

# USAGE OF M-BANKING SERVICES - A COMPARATIVE STUDY OF SELECT PUBLIC, PRIVATE AND FOREIGN SECTOR BANKS

Safia Binte Omer<sup>1</sup>

## Abstract:

The aim of this paper is to study the use of M-banking services provided by select public, private and foreign sector banks in Hyderabad. A total of 1088 bank customers are taken for the study. Different statistical tests like Proportion, Frequency distribution, Tables, Chi square used to study the perception towards M-banking and also to test significant difference in usage of M-banking by different sector banks. The result of the study shows the usage of M-banking differs significantly according to public, private and foreign sector banks. This paper concludes that a usage of M-banking services by the customers will help banks to understand their customer in a better way.

**Key words** – M-banking, chi square test, old and new private sector banks.

## 1. Introduction

Worldwide financial systems have undergone structural changes. The global factors driving these changes have been advancements in technology and computing, external financial liberalization and organizational changes in corporate world. Banking and finance in emerging economies has been no exception (vasant desai, 2010). IT revolution has had a great impact on the Indian banking system. In India traditional branch-based banking remains the most widely adopted method of conducting banking transaction, at same time commercial banks are undergoing a rapid change majorly driven by the information & telecommunication (ITC) technology. ICICI bank pioneered in mobile banking services in India. Today many commercial banks have launched mobile banking using ITC technology and now they can reach out to customers and provide them with not only general information about its services but also the opportunity of performing interactive retail banking transactions anytime, anywhere.

---

<sup>1</sup> Associate Professor, Sarojini Naidu Vanita Maha Vidyalaya, Nampally, Hyderabad, India

## 1.1 Concept of mobile banking

Mobile Banking refers to provision and availment of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank transactions, to administer accounts and to access customized information (Tiwari and Buse 2007). In the broader sense mobile banking as that type of execution of financial services in the course of which - within an electronic procedure - the customer uses mobile communication techniques in conjunction with mobile devices (Pousttchi and Schurig 2004).

### Review of Literature:

Ann Shawing Yang (2009), Factors associated with adopting and resisting mobile banking technologies were investigated among university students in Taiwan. Adoption factors included the belief that mobile banking helps fulfill personal banking needs, provides location-free conveniences, and is cost effective. Infogile Technologies (2007) in their case study paper describes the basic concepts, services offered, market survey and technology which enables mobile banking. Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. This opens up huge markets for financial institutions interested in offering value added services. Purnima S. Sangle and Preety Awasthi(2011), In this paper researcher attempted to develop the understanding of various factors affecting the adoption of mobile CRM services through newly launched mobile banking application The pragmatic findings reveal that perceived utility value is regarded as the most important factor for mobile CRM services. Padmaavathy P A., Adalarasu B. (2015), present study identified significant factors such as availability of service points, cost of service, social influence and security of service having positive influence on attitude toward the usage of mobile banking. Hernan and Rosa (2010) seek to test the factors that can influence adoption of mobile banking. In the present study, they found usefulness, social norms and social risk, are the factors that influence the intention to adopt mobile banking services the most.

### Objectives of the Study

1. To study the pattern of usage of Mobile banking services by the customers of select banks.
2. To identify the association between Mobile Banking Usage pattern of the respondents and perceived mobile banking usage.

## Hypotheses

Ho: 1 Pattern of usage of Mobile banking service is independent of bank category

Ho: 2 There is no association between Mobile Banking Usage pattern of the respondents and perceived mobile banking usage.

## Research Methodology

Type of study: Descriptive

Sources of Data: Both primary and secondary

Sampling unit: Select banks in twin cities of Hyderabad

Sampling Area: Twin cities of Hyderabad

Sampling method: Simple random sampling

Sample Size: 1088 respondents

## Data Analysis

**Table: 1 Demographic profile of the respondents**

		Frequency	Percentage
Gender	Male	871	80.1
	Female	217	19.9
	Total	1088	100.0
Age	18-25 years	271	24.9
	26-35 years	202	18.6
	36-45 years	216	19.9
	46-55 years	228	21.0
	55 years and above	171	15.7
	Total	1088	100.0
Marital status	Married	828	76.1
	Single	260	23.9
	Total	1088	100.0
Educational Qualification	SSC/Intermediate	118	10.8
	Graduate	412	37.9
	Post graduate	347	31.9
	Any other	211	19.4
	Total	1088	100.0
Occupation	Govt. Employee	262	24.1
	Private Employee	499	45.9
	Self-employed	216	19.9
	Business	111	10.2
	Total	1088	100.0
Annual	Less than Rs.2.00	130	11.9

income	lakhs		
	Rs. 2.0 - 4.0 lakhs	168	15.4
	Rs.4.0 - 6.0 lakhs	221	20.3
	Rs. 6.0 - 8.0 lakhs	282	25.9
	Rs.8.0 - 10 lakhs	191	17.6
	Rs.10.0 lakhs and above	96	8.8
	Total	1088	100.0

Source: Questionnaire – Primary data

Interpretation: On the basis of age 24.9% of the respondents are in the age group of 18-25 years, 18.6% are between 26-35, 19.9% are between 36-45 years, 21% are between 46-55 years and remaining 15.7% respondents are above 55 years. 76.1% respondents are married and remaining 23.9% are single. With regard to Education 10.8% respondents are SSC/intermediate, 37.9% respondents are graduates, 31.9% respondents are post graduates and remaining 19.4 % are under other category. Out of 1088 respondents 24.1% are government employees, 45.9% are private employees, 19.9% respondents are self-employed and remaining 10.2% are businessmen. With regard to annual income, 11.9% respondents are having income less than 2 lakhs p.a, 15.4% are between 2-4 lakhs, 20.3% are between 4-6 lakhs, 25.9% are between 8-10 lakhs and remaining 8.8% are above 10 lakhs.

Ho: 1 Pattern of usage of Mobile banking service is independent of bank category

**Table: 2 Mobile Banking usage pattern and Bank category**

Bank Category	How often do you use these services: Mobile Banking				Total
	Everyday	Once or twice in a week	Fortnightly	Monthly	
Public Sector Bank	43	313	70	11	437
Old Private Sector Bank	31	108	67	7	213
New Private Sector Bank	37	97	61	25	220
Foreign Bank	60	92	46	20	218
Total	171	610	244	63	1088

Source: Questionnaire – Primary data

Calculated X <sup>2</sup> value	Degree of Freedom	Table value @ 0.05	p- value	Result on hypothesis tested
107.527	9	16.919	.000	Rejected

Interpretation: Since p-value .000 is less than 0.05, null hypothesis is rejected. Hence, Mobile Banking usage pattern is dependent on Bank category.

Ho: 2.1 there is no association between Mobile Banking Usage pattern of the respondents and perceived high security in mobile banking usage.

**Table: 3 Mobile Banking Usage pattern of the respondents and perceived high security in mobile banking usage**

Mobile Banking	Mobile Banking provides high security.					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Everyday	18	52	8	91	2	171
Once or twice in a week	90	313	40	158	9	610
Fortnightly	29	99	11	98	7	244
Monthly	4	18	3	38	0	63
Total	141	482	62	385	18	1088

Source: Questionnaire – Primary data

Calculated $X^2$ value	Degree of Freedom	Table value @ 0.05	p- value	Result on hypothesis tested
72.033	12	21.026	.000	Rejected

Interpretation: Since p-value .000 is less than 0.05, is Rejected. Hence, there is an association between Mobile Banking Usage pattern of the respondents and perceived high security in mobile banking usage.

Ho: 2.2 there is no association between Mobile Banking Usage pattern of the respondents and perceived convenience in mobile banking usage.

**Table: 4 Mobile Banking Usage pattern of the respondents and perceived convenience in mobile banking usage**

Mobile Banking	Mobile banking is more convenient than other banking options.					Total
	Strongly disagreed	Disagree	Neutral	Agree	Strongly agree	
Everyday	0	23	48	100	0	171
Once or twice in a week	2	247	102	256	3	610
Fortnightly	0	53	72	119	0	244
Monthly	0	15	22	26	0	63

Total	2	338	244	501	3	1088
-------	---	-----	-----	-----	---	------

Source: Questionnaire – Primary data

Calculated $X^2$ value	Degree of Freedom	Table value @ 0.05	p- value	Result on hypothesis tested
76.144	12	21.026	.000	Rejected

Interpretation: Since p-value .000 is less than 0.05, null hypothesis is rejected. Hence, there is no association between Mobile Banking Usage pattern of the respondents and perceived convenience in mobile banking usage.

Ho: 2.3 there is no association between Mobile Banking Usage pattern of the respondents and perceived increase in transaction cost of mobile banking.

**Table: 5 Mobile Banking Usage pattern of the respondents and perceived increase in transaction cost of mobile banking**

Mobile Banking	Increases transaction cost					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Everyday	5	16	9	105	36	171
Once or twice in a week	9	17	13	380	191	610
Fortnightly	8	24	8	156	48	244
Monthly	0	5	0	44	14	63
Total	22	62	30	685	289	1088

Source: Questionnaire – Primary data

Calculated $X^2$ value	Degree of Freedom	Table value @ 0.05	p- value	Result on hypothesis tested
45.043	12	21.026	.000	Rejected

Interpretation: Since p-value .000 is less than 0.05, null hypothesis is rejected. Hence, there is no association between Mobile Banking Usage pattern of the respondents and perceived increase in transaction cost of mobile banking.

Ho: 2.4 there is no association between Mobile Banking Usage pattern of the respondents and perceived reliability of mobile banking.

**Table: 6 Mobile Banking Usage pattern of the respondents and perceived reliability of mobile banking**

Mobile Banking	Reliability of mobile banking					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Everyday	10	41	18	96	6	171
Once or twice in a week	63	318	40	174	15	610
Fortnightly	26	79	14	116	9	244
Monthly	8	10	3	39	3	63
Total	107	448	75	425	33	1088

Source: Questionnaire – Primary data

Calculated $X^2$ value	Degree of Freedom	Table value @ 0.05	p- value	Result on hypothesis tested
97.087	12	21.026	.000	Rejected

Interpretation: Since p-value .000 is less than 0.05, null hypothesis is rejected. Hence, there is no association between Mobile Banking Usage pattern of the respondents and perceived reliability of mobile banking.

### Conclusion:

This study has analyzed the usage of M-banking services and perceived usage by the customers from public, Private and foreign sector banks in twin cities of Hyderabad. The study also identified significant factors such as security, convenience, reliability and concern about transaction cost while using M-banking. Majority of the respondents are concern about security, reliability and increase transaction cost. M-banking will be successful for banks only when they have commitment to M-banking along with a deeper understanding of customer needs. The rise of usage of technology in banking sector is redefining business relationships and the most successful banks will be those that can truly strengthen their relationship with their customers. Banks should concentrate on above lines in order to have effective M-banking practices.

### References:

1. Ann Shawing Yang (2009). Exploring Adoption Difficulties in Mobile banking services, *Canadian Journal of Administrative Sciences*, Pg: 136-149.
2. Hernan E. Riquelme and Rosa E. Rios (2010). The moderating effect of gender in the adoption of mobile banking, *International Journal of Bank Marketing* , Vol. 28 No. 5, pp. 328-341.
3. Padmaavathy P A., Adalarasu B. (2015). A Study on Customer's apprehension

towards mobile banking technology, *International Journal of Research in Commerce, IT & Management*, Vol no. 5, Issue no. 07 (July) pg: 1-4.

4. Pousttchi, K. & Schurig, M. (2004). Assessments of Today's Mobile Banking Applications From the View of Customer Requirements, Proceedings of the Hawaii *International Conference on System Sciences*, January 5-8.
5. Purnima S. Sangle and Preety Awasthi (2011). Consumer's expectations from mobile CRM services: a banking context, *Business Process Management Journal* Vol. 17 No. 6, pp. 898-918.
6. Tiwari, R. and Buse, S. (2007) *The Mobile Commerce Prospects: A Strategic Analysis of Opportunities in the Banking Sector*, Hamburg University Press, Hamburg.
7. Vasant Desai( 2010) *Banks and Institutional Management*, Himalaya Publishing House, re-oriented second edition, pg:174.
8. White Paper (2007) Overview on Mobile Banking - The Future, Infogile Technologies Pvt. Ltd.