

## IMPACT OF MOBILE BANKING ON ITS USERS AND BANKING

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### ABSTRACT

Mobile banking is useful to operate a number of financial transactions through a mobile device such as a mobile phone or tablet. These financial transactions have been taken place between mobile user and financial intuitions. Mobile banking vary from mobile payments which consider the use of a mobile device to pay for goods or services either at the point of sale or remotely, analogously to the use of a debit or credit card to effect an EFTPOS payment. The data collected from the 120 respondents through the structured questionnaire. The secondary data obtained from the existing literature and review. The study found that the half of the respondents did not know about the technology of NEFT regarding mobile banking. The respondents opined that cell phone technology was useful for the expansion of the banking sector in India and they wanted to start a mobile banking initially in public sector rather than private sector, and they also opined that mobile banking saves the customers and banks utilization time and also useful for the business situations as well as financial situation, and it has a superior customer experience with bi-directional communications etc.

**KEY WORDS:** Expansion of Banking Sector, Public Sector, Utilization Time, Business Situation.

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**Introduction:** Mobile banking is useful to operate a number of financial transactions through a mobile device such as a mobile phone or tablet. These financial transactions have been taken place between mobile user and financial intuitions. Mobile banking vary from mobile payments which consider the use of a mobile device to pay for goods or services either at the point of sale or remotely, analogously to the use of a debit or credit card to effect an EFTPOS payment. The previous mobile banking services were offered over SMS a service known as SMS banking with the introduction of smart phone with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customer. Mobile banking has until recently (2010) most often been performed via SMS or the mobile web. Apple's initial success with iPhone and the rapid growth of phones based on Google's Android(operating system) have led to increasing use of special client programs, called

apps, downloaded to the mobile device. With the help of HTML5, CSS3 and JavaScript have seen more banks introduced mobile web based services to complement native applications. A study conducted by Mapa (May 2012) suggests that over a third of bank have mobile device detection upon visiting the banks' main website. A number of things can happen on mobile detection such as redirecting to an app store, redirection to a mobile banking specific website or providing a menu of mobile banking options for the user to choose from. In one academic model, mobile banking is defined as: Mobile Banking refers to provision and availability of banking- and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information."

**Concept of Mobile Banking:** Mobile banking can be said to consist of three inter-related concepts, mobile accounting, mobile brokerage and mobile financial information services. These services relevant to accounting and brokerage are transaction-based. The non-transaction-based services belonged to the balance inquiries might be needed before committing a money remittance and other services are Information services.

**Services of Mobile Banking:** The mobile banking service includes account information, transactions, investments and supporting services. The services of accounting information includes alerts on account activity or passing of set thresholds, monitoring of term deposits, access to loan statements, access to card statements, equity statements and insurance policy management. The transaction services involve the fund transfers between the customer's linked accounts and paying third parties, bill payments and third party fund transfers. The services of investment consists of portfolio management services, real-time stock quotes and personalized alerts and notifications on security prices. The supporting services are status of requests for credit, including mortgage approval, and insurance coverage, check (cheque) book and card requests and exchange of data messages and email, including complaint submission and tracking ATM Location. The content services avail of general information such as weather updates, news, loyalty-related offers and local services.

**Future Functionalities in Mobile banking:** The current mobile banking objectives are building relationships, reducing cost, and achieving new revenue stream will transform to enable new objectives targeting higher level goals such as building brand of the banking organization. Emerging technology and functionalities would enable to create new ways of lead generation, prospecting as well as developing deep customer relationship and mobile banking world would achieve superior customer experience with bi-directional communications. The following are the functionality enrichment In Mobile Banking communication enrichment video Interaction with agents, advisors. pervasive Transactions capabilities through the comprehensive "Mobile wallet", customer Education: - "Test drive" for demos of banking services, connect with new customer segment: - Connect with Gen Y – Gen Z using games and social network ambushed to surrogate bank's offerings, content monetization: - Micro level revenue themes such as music, e-book download, vertical positioning: - Positioning offerings over mobile banking specific industries, Horizontal positioning: - Positioning offerings over mobile banking across all the industries personalization of corporate banking services: - Personalization experience for multiple roles and hierarchies in corporate banking as against the vanilla based segment based

enhancements in the current context, build brand: - Built the bank's brand while enhancing the "Mobile real estate".

### Challenges for a Mobile Banking Solution

**Handset Operability:** There are a large number of different mobile phone devices and it is a big challenge for banks to offer mobile banking solution on any type of device. Some of these devices support java ME and others support Sim Application Kit a WAP browser, or only SMS. There is a challenge of interoperability between mobile banking applications due to perceived lack of common technology standards for mobile banking. In practice it is too early in the service lifecycle for interoperability to be addressed within an individual country, as very few countries have more than one mobile banking service provider.

**Security :** Security of financial transactions, being executed from some remote location and transmission of financial information over the air, are the most complicated challenges that need to be addressed jointly by mobile application developers, wireless network service providers and the banks' IT departments. The following aspects need to be addressed to offer a secure infrastructure for financial transaction over wireless network Physical part of the hand-held device. require at least an ID/Password to access the application ,authentication of the device ,user ID / Password authentication of bank's customer and the data being transmitted over the air. Therefore, the provision of Service level Agreements (SLAs) is a requirement for this industry.

**Scalability and Reliability:** Another challenge is to scale-up the mobile banking infrastructure to handle exponential growth of the customer base.

**Application Distribution:** It would be impractical to expect customers to regularly visit banks or connect to a web site for regular upgrade of their mobile banking application. It will be expected that the mobile application itself check the upgrades and updates and download necessary patches.

**Personalization:** The following are the details of languages, preferred language, date or time format, amount format, default transactions, standard beneficiary list and alerts

### Review of Literature:

**Suoranta and Mattila(2003)** explained in their theories Bass Diffusion model and IDT,information sources,age and household income significantly influence mobile banking.**Luam and Lin(2005)** found that the perceived self efficacy, financial costs ,credibility,ease of use and usefulness had significant influence on intention to adopt mobile banking.**Laukkanen(2007)** opined that perceived benefits (location free and efficiency) are main factors motivating people to adopt mobile banking. **Sripalawat et al (2011)** examined that the subjective norm is the most influential factor, and it was followed by perceived usefulness and self –efficacy. After examining the existing literature, most of the researchers were confined to find the reasons for adopting mobile banking,and it was found that no researcher

was not explained how the mobile banking influence the users of the mobiles and banking system.

**Research Problem:** Is mobile banking impact on users of mobiles and baking system.?

**Objectives of the Study:** After examining the review of literature and research problem the following objectives were identified for this study.

- 1.To interpret and analyze the perceptions of respondents regarding various issues of mobile banking.
2. To know how the mobile banking impact on users of mobiles and banking.
3. To offer a suitable suggestions to promote the mobile banking

**Methodology of the Study:** The data has been collected through the structured questionnaire from the 120 respondents. The respondents represented from the districts of Visakapatnam, West Godavari and East Godavari. The secondary data obtained from the existing literature. The convenience sampling method was used to collect the information through the questionnaire.

**Techniques:** The SPSS 16.0 version was used to derive the statistical results. The mean, percentage, standard deviation, t-test and Chi-Square test applied to analyze the data. In some questions adopted five point scale, and some of the four point and event three point also. The 1 is given for strongly agree, 2 for agree 3 for neutral 4 for disagree and 5 for strongly disagree. The value of a mean is considered as a most favorable item, because of I opted 1 for strongly agree instead of 5.

**Hypothesis1: Null Hypothesis (HO):** Mobile banking did not save the customers and banks utilization time to obtain the cash from the ATMs and facilitates increase the speed of transactions with transparency.

**Alternative hypothesis (HA):** Mobile banking saves the customers and banks utilization time to obtain the cash from the ATMs and facilitates increase the speed of transactions with transparency.

**Hypothesis2: Null Hypothesis (HO):** There is no significant difference in the usage of the cell phones and chance of misuse of passwords

**Alternative Hypothesis (Ha):** There is a significant difference in the usage of the cell phones and chance of misuse of passwords.

**Hypothesis3: Null Hypothesis (Ho):** Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization but did not useful for basic transactions such as querying for account balance and making bill payments.

**Alternative Hypothesis (Ha):** Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization useful for basic transactions such as querying for account balance and making bill payments.

**A. Personal Background of the Respondents:**

In this section demographical profile of the respondents explained in terms of age,gender,income and educational qualifications.

**Table 1: Distribution of Respondents by their Age**

	Frequency	Percent
Valid 10-20 yrs	30	25.0
20-30 yrs	45	37.5
30-40 yrs	45	37.5
Total	120	100.0

**Source:SPSS-Field Study.**

Table 1: The above table reveals that the (37.5 percent) of the respondents represented from the 20-30 years as well as 30-40 years and it was followed by 10-20 years. Hence, it can be concluded that the majority of the respondents represented from the age groups of 20-30 years and 30-40 years.

**Table 2: Distribution of Respondents by their Gender**

	Frequency	Percent
Valid Male	45	37.5
Female	75	62.5
Total	120	100.0

**Source:SPSS-Field Study**

Table 2: The above table makes it clear that the majority of the respondents (62.5 percent) relevant to the female category and remaining respondents concern to the male category. Hence, the majority of students confine to the female category.

**Table 3: Distribution of Respondents by their Income**

	Frequency	Percent
Valid Below 10,000	60	50.0
10,000-20,000	45	37.5
20,000-30,000	15	12.5
Total	120	100.0

Source:SPSS-Field Study

Table 3: The above table extracts the level of incomes between the less than 10,000 to 30,000. The majority of the respondents ( 50 percent) income varied from the zero level to 10,000., followed by 10,000-20,000 and 20,000-30,000. Hence, it can be concluded that the majority of the respondents represented from the below 10,000 income group.

**Table 4: Distribution of Respondents by their Education Qualification**

	Frequency	Percent
Valid Intermediate	45	37.5
Degree	15	12.5
Pg	60	50.0
Total	120	100.0

Source:SPSS-Field Study

Table 4: The above table reveals about the educational qualifications of the respondents. The majority of the respondents (50 percent) represented from the post graduation followed by intermediate and degree. Hence, it is evident that majority of the respondents posses the qualification of degree.

### **Section B: Impact Issues of Mobile Banking on its Users and Banking.**

This section studies with the aware of NEFT Regarding Mobile Banking, utility of cell phone technology for the expansion of the banking sector in India, whether they prefer to starts a mobile banking Initially in private sector or public sector and other issues and other impact issues of mobile banking on its users and banking.

**Table 5: Respondents Opinion on Aware of NEFT Regarding Mobile Banking**

Aware of NEFT		Frequency	Percent
Valid	Yes	63	52.5
	No	57	47.5
	Total	120	100.0

**Source:SPSS-Field Study**

Table 5: The above table makes it clear that the half of the respondents (52.5 percent) knew about the NEFT regarding mobile banking, and rest of the respondents did not aware about them. Hence, it can be concluded that the only half-of the respondents knew about them, due to its technical jargon.

**Table 6: Opinion on Utility of Cell Phone Techenology for the Expansion of the Banking Sector in India**

Utility of Cell Phone Techenology	Frequency	Percent
Yes	75	62.5
No	30	25.0
Cannot say	15	12.5
Total	120	100.0

**Source:SPSS-Field Study**

The table 6 explaining about whether cell phone technology useful for the expansion of the banking sector in India. The majority of the respondents (62.5 percent) opined that cell phone technology was useful for the expansion of the banking sector in India and rest of the respondents did not favorable regarding above said issue. Hence, it can be concluded that the usage of cell phone technology definitely useful for the banking sector.

**Table 7: Respondents Opinion on Whether they Prefer to Starts a Mobile Banking Initially in private sector or public sector**

Prefer to Starts a Mobile Banking		Frequency	Percent
Valid	Private sector	17	14.2
	Public sector	58	48.3
	Both private sector and public sector	45	37.5
	Total	120	100.0

**Source:SPSS-Field Study**

The above makes it clear that 48.3 percent of the respondents wanted to start a mobile banking initially in public sector, and it was followed by the both private and public sector (37.5 percent)

and private sector (14.2 percent). Hence, it can be concluded that the majority of the respondents represented from the public sector, followed by both private and public sector and private sector.

**Table 8: Calculation of Descriptive Statistics for Various Issues of Mobile Banking**

Various Issues of Mobile Banking	N	Mean	Std. Deviation
Mobile Banking saves the customers and banks utilizations time to obtain the cash from the atms	120	1.7500	1.30448
Mobile banking facilities increase the speed of transactions with transparency	120	2.0000	1.32842
private sector banks may not be implement the mobile banking due to their risk in payments	120	3.1250	1.36931
mobile bankinking increase the employment opportunites in banking sector	120	2.8750	1.27393
usage of technology may not be possible for all theb cell phone users	120	2.0000	1.22988
There is a chance of misues of password	120	1.7500	.97231
mobile bankinking reduce the operational cost	120	2.5000	1.22988
Mobile banking reduces the employment opportunities in banking sector	120	2.5000	1.22988
Mobile banking increase the employment opportunities in banking sector	120	2.7500	1.39778
mobiles may not correct devices to implement the mobile banking due to loss of mobiles in transit, hence customer may loss his/her pass word	120	2.2500	1.39778
Mobile banking may also be used to help in business situations as well as financial	120	1.7500	.66421
Banks may be unable to meet performance and relibility expectations may lose customer confidence	120	2.5000	1.12272
Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of the organization	120	2.0000	1.22988
Mobile banking develop deep customer relation ship and mobile banking world would achieve superior customer experience with bi-directional communications	120	2.1250	1.17081
Mobile banking is also use full for basic transactions such as querying for account balance and making bill payments	120	2.0000	1.32842
Valid N (listwise)	120		



**Mobile Banking saves the customers and banks utilizations time to obtain the cash from the atms \*  
 Mobile banking facilities increase the speed of transactions with transparency**

	Mobile banking facilities increase the speed of transactions with transparency				Total
	Strongly agree	Agree	Neutral	Strongly disagree	
Mobile Banking Strongly agree saves the customers and banks utilizations time to obtain the cash from the atms	45 (60.0)	15 (20.0)	15 (20.0)	0 (.0)	75 (100.0)
Agree	15 (50.0)	15 (50.0)	0 (.0)	0 (.0)	30 (100.0)
Strongly disagree	0 (.0)	0 (.0)	0 (.0)	15 (100.0)	15 (100.0)
Total	60 (50.0)	30 (25.0)	15 (12.5)	15 (12.5)	120 (100.0)
Pearson Chi-Square:1.350E2 <sup>a</sup> df 6 Asymp. Sig. (2-sided):.000,					

**Source:SPSS-Field Study**

The above table extracts the values of mean and standard deviation of the various variables. The majority of the respondents opined that there is a chance of misuse of password, and mobile

banking saves the customers and banks utilization time to obtain the cash from ATMS (Mean 1.75) and this banking way also useful for business situations as well as financial situations (mean 1.75), followed by the superior customer experience with bi-directional communications (mean 2.125) increase the speed of transactions with transparency (2.00) lose the customer confidence (2.50), loss of mobiles in transit (2.25), reduce the operational cost (2.50). Hence, it can be concluded that majority of the respondents favorable regard saves the customers and bank utilization time and also useful for the business situations as well as financial situation, have a superior customer experience with bi-directional communications etc.

**Table 9: Null Hypothesis (HO):** Mobile banking did not save the customers and banks utilization time to obtain the cash from the ATMs and facilitates increase the speed of transactions with transparency.

**Alternative hypothesis (HA):** Mobile banking saves the customers and banks utilization time to obtain the cash from the ATMs and facilitates increase the speed of transactions with transparency.

**Analysis:** The null hypothesis (HO) is rejected because ( $X^2 = 1.3502, df = 6, p = 0.000$ ), hence it can be concluded that mobile banking saves the customers and banks utilization time to

obtain the cash from the ATMs and facilitates increase the speed of transactions with transparency.

**Table 10: Null Hypothesis (H<sub>0</sub>):** There is no significant difference in the usage of the cell phones and chance of misuse of passwords

**Alternative Hypothesis (H<sub>a</sub>):** There is a significant difference in the usage of the cell phones and chance of misuse of passwords.

**Group Statistics**

	There is a chance of misues of password	N	Mean	Std. Deviation	Std. Error Mean
usage of technology may not be possible for all theb cell phone users	Strongly agree	60	1.2500	.43667	.05637
	Agree	45	3.0000	1.43019	.21320

	Levene's Test for Equality of Variances				
	F	Sig.	t	df	Sig. (2-tailed)
usage of technology may not be possible for all theb cell phone users	189.850	.000	-8.950	103	.000
			-7.936	50.185	.000

**Source:SPSS:Field Study**

**Analysis:** The proposed null hypothesis was rejected, where (t – 8.950, df 103, p = 0.00). Hence, it can be concluded that the there was a significant difference in the usage of the cell phones and chance of misuse of passwords.

**Table 11: Null Hypothesis (H<sub>0</sub>):** Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization did not useful for basic transactions such as querying for account balance and making bill payments.

**Alternative Hypothesis (H<sub>a</sub>):** Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization useful for basic transactions such as querying for account balance and making bill payments.

**Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of the organization \* Mobile banking is also use full for basic transactions such as querying for account balance and making bill payments**

	Mobile banking is also use full for basic transactions such as querying for account balance and making bill payments				Total
	Strongly agree	Agree	Neautral	Stron gly disagree	
Mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of the organization	45 (75.0)	0 (.0)	0 (.0)	0 (.0)	45 (37.5)
Strongly agree	15 (25.0)	30 (100.0)	15 (100.0)	0 (.0)	60 (50.0)
Agree	0 (.0)	0 (.0)	0 (.0)	15 (100.0)	15 (12.5)
Strongly disagree	60 (100.0)	30 (100.0)	15 (100.0)	15 (100.0)	120 (100.0)
Total	60 (100.0)	30 (100.0)	15 (100.0)	15 (100.0)	120 (100.0)

Pearson Chi-Square: 1.8752 df 6 Asymp. Sig. (2-sided):.000, Likelihood Ratio 166.355  
 df :6 Asymp. Sig. (2-sided):0.000

**Source:SPSS-Field Study**

**Analysis:** The proposed null hypothesis was rejected, where ( $X^2 = 1.8752, df = 6, p = 0.000$ ), hence it can be concluded that mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization useful for basic transactions, such as querying for account balance and making bill payments.

**Findings of the Study:**

1. The study found that the half of the respondents did not know about the NEFT regarding mobile banking.
2. The study observed that (62.5 percent) of the respondents opined that cell phone technology was useful for the expansion of the banking sector in India.
3. The study also found that 48.3 percent of the respondents wanted to start a mobile banking initially in public sector rather than private sector.
4. The study also found that mobile banking saves the customers and banks utilization time and also useful for the business situations as well as financial situation, and it has a superior customer experience with bidirectional communications etc.

5. The study found that there was a significant difference in the usage of the cell phones and chance of misuse of password.
6. Mobiles may be a correct device to implement the mobile banking due to loss of mobiles in transit, hence customers may lose his/her password and banks may be able to meet performance and reliability.
7. The study also observed that the mobile banking builds the relationships, reducing cost, achieving new revenue stream building brand of organization useful for basic transactions such as querying for account balance and making bill payments.

**Suggestions and conclusion:** Finally, it can be concluded that mobile banking was useful for customers and bankers in terms of saving of maintenance cost and time, promptness of service etc. Mobile banking certainly influences the users and government in terms of increase in quality of service, accountability and transparency in their operational dimensions. For better functioning of mobile banking there should be an outlet initially to create an awareness amongst the people, the success will depend upon the users of this service and providers of the service.

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