

INDIAN MOBILE BANKING SERVICES: MEASURING THE TRUST FACTOR AND RISK FACTOR ALONG WITH OTHER FACTORS INFLUENCING USER'S INTENTION.

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ABSTRACT:

This paper talks about upcoming development in Banking Services, with concentration on mobile banking (mbanking) services. In this study researcher has tried to measure the effects of various variable on the intention of users towards banking services taking mbanking as one of the primary services. The data collected for the research through structured instrument consists of 447 respondents acquainted with mbanking services. Data gathered for the research was selected on the basis of Simple random sampling. The interpretation of data highlights the positive relationship between the numerous elements and it also show the significant responsiveness with customer usage intention. This study bridges the breach in previous scholarly works on these topics by creating understanding for mbanking. Further, research in the study and model developed can be further developed in different contexts with other dimensions. The study conducted in Gujarat (India) is the limitation of present research however this can be expanded with new variable for getting better results with varied dimensions.

1. Introduction:

This study magnifies the role of Trust and Risk in the user's intention for the mbanking services. Either the all types of transactions related to bank online or offline is all about trust. Trust participate as an imperative part when it comes about the association of bank with their customers. In addition, for customer the association with bank is special, as it will lead to have Trust in the banking services. Changes is global market and pecuniary crisis worldwide, the faith of people in banking system, financial institutions and bank has deteriorate dinmany countries (Hurley, Gong, & Wagar, 2014). The catastrophe is also highlighting the prominent position of trust, or faith in the banks and banking systems. (Shim, Soyeon, Serido, & Tang, 2013). "Banking is essential to a modern economy,banks are not" was stated by "Business

week” and it clearly indicates that the banking services are becoming more important than bank itself (quoted in Financial Times, 1996). On the other hand, subsequently from the 80's major technology-boosted banking products and services are being accessible universally, at any place and at one's convenient time, then let it be e-banking or automated teller machines. More than a decade ago it is being clearly acknowledged that the usage of internet services in any field is not less than any revolution, and the same is applicable in the banking services as well.

(Barnes & Corbitt, 2003) states that m-banking is “a network whereby the customer interacts with a bank via a mobile device, such as a mobile phone or personal digital assistant.” M-banking is an updated version and an alternate to the conventional face-to-face banking practice (Püschel, Afonso Mazzon, Mauro, & Hernandez, 2010)

Indian banking sector is on boom, with digital alternative banking channel and initiatives by the various government schemes like: Pradhan Mantri Jan Dhan Yojana (PMJDY) (Pradhan Mantri Jan Dhan Yojna, n.d.). There a chof banking or rural sector has also been increased. Under Pradhan Mantri Jan Dhan Yojana (PMJDY) 15 million bank accounts were open on inauguration day (Pradhan Mantri Jan Dhan Yojna, n.d.). So as to endorse the digitalization of banking services and transactions, the Government of India has instructed to all Indian banks to upgrade the e-services portal and facilities through the digitalization of banking services which also include m-banking facilities to all their values customers by the completion of the year 2020. To promote the more usage of mobile banking among the respective customer of the banks, the RBI has eliminated the day-to-day transaction restrictions. Such mode of banking is having a quite conceivable for India and especially to the rural areas, where there are inadequate branches of banks.

However, in spite of having these much facilities there is very low adopting of the m-banking among the people. According to some survey done on 3000 randomly selected people, there are 22% of the people who are not having any clue how to use the m-banking services. 18% of the people are not only aware about the m-banking applications, and 14% of the people have highlighted the fear of being hacked during any mobile transaction. Majority of the people are hesitating to use the m-banking are: risk, security, service quality, etc. Lower level of adoption can be attributed to the people who are lacking with the proper mindfulness about m-banking application and digitalization of banking services. And the banks are also somewhere responsible because of lacking in faith in the banking functionalities, unclear bank practices in all the transactions and inadequate security measures.

This study examines the behavior pattern of customers towards e-banking and also to understand what motivates them to adopt it. The findings elaborate the pattern regarding the expectations of digital banking customers. The final output helps in endorsing adoption of M-banking in different geographical regions.

2. Theoretical Framework: Consumer mobile behaviour:

Technological Acceptance model (T.A.M) being widely popular in the technological space is considered as base for this study. (Davis, 1989) TAM model considers customers experiences and perception towards adopting IT. Over the years TAM model has been extended by adding Trust and Risk theories. Further adoption of m-banking is comparatively on a lower side. This is because people prioritize physical transaction, avoid agility, and are hesitant to adopt any innovation in IT due to insecurity and Risk (Selvakumar, 2015) This study focuses on the user's intention for m-banking services considering the factor like trust, risk and benefits.

2.1 Literature review of research on factor affecting user intentions:

A lot of literature is available on user's intention for m-banking services. These literatures consists of different variables of m-banking services (Abhishek & Hemchand, 2016) (Bamberg, Ajzen, & Schmidt, 2003) (Campbell & Goodstein, 2001) (Hurley, Gong, & Wagar, 2014) (Liao & Cheung, 2002) The variables

include: overall perceived ease of use(OPEU),overall perceived usefulness(OPU), overall perceived trust(OPT), overall perceived risk(OPR)&overall perceived benefits(OPB), etc.

(Liebana-cabanillas, Munoz-Leiva, & Sanchez-Fernandez, 2015a)Analysedmultiple paperswhich highlighted that OPEU and OPUhighly influenceOUI. (Dahlberg, Guo, & Ondrus, 2015)arguesincreased adoption of OPEU and OPUon OUI. (Verkijika, 2018)states that for the adoption of new technology OPT and OPR impacts the most.

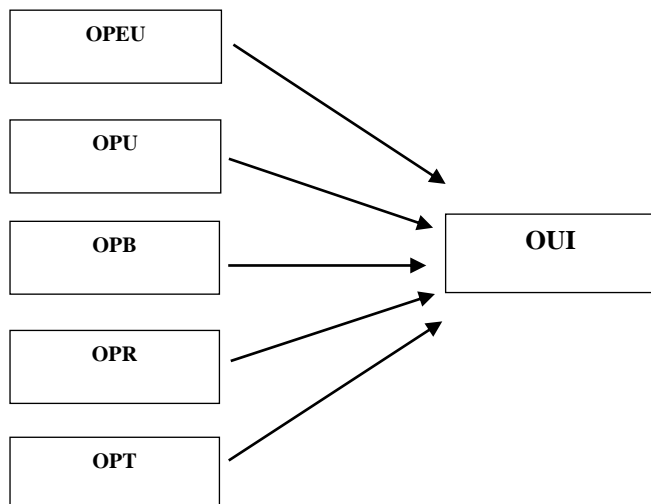


Fig. 01 – Factors affecting Customer Usage Intention:

(Patil, Rana , Dwivedi, & Abu-Hamour, 2018)publisheda literature discussing the impact of OPT and OPR on OUI. This paper is a synthesis of previous work done in similar area. (Thakur & Srivastava, 2014)And(Madan & Yadav, 2018)further confirmeditin their study that OPT, OPEU, OPU and OPR affectsOUI.

Conceptual Structural Model;

The researcher tries to discuss various factors affecting the usage intention of consumer for mbanking services. Individual's willingness to perform can be referred to Intention(Bamberg, Ajzen, & Schmidt, 2003)(Refer Figure 01)

The research has derived five major areas: Overall Perceived Risk (OPR) Overall Perceived Ease of Use (OPEU), Overall Perceived Trust (OPT), Overall Perceived Benefits (OPB) and Overall Perceived Usefulness (OPU).

These five factors directly influence the consumer's usage intention for mbanking services. On the bases of past studies, five independent variables have been identified to evaluate them in context of dependent variable of consumer's usage intention towardsmbanking services. After the rigorous process the model with five independent variables and one dependent variable have been derived and discussed below.

2.1.1 OPEU:

An ease to use application is highly accepted by users(Davis, 1989). Customers subjectively compare the perceived quality of services with the actual service that they receive(Parasuraman, Zeithaml, & Berry, 1985). The easier the application, the higher the acceptance among users for the same. Complication in usage prevents users from adopting the latest technology.

2.1.2 OPU

OPU is widely accepted in the field of e-banking (Liao & Cheung, 2002). Based on social psychology theories, like the theory of reasoned action (TRA) and the theory of planned behaviour (TPB), the technology acceptance model (TAM) is established as a voluminous framework that can be adopted under various fields (Davis, 1989).

2.1.3 OPB

Any technological acceptance is highly influenced by the advantages it offers to the users. Banks involved in providing m-banking services often provide various kinds of benefits. Such Perceived benefit turns out to be a motivating factor for adopting m-banking. This can be quite important owing to increased competition and larger number of service providers in the same field.

2.1.4 OPT

The amount of confidence and faith that a customer has in the marketer decides the success of their relationship. OPT becomes a motivator to accept innovative technologies and systems that are launched (Pham & Jo, 2015). Trust has been identified as a significant factor that can lead to adoption of technologies.

2.1.5 OPR

Bauer (1960) introduced the concept of OPR which thereafter became one of the significant variables to be studied in the research field (Campbell & Goodstein, 2001). Consumers while evaluating product brand consider perceived risk as an important parameter. The concept of risk is applied in wide range of areas from store brands, e-banking and grocery store. Risk and uncertainty are elements of perceived risk in the field of economics.

2.2 Research Gap:

During the literature review it was observed about the importance of Risk and trust factor in M-banking services. The literature review is making the way for trust and risk factor which are been studied less when the research are conducted on User Intention especially with m-banking service. Here Researcher has identified that the TAM model when studied specifically for m-banking it needs to study along with Risk and Trust factor.

2.3 Research Objectives:

- To study the various factor which are affecting to the Usage Intention of M-banking.
- To understand the intensity of the relationships amongst various factors which are affecting to the Usage Intention of consumers for M-banking.
- To measure the impact of each factor which are influencing usage intention of consumers for M-banking.

3 Research Methodology:

An empirical research was conducted and the researcher has applied the cross sectional survey method. He collected the opinions of the respondents with regards to M-banking Services, for testing the association between the variables through designing structured survey.

3.1 Research Design:

Research Design defined by Aaker (2001) as the detailed outline of the study which helps in achievement of the research objectives and decisions related to research process and data collection methods used. Descriptive research design is mainly applied where the researcher wants to improve on existing work. So here, the researcher has used descriptive research design.

3.2 Measurement development:

Online questionnaire was developed by researcher to collect the data. The measurement scales used for research was adopted from past related studies of same topic. Researcher to measure the variables used 5-point Likert scales, moving from “strongly agree” to “strongly disagree. Researcher included five constructs namely OPR, OPEU, OPT, OPB and OPU. Apart from that researcher also included factors like gender, age, income, marital status, and so on.

3.3 Data Collection:

Researcher collected data using survey method during months of October to December 2019, by using a purposive non-probabilistic sampling technique. The sample of the current study was from Gujarat, which is one of the industrial developed state of India. Researcher distributed 520 questionnaires to consumers out of which 460 were filled and returned. At last, 447 responses was considered for the study. 13 responses was rejected due to incomplete information. Table 01 explains demographic classification of the sample.

Table 01			
Descriptive statistics of respondents			
		Frequency	Percent
Age	18-30	218	48.8
	31-50	163	36.5
	Above 50	66	14.8
Gender	Male	271	60.6
	Female	176	39.4
Marital Status	Married	172	38.5
	Unmarried	275	61.5
Monthly Income	0-25000	188	42.1
	25001-50000	101	22.6
	50001-100000	73	16.3
	Above 100000	85	19.0
Education	Under Graduate	52	11.6
	Graduate	145	32.4
	Post Graduate	159	35.6
	Professional	91	20.4
Occupation	Job	178	39.8
	Business	63	14.1
	Home Make	57	12.8
	Professional	45	10.1
	Students	104	23.3
Duration	Less than 1	120	26.8

	year		
	1 to 2 years	135	30.2
	More than 2 years	192	43.0
Purpose			
	Deposit	83	18.6
	Withdrawal	98	21.9
	Money Transfer	266	59.5

3.4 Data analysis procedure:

In this study tools like reliability, descriptive and hierarchical regression and correlation analyses is used by researcher in order to understand the most controlling factors amongst the all independent factors. Hierarchical regression also known as stepwise regression is special form of multiple regressions. It is done to check whether adding an extra variable will improve the model's ability to predict criterion variable. The study adopts combined scale for extracting variables values.SPSS2.0 and Ms Excel are utilised as part of analytical tools.

3.5 Measurement model: Reliability:

In any research it is compulsory to check internal consistency of structured questionnaire. The study uses Cronbach alpha test to assess internal consistency of responses given by respondents. Reliability of the scales was checked by computing Cronbach alpha (Table 02), a measure of reliability which found to be satisfactory. All the variables' coefficient of alpha was above 0.7 specifying a satisfactory internal consistency.

Table 02		
Reliability for factors		
Particulars	Cronbach's Alpha	No of items
OPB	0.793	8
OPU	0.808	9
OPT	0.803	8
OPR	0.749	7
OPEU	0.720	7
OUI	0.847	9

4 Results:

4.1 Descriptive analysis:

(Table 03) depicts the descriptive analysis of the data. The value of mean and standard deviation shows acceptable range values. Researcher took sample size of 447 respondents to generalise the results over the entire population.

Table 03			
Descriptive Statistics			
	Mean	Std. Deviation	N
OUI	2.1427	.60486	447
OPB	1.7629	.47452	447

OPU	1.8653	.45676	447
OPE U	2.0932	.55939	447
OPT	2.0109	.56344	447
OPR	2.0128	.49295	447

4.2 Correlation analysis:

Furthermore in Table 04 researcher calculated the correlation using Pearson correlation method to exhibit correlation among variables. The correlation between all the variable is above 0.5 which shows strong relation amongst OPU with OPB (0.639), OPR with OUI (0.627), OPT with OPU (0.609) and OPR with OPU (0.608) the only relation among OPB with OUI (0.342) which is between 0.2 to 0.5 which is also acceptable but shows the medium relation which are in line with literature

Table 04						
Pearson Correlations						
	OUI	OPB	OPU	OPEU	OPT	OPR
OUI	1.000					
OPB	0.342	1.000				
OPU	0.554	0.639	1.000			
OPEU	0.580	0.504	0.547	1.000		
OPT	0.529	0.529	0.609	0.507	1.000	
OPR	0.627	0.485	0.608	0.523	0.539	1.000

4.3 Regression analysis:

Regression analysis provides the understanding and estimation of the association among variables. It helps in understanding how the distinctive value of dependent variable changes with the change in one of the independent variable when other independent variables are unchanged. Now when the researcher have established the linear relationship among the dependent variable and independent variables, the researcher wish to estimate the degree of change in the value of dependent variable due to change in independent variable.

We check the how independent factors like Overall Perceived Risk (OPR), Overall Perceived Ease of Use (OPEU), Overall Perceived Trust (OPT), Overall Perceived Benefits (OPB) and Overall Perceived Usefulness (OPU) affect Overall User Intention (OUI) towards mbanking Services. Hence, researcher applied multiple regressions and checks the validity of regression model with respect to both dependent and independent variables.

(Table 05) shows the model summary in which it is clearly indicated that significance value is 0.000 which is less than 0.05 it indicates that the multiple regression model is significant. Same significance value indicates that explained variance calculated by independent variables creates a significant impact on the Overall Usage Intention while using various Mbanking Services.

$$Y = a + \beta_0 x_1 + \beta_0 x_2 + \beta_0 x_3 + \beta_0 x_4 + \beta_0 x_5 + \epsilon$$

$$Y = a + \beta_0 x_1 + \epsilon \dots\dots\dots (a)$$

In above equation and with reference to Table 04, Y denotes OUI, β_1 is the regression coefficient of first independent variable that is OPR, and x_1 is the perceived overall change with respect to OPR

Further from first model i.e. (a), R is (0.627) and we can predict that value of R² is (0.393). It means 39.30% of total impact on User Intention is due to OPR and remaining 60.70% is due to other factors.

$$Y = a + \beta_01x_1 + \beta_02x_2 + \epsilon \quad \dots\dots\dots (b)$$

In above equation and with reference to Table 04, Y denotes Overall User's Intention, β_1 & β_2 is the regression coefficient of first two independent variable that is OPR&OPQ, x_1 & x_2 is the perceived overall change with respect to OPR&OPEU.

Further from second model i.e. (b), R is (0.693) and we can predict that value of R^2 is (0.481). It means 48.10% of total impact on User Intention is due to OPR&OPEU and remaining 51.90% is due to other factors.

$$Y = a + \beta_01x_1 + \beta_02x_2 + \beta_03x_3 + \epsilon \quad \dots\dots\dots (c)$$

In above equation and with reference to Table 04, Y denotes Overall User's Intention, β_1, β_2 & β_3 is the regression coefficient of first three independent variable that is OPR, OPQ&OPT, x_1, x_2 & x_3 is the perceived overall change with respect to OPR, OPEU & OPT.

Further from third model i.e. (c), R is (0.707) and we can predict that value of R^2 is (0.501). It means 50.10% of total impact on User Intention is due to OPR, OPEU&OPT and remaining 51.90% is due to other factors.

$$Y = a + \beta_01x_1 + \beta_02x_2 + \beta_03x_3 + \beta_04x_4 + \epsilon \quad \dots\dots\dots (d)$$

In above equation and with reference to Table 04, Y denotes Overall User's Intention, $\beta_1, \beta_2, \beta_3$ & β_4 is the regression coefficient of first four independent variable that is OPR, OPEU, OPT&OPB, x_1, x_2, x_3 & x_4 is the perceived overall change with respect to OPR, OPEU, OPT&OPB,

Further from fourth model i.e. (d), R is (0.715) and we can predict that value of R^2 is (0.511). It means 51.10% of total impact on User Intention is due to OPR, OPEU, OPT&OPB, and remaining 48.90% is due to other factors.

$$Y = a + \beta_01x_1 + \beta_02x_2 + \beta_03x_3 + \beta_04x_4 + \beta_05x_5 + \epsilon \quad \dots\dots\dots (e)$$

In above equation and with reference to Table 04, Y denotes Overall User's Intention, $\beta_1, \beta_2, \beta_3, \beta_4$ & β_5 is the regression coefficient of all independent variable that is OPR, OPEU, OPT, OPB&OPU, x_1, x_2, x_3, x_4 & x_5 is the perceived overall change with respect to all five independent variables.

Further from fifth model i.e. (e), R is (0.727) and we can predict that value of R^2 is (0.528). It means 52.80% of total impact on User Intention is due to OPR, OPEU, OPT, OPB&OPU and remaining 47.20% is due to other factors.

The value of Durbin Watson test is 1.841, which lies in range of 1 & 3 without compromising its benchmark. Here researcher did not violated the assumption of serial auto correlations.

From Table 06 it can be seen that the coefficient table first column indicates the value of constant and respective regression coefficients of independent variables shows their relative impact on dependent variable overall user intention.

Ha1: OPR leads to OUI for Mbanking Services.

The significant value for each independent factor is 0.00 which are less than 0.05. It clearly indicated that all the independent variables have a significant impact on the dependent factor namely OUI.

$\beta_01 = 1$ unit change in OPR leads to 0.769 unit change in OUI

If we put these values in to the regression equation it would be as follows:

$$Y=0.594 + 0.769(OPR) + \epsilon \dots\dots\dots (aa)$$

- Hb1: OPR leads to OUI for Mbanking Services.**
- Hb2: OPEU leads to OUI for Mbanking Services.**

The fifth column in (Table 05) shows that significant value for each independent variable is less than 0.05 which depicts that all independent variables have significant impact on dependent variable that is OUI.

- β_{01} = 1 unit change in OPR leads to 0.546 unit change in OUI
- β_{02} =1 unit change in OPEU leads to 0.376 unit change in OUI

If we put these values in to the regression equation it would be as follows:

$$Y=0.257 + 0.546(OPR) + 0.376(OPEU) + \epsilon \dots\dots\dots (bb)$$

- Hc1: OPR leads to OUI for Mbanking Services.**
- Hc2: OPEU leads to OUI for Mbanking Services.**
- Hc3: OPT leads to OUI for Mbanking Services.**

The significant value for each independent variable is less than 0.05 which depicts that all independent variables have significant impact on dependent variable that is OUI.

- β_{01} = 1 unit change in OPR leads to 0.465 unit change in OUI
- β_{02} = 1 unit change in OPEU leads to 0.317 unit change in OUI
- β_{03} = 1 unit change in OPT leads to 0.189 unit change in OUI

If we put these values in to the regression equation it would be as follows:

$$Y= 0.164+0.465(OPR) + 0.317(OPEU) + 0.189(OPT) + \epsilon \dots\dots\dots (cc)$$

- Hd1: OPR leads to Overall User Intension for Mbanking Services**
- Hd2: OPEU leads to Overall User Intension for Mbanking Services**
- Hd3: OPT leads to Overall User Intension for Mbanking Services**
- Hd4: OPB leads to Overall User Intension for Mbanking Services**

The fifth column in (Table 05) shows that significant value for each independent variable is less than 0.05 which depicts that all independent variables have significant impact on dependent variable that is OUI.

- β_{01} = 1 unit change in OPR leads to 0.496 unit change in OUI
- β_{02} = 1 unit change in OPEU leads to 0.353 unit change in OUI
- β_{03} =1 unit change in OPT leads to 0.231 unit change in OUI
- β_{04} = 1 unit change in OPB leads to 0.169 unit change in OUI

If we put these values in to the regression equation, it would be as follows:

$$Y= 0.238 + 0.496(OPR) + 0.353(OPEU) + 0.231(OPT) + 0.169(OPB) + \epsilon \dots\dots\dots (dd)$$

- He1: OPR leads to OUI for Mbanking Services
- He2: OPEU leads to OUI for Mbanking Services
- He3: OPT leads to OUI for Mbanking Services
- He4: OPB leads to OUI for Mbanking Services

He5: OPU leads to OUI for Mbanking Services

The significant value for each independent factor is less than 0.05 hence it shows that all the independent variables have a significant impact on the dependent factor, which is Overall User Intention.

- β_{01} = 1 unit change in OPR leads to 0.434 unit change in OUI
- β_{02} =1 unit change in OPEU leads to 0.325 unit change in OUI
- β_{03} = 1 unit change in OPT leads to 0.182 unit change in OUI
- β_{04} = 1 unit change in OPB leads to 0.251 unit change in OUI
- β_{05} = 1 unit change in OPU leads to 0.262 unit change in OUI

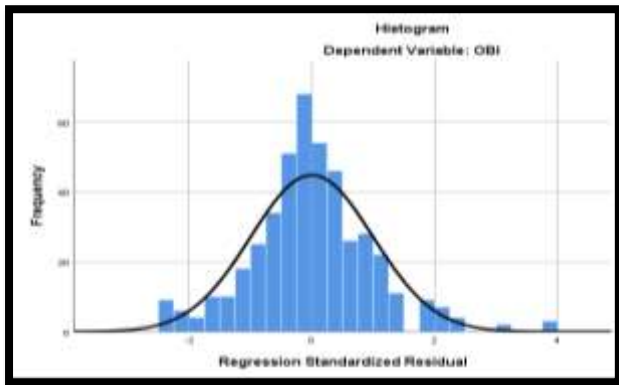


Chart 01

If we put these values in to the regression equation it would be as follows:

$$Y = 0.178 + 0.434(OPR) + 0.325(OPEU) + 0.182(OPT) + 0.251(OPB) + 0.262(OPU) + \epsilon \dots\dots\dots$$

Researcher has also taken care about the data should not affect by the issue of multi Collinearity. To check the multi collinearity Tolerance and VIF should be performed. If the value of VIF is less 10 it would not violate the assumption of Multi Collinearity

Table 05										
Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.627^a	0.393	0.392	0.47174	0.393	288.226	1	445	0.000	
2	.693^b	0.481	0.478	0.43682	0.088	74.990	1	444	0.000	
3	.707^c	0.501	0.497	0.42892	0.020	17.512	1	443	0.000	
4	.715^d	0.511	0.507	0.42468	0.011	9.898	1	442	0.002	
5	.727^e	0.528	0.523	0.41790	0.017	15.447	1	441	0.000	1.841
a. Control Variable: (Constant), OPR										
b. Control Variable: (Constant), OPR, OPEU										
c. Control Variable: (Constant), OPR, OPEU, OPT										
d. Control Variable: (Constant), OPR, OPEU, OPT, OPB										
e. Control Variable: (Constant), OPR, OPEU, OPT, OPB, OPU										
f. Dependent Variable: OBI										

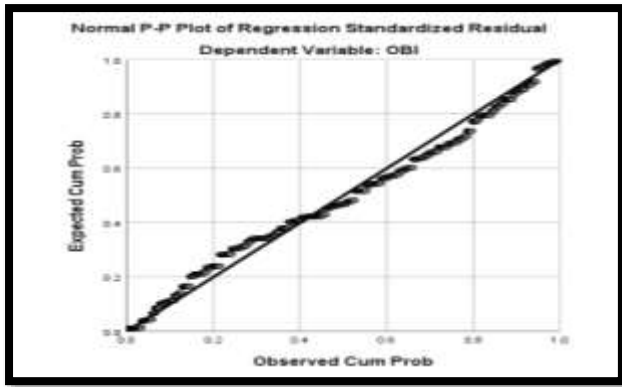


Chart 02

.With the help of (Chart 01) the histogram is showing almost bell shape which indicates assumption of normality is not been violated With help of (Chart 02) the researcher has displayed the P-P plot of Regression.

5 Discussion, Theoretical & Practical Contribution:

5.1 Discussion of results:

The researcher focuses on exploring factors affecting user's intention toward mbanking services. The analysis shows that Risk as factor impacts the most followed by ease of use and trust. A higher number of respondents strongly agree that risk has a negative impact up to a certain level then it becomes secondary while considering the trust factor and Ease of use factor.

The study suggests that OPU creates small but important impact on user intention. The major thing that was observed in this study was that when it's about fund transfer the usage of mbanking services is more in comparison to other banking activities.

5.2 Theoretical Contribution:

The study focuses on OPR and OPT towards mbanking services. The popularity of digital platforms has aided consumers to communicate their opinions and view openly. The findings indicate our results show that user's OPR, OPT along with OPEU have an important impact on user intention.

5.3 Practical Contribution:

Under this study, we have considered the Risk factor and trust factor along with TAM model. These variables are significant for the customer as the banking activities have been the lifeline of the developing economy. Any issues regarding trust and risk can directly affect user's intention to avail of the banking services on mobile. Practically this study highlights major factors important for designing mbanking services. Furthermore, benefits emerged as a key element for intention to use revised mbanking.

An important insight discovered magnifies what consumers expect in terms of benefits for this study customers expected to be valued with the passage of time and also to be rewarded for their long term association. So more emphasises should be offered by banks on mbanking activities.

6 Conclusions, limitations & future research:

6.1 Conclusion:

The independent factors significantly impact the overall usage intention of the consumers and which influences their Mbanking services. Risk along with trust as found to be playing a major role of influence in

the study. It is important for banks to manage quality parameters like safety, security, authorization, authentication, privacy concerns.

The benefits provided to the members have also made a considerable impact on the intention of users. Banking services definition is changing and banks will also have to make a move to work according to the future requirement. Mbanking services are slowly and steadily moving towards the mainstream of business making traditional banking the secondary thing.

The changes in banking policies with changing scenario of banking activities, a much more revolutionary era is yet to come, with the launch of hi-tech smartphones and 5G network connections, the scenario will be quite different.

6.2 Future Scope of Research & limitations:

The current study that we conducted has certain limitations. The primary shortfall is the number of respondent of the group that is been selected which is representing the Indian Population in a partial manner. Selecting the group from all the directions of the country may provide a better understanding for future research. The future researcher may try to consider different cultures, backgrounds, and various demographics which can influence the user's intention. We believe that increase in sample size would make a considerable difference and could be more useful for producing varied findings. Our research proposes an analysis of mbanking services, but to cover all the mbanking services on mobile will also be not possible, so traditional banking will have its importance. The relation between Bank and Customer cannot be completely neglected. Future studies can also be conducted with UTAUT2 variables. One of the variables we considered is a Perceived risk which can also be studied. Further studies can be done on perceived trust with various other elements of trust. The study discusses user's intentions about various banking services focusing on mbanking. Further there is a scope for exploring unidentified factors from literature that is not studied but their presence is making a major impact on the results of research.

Coefficients											
Model	Unstandardize d Coefficients			Standardize d Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta	Zero-order			Partia l	Part	Toleranc e	VIF	
1	(Constan t)	0.594	0.094		6.328	0.000					
	OPR	0.769	0.045	0.627	16.977	0.000	0.627	0.627	0.627	1.000	1.000
2	(Constan t)	0.257	0.095		2.693	0.007					
	OPR	0.546	0.049	0.445	11.097	0.000	0.627	0.466	0.379	0.726	1.377
	OPEU	0.376	0.043	0.347	8.660	0.000	0.580	0.380	0.296	0.726	1.377
3	(Constan t)	0.164	0.096		1.708	0.088					
	OPR	0.465	0.052	0.379	8.930	0.000	0.627	0.391	0.300	0.626	1.598
	OPEU	0.317	0.045	0.293	7.059	0.000	0.580	0.318	0.237	0.655	1.527
	OPT	0.189	0.045	0.176	4.185	0.000	0.529	0.195	0.14	0.640	1.56

						0			1		4
4	(Constant)	0.238	0.098		2.430	0.015					
	OPR	0.496	0.053	0.405	9.451	0.000	0.627	0.410	0.314	0.603	1.658
	OPEU	0.353	0.046	0.326	7.690	0.000	0.580	0.344	0.256	0.614	1.630
	OPT	0.231	0.047	0.215	4.955	0.000	0.529	0.229	0.165	0.586	1.706
	OPB	0.169	0.054	0.133	3.146	0.002	0.342	0.148	0.105	0.622	1.607
5	(Constant)	0.178	0.098		1.817	0.070					
	OPR	0.434	0.054	0.354	8.039	0.000	0.627	0.357	0.263	0.552	1.812
	OPEU	0.325	0.046	0.300	7.105	0.000	0.580	0.320	0.232	0.599	1.670
	OPT	0.182	0.048	0.169	3.819	0.000	0.529	0.179	0.125	0.545	1.834
	OPB	0.251	0.057	0.197	4.418	0.000	0.342	0.206	0.145	0.538	1.859
	OPU	0.262	0.067	0.198	3.930	0.000	0.554	0.184	0.129	0.423	2.365
a. Dependent Variable: OUI											

References

- Abhishek, & Hemchand, S. (2016). Adoption of sensor based communication for mobile marketing in India. *Journal of Indian Research*, 8(1), pages 65-76.
- Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of Travel Mode in the Theory of Planned Behavior: The Roles of Past Behavior, Habit, and Reasoned Action, *Basic and Applied Social Psychology*, 25:3. 175-187.
- Barnes, S. J., & Corbitt, B. (2003). Mbanking: concept and potential. *International Journal of Mobile Communications*.
- Campbell, M. C., & Goodstein, R. C. (2001). The Moderating Effect of Perceived Risk on Consumers' Evaluations of Product Incongruity: Preference for the Norm. *Journal of Consumer Research*, 28(3): Pages 439-49.
- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14, Pages 265-284.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, Vol. 13, No. 3. Pages 319-340.
- Hurley, R., Gong, X., & Wagar, A. (2014). Understanding the loss of trust in large banks. *International Journal of Bank Marketing*, 32, 348-366.
- Jøsang, A., & Presti, S. (2004). Analysing the Relationship between Risk and Trust. *Trust Management*, 135-145.
- Liao, Z., & Cheung, M. T. (2002). Internet-based e-banking and consumer attitudes: an empirical study. *Information & Management*, Vol.39 N0.2, Pages 282-295.
- Liebana-cabanillas, J., Munoz-Leiva, F., & Sanchez-Fernandez, J. (2015a). User Behaviour in QR mobile payment system: The QR Payment Acceptance Model. *Technology Analysis & Strategic Management*, 27(9), Pages 1031-1049.
- Madan, K., & Yadav, R. (2018). Understanding and predicting antecedents of mobile shopping

- adoption: A developing country perspective. Asia Pacific Journal of Marketing and Logistics, Pages 139-162.**
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and its Implication for Future Research (SERVQUAL). Journal of Marketing, Pages 41-50.**
- Patil, P., Rana, N., Dwivedi, Y., & Abu-Hamour, H. (2018). The role of trust and risk in mobile payments adoption: A meta-analytics review. PACIS, Pages 129.**
- Pham, T.-T., & Jo, J. C. (2015). The effects of product-related, personal-related factors and attractiveness of alternatives on consumer adoption of NFC-based mobile payments. Technology in Society, 43 (2015), pages 159-172.**
- Pradhan Mantri Jan Dhan Yojna. (n.d.). Retrieved from <https://pmjdy.gov.in/>**
- Püschel, J., Afonso Mazzon, J., Mauro, C., & Hernandez, J. (2010). Mbanking: proposition of an integrated adoption intention framework. International Journal of Bank Marketing, 28(5):Pages 389-409.**
- Selvakumar, J. (2015). Impact of service quality on customer perceives satisfaction in public sector and private sector banks. SMS Varanasi, 8(1), Paages 3-12.**
- Shim, Soyeon, Serido, J., & Tang, C. (2013). After the global financial crisis: Individual factors. Journal of Retailing and consumer services, 20, pages 26-33.**
- Tan, M., & Teo, T. S. (2000). Factors influencing the adoption of internet banking. Journal of the Association for Information Systems, Vol. 1 No. 5, pages. 1-42.**
- Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage across customers groups for mobile payments services in India. Internet Research, 24(3), Pages 369-392.**
- Van Esterik-Plasmeijer, P., & Fred van Raaij, W. (2017). Banking system trust, bank trust, and bank loyalty. International Journal of Bank Marketing, Vol.35 Iss 1.**
- Verkijika, S. F. (2018). Factors influencing the adoption of mobile commerce applications in Cameroon. Telematics and Informatics, 35(6), Pages 1665-1674.**

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