away from the reach of internet facility or telecom network are not suitable for mobile banking services.

#### LITERATURE REVIEW

Bamoriya and Singh [1] suggested that mobile banking has got issues and challenges like mobile handset compatibility, standardizing, software downloading, privacy and security.

Shahanur [2] investigated in his study about mobile banking and the result found that around 54% respondents thought that mobile banking system was less costly and time saving and 63% respondents trusted this service. 83% respondents thought that it is easier to access.

Chandran [3] presented three steps to run and improve the mobile banking services effectively, and he presented the benefits, limitations and problems faced by the customer during the transaction of mobile banking and recommended a method for improving mobile banking services.

Tiwari et al. [4] deliberated about mobile banking advantages, drawbacks, security issues and challenges in mobile banking services and suggested some idea to get the solution of mobile banking security.

Devadevan [5] talked about mobile compatibility, mind set about mobile banking acceptance and security issues. The author points that -evolution of eminent technologies in communication system and mobile device is a major factor and challenge to frequently changing mobile banking solutions. The author recommended creating awareness among the existing customers and providing special benefits for mobile bankers which will increase the service.

Giese and Cote [6] determined that there are three general components are: (1) consumer satisfaction is an emotional response; (2) the response refers to a specific focus; (3) the response is determined by limited time. The authors identify that specific definitions of consumer satisfaction should be used based on the context, taking into account the above characteristics.

Tukhrejul, et al. [7] described the present condition of mobile banking services in Bangladesh and also showed prospects and limitations of Mobile banking in their country. The author suggested to the Bangladesh banks to follow the mobile banking services for making customer's lives at ease. Mobile phones target the world's non reading poor.

McDougall and Levesque [8] scrutinised the connection between three components of value (core quality, relational quality and service value), customer satisfaction and future intentions across services. The results revealed that all three variables of core quality, relational quality and service value significantly affected customer satisfaction which subsequently affected future intentions.

Agwu and Adele [9] investigated the extent of the adoption and usage of the mobile phone banking services among banking customers in Nigeria and the associated problems. Mobile phones are now global and a standard aspect of daily life for a large percentage of the world population.

Based on the above literature review, it was found that fewer studies focused on service quality performance of mobile banking services. Hence this study is an attempt to find out the current status of service quality performance in mobile.

Research Objectives and Research Hypothesis:

- 1) To investigate the service quality performance of the mobile banking services
- 2) To identify the problems faced by the customers in mobile banking services
- 3) Suggest to improve mobile banking customer service.

**Hypothesis 1:** There is no significant difference between demographic profile of the respondents and the mobile banking service quality performance.

**Hypothesis 2:** There is no significant difference between demographic profile of the respondents and the problems of mobile banking services.

#### DATA COLLECTION AND METHODOLOGY

The aim of this study is to analyse the service qualities and the problems faced by the customers in mobile banking services. This study uses quantitative techniques. Both primary and secondary data were used in this study.

Primary data was collected with the help of questionnaire. For collecting data, researchers have used mailed questionnaire (Google forms). Secondary data was collected through wide range of literature review, magazines and published thesis.

The sample size of this study is 100 mobile banking customers which were taken for sample in selected districts (Tiruchirappalli, Coimbatore, Madurai, and Vellore) in Tamil Nadu. This study used simple random sampling for collecting the samples. ANOVA was used to test the hypotheses of this study.

#### DATA INTERPRETATION AND ANALYSIS

**Hypothesis 1:** There is no significant difference between demographic profile of the respondents and the service qualities of mobile banking services.

The overall mobile banking service qualities showed that there was a significant difference found between demographic profile of the respondents and the mobile banking service qualities (Table 1).

- 1. There is no significant difference between gender and mobile banking service qualities (F=0.640, p>0.05).
- 2. There is a significant difference between age and mobile banking service qualities (F=10.301, p<0.05).
- 3. There is a significant difference between education qualification and mobile banking service qualities (F=68.921, p<0.05).
- 4. There is a significant difference between occupation and mobile banking service qualities (F=9.108, p<0.05).
- 5. There is no significant difference between monthly income and mobile banking

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service qualities (F=0.827, p>0.05).

Measures		Sum of Squares	DF	Mean Square	F	Sig.
Gender	Between	23.560	99	oquaro		
	Groups					
	Within Groups	16.954	23	0.737	0.640	0.886
	Total	23.560	99			
Age	Between	17.838	23	0.776	10.301	0.000
	Groups					
	Within Groups	5.722	76	0.075		
	Total	23.560	99			
Education	Between	142.527	23	6.197	68.921	0.000
Qualification	Groups					
	Within Groups	6.833	76	0.090		
	Total	149.360	99			
Occupation	Between	149.077	23	6.482	9.108	0.000
	Groups					
	Within Groups	54.083	76	0.712		
	Total	203.160	99			
Monthly	Between	15.732	23	0.684	0.827	0.688
Income	Groups					
	Within Groups	62.858	76	0.827		
	Total	78.590	99			

**Table 1:** ANOVA between demographic profile and mobile banking service qualities.

Hence, there is a significant difference between demographic profile of the respondents like age, educational qualification and occupation and the mobile banking service qualities. The result shows that there exist no significance difference observed between male and female mobile banking customers and the service qualities of mobile banking. It is inferred that the respondents of difference in gender are not showing difference in service qualities of mobile banking.

The study results show that there is a significance difference observed between age of the mobile banking customers and the service qualities of mobile banking services. Hence the null hypothesis is rejected and it is inferred that customers in different age group are difference in their opinion of quality of mobile banking services.

The results indicate that there exist a significance difference observed between occupation and the service qualities of mobile banking. Occupations between groups

and within groups are showing a significance difference between mobile banking service qualities, this is due to their different types of job. It is inferred that the respondents are working in different sectors are not satisfied with regard to the quality of mobile banking services.

In educational qualification is also showing a significant difference in mobile banking service qualities. The results reveal that p value is less than 0.05. Hence the null hypothesis is rejected. It is inferred that there is a significance difference observed between educational qualification and service quality. Mobile banking customers are difference in their educational qualification are providing different opinion with regard to quality of mobile banking services.

Incomes between groups and within groups are not having significant difference in mobile banking service qualities. It is inferred that the respondents of different income groups are satisfied with regard to the mobile banking service qualities.

**Hypothesis 2:** There is no significant difference between demographic profile of the respondents and the problems of mobile banking services.

The overall service qualities shows a significant relationship between demographic profile of the respondents and the mobile banking problems.

- 1. There is a significant difference found between gender and problems of mobile banking services (F=0.537, p>0.05).
- 2. There is no significant difference found between age and problems of mobile banking services (F=8.827, p<0.05).
- 3. There is no significant difference found between education qualification and problems of mobile banking services (F=13.226, p<0.05).
- 4. There is a significant difference found between occupation and problems of mobile banking services (F=11.656, p<0.05).
- 5. There is a significant difference found between monthly income and problems of mobile banking services (F=0.719, p>0.05).

Hence, there is a significant difference between demographic profile of the respondents like age, educational qualification and occupation and the problems of mobile banking services. The result shows that there exist no significance difference observed between male and female mobile banking customers and the problems of mobile banking services. It is inferred that the respondents of difference in gender are not showing difference in problems of mobile banking services.

The study result shows that there is a significance difference observed between age of the mobile banking customers and the problems of mobile banking services. Hence the null hypothesis is rejected and it is inferred that customers in different age group are difference in their opinion of problems of mobile banking services (Table 2).

Measures		Sum of Squares	DF	Mean Square	F	Sig.
Gender	Between Groups	11.133	18	0.619	0.537	0.932
	Within Groups	93.377	81	1.153		
	Total	104.510	99			
Age	Between Groups	15.604	18	0.867	8.827	0.000
	Within Groups	7.956	81	0.098		
	Total	23.560	99			
Education	Between Groups	111.443	18	6.191	13.226	0.000
Qualification	Within Groups	37.917	81	0.468		
	Total	149.360	99			
Occupation	Between Groups	146.573	18	8.143	11.656	0.000
	Within Groups	56.587	81	0.699		
	Total	203.160	99			
Monthly	Between Groups	10.827	18	0.601	0.719	0.782
Income	Within Groups	67.763	81	0.837		
	Total	78.590	99			

**Table 2:** ANOVA between demographic profile and problems of mobile banking services.

The results indicate that there exist a significance difference observed between occupation and the problems of mobile banking services. Occupation between groups and within groups is showing a significance difference between problems of mobile banking services, this is due to their different types of job. It is inferred that the respondents are working in different sectors are not satisfied with regard to the problems of mobile banking services.

In educational qualification is also showing a significant difference in problems of mobile banking services. The results reveal that p value is less than 0.05. Hence the null hypothesis is rejected. It is inferred that there is a significance difference observed between educational qualification and problems of mobile banking services. Mobile banking customers are difference in their educational qualification are providing different opinion with regard to problems of mobile banking services.

Incomes between groups and within groups are not having significant difference in problems of mobile banking services. It is inferred that the respondents of different income groups are satisfied with regard to the problems of mobile banking services.

#### LIMITATIONS AND FUTURE RESEARCH DIRECTION

This study has few limitations such as:

- I. Study confined to mobile banking customers in Tamil Nadu,
- II. Focused only Nationalised banks in Tamil Nadu and
- III. This study does not represent the full population of customers.

For further research, it may extent to mobile banking service qualities at India level. Comparative study also conducted between nationalized bank and co-operative banks.

#### CONCLUSIONS AND RECOMMENDATIONS

Mobile phone plays as a vital communication tool for almost every individual in the world. In this study, the researchers were found that the factors of service quality performance and problems faced by the customers. The researchers also found that age shows the significant difference in perceiving service qualities offered in the mobile banking. Customers appreciating mobile banking services are still not satisfied with the quality and the efficiency of the mobile banking services. The problems such as lack of reliability, poor network and lack of language skills are affected by mobile banking customers. This study would be useful to the users of mobile banking both the service providers and customers to assure best performance in the implementation of mobile banking operations. The bankers can enhance the performance of the operations of mobile banking with the user friendly guidelines in using every facility extended in the apps, which could not only enable the customers to use all the facilities available in the mobile banking but also redress the problems faced by the customers in this study.

### REFERENCES

- Bamoriya PS, Singh P (2011) Issues and Challenges in Mobile Banking in India: A Customers' Perspective. Research Journal of finance and accounting 2: 112-120.
- 2. Shahanur (2013) Mobile Banking: An Emerging Issue in Bangladesh, ASA University Review p: 7.
- 3. Chandran R (2014) Pros and Cons of Mobile Banking- International Journal of Scientific Research Publications, p: 4.
- Tiwari AK, Agarwal R, Goyal S (2014) Imperative and Challenges of Mobile Banking in India. International Journal of Computer Science and Engineering Technology, p: 5.

- Devadevan V (2013) Mobile Banking in India-Issues and Challenges. International Journal of Emerging Technology and Advanced Engineering 3: 516-520.
- 6. Giese JL, Cote JA (2000) Defining consumer satisfaction. Academy of marketing science review, p: 1.
- Inam T, Islam B (2013) Possibilities and Challenges of Mobile Banking: A Case Study in Bangladesh. International Journal of Advanced Computational Engineering and Networking, p: 1.
- 8. McDougall GH, Levesque T (2000) Customer satisfaction with services: putting perceived value into the equation. Journal of services marketing 14: 392-410.
- 9. Em A, Carter AL (2014) Mobile Phone Banking in Nigeria: Benefits, Problems and Prospects. International Journal of Business and Commerce 3: 50-70.