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Unveiling the Determinants of Islamic Mobile Banking Adoption: Evidence from Pakistan

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ABSTRACT

Mobile Banking is a cutting-edge technological innovation in the banking industry that has greatly increased banking efficiency and boosted the overall quality of life for individuals. Financial firms are increasingly attracted to systems that enhance the quality of client service. This study aims to further our understanding of the adoption of Islamic mobile banking by utilizing the Technological Acceptance Model (TAM). This study presents a research approach that utilizes the Technology Acceptance Model (TAM) to investigate the factors that influence consumers' adoption of Islamic mobile banking. Consequently, it offers insights into the crucial factors that banking professionals must take into account to promote the integration of mobile technology in Islamic banking services. The data for this study were collected by a questionnaire survey and then analyzed using SPSS and Smart PLS 3.0, utilizing structural equation modeling (SEM). The study sample comprised 350 individuals who were customers of various branches of five Islamic banks, namely Meezan Bank Limited, Dubai Islamic Bank, Al-Baraka Bank Limited, MCB Islamic Bank Limited, and Bank AlFalah Islamic. After conducting data screening procedures, a final sample of 300 respondents was selected for analysis. The findings indicate that characteristics such as Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) have a positive influence on the Intention to Use (INT), supporting the notion that PU has a positive impact on PEOU according to the Technology Acceptance Model (TAM). The research findings suggest that customers' adoption of Islamic banking is positively influenced by their intentions to utilize it, and these intentions are further enhanced by social influence.

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1. Introduction

Mobile banking is a convenient technology that allows consumers to easily and securely access their financial services providers using their mobile devices. It enables users to conduct many tasks with just a single click, regardless of their location or time (Alalwan, Dwivedi, & Rana, 2017; Chuan, Tan, Cheah, Ooi, & Yew, 2012). Mobile Banking services allow clients to carry out fiscal dealings remotely which may involve mobile money transfers, payment of bills, balance queries, and many more (Howell & Wei, 2010). Although mobile banking is the most effective approach to boosting client services (Ali, Xiaoling, Sherwani, & Ali, 2018) and its adoption rate is very slow in developing countries (Malaquias & Hwang, 2019; Raza, Shah, & Ali, 2019). Consumers have alternatives to utilize conventional banking and Islamic banking keeping in view that the context of both banking systems are different despite the same sort of services being supplied and similar studies are also carried out in Pakistan about Islamic mobile banking. At the same time adoption rate of mobile banking is completely different for Islamic banks than conventional banks (Raza et al., 2019). Islamic banks work within Islamic laws and principles of the Quran and Sunnah. According to Shariah, all kinds of financial dealings must be free from interest (Riba) and excessive uncertainty and Islamic mobile banking is the appliance of financial services and products according to Islamic Shariah (Thye Goh, Mohd Suki, & Fam, 2014). According to (Kitla, 2020), mobile banking users are still more attracted to traditional banking as compared to Islamic Mobile Banking and there is a need for financial institutions to take innovative and impressive steps to improve Islamic banking services and increase the rate of adoption and the reason for the research is to examine the behavior of users of Islamic m-banking. This study also examines the external element of “social influence” on the Technological Adoption Model and offers a thorough understanding of the component affecting decision-making connected to the adoption of Islamic m-banking. The purpose is to construct up thorough consideration of the acceptability of Islamic m-banking, through the use of dormant variables of the Technological acceptance model (TAM) (Liébana-Cabanillas, Higuera-Castillo, Molinillo, & Montañez, 2019), PEOU (perceived ease of use), PU (perceived usefulness), INT (Intention to use) & BA (behavioral adoption) and external factor social influence (SI) affect on intention to use to guide current research. This study is about Islamic mobile banking which focuses on two key contributions; initially, this study recommends “What are the factors influencing the adoption of Islamic mobile banking services in Pakistan”. By knowing those aspects, it is predictable assist the strategy of Islamic mobile banking to make more practice level of m-banking along with clients and generate the improvement of Islamic banks at the same level as conventional banks. Secondly, this research also contributes in conditions of increasing the literature offered on Islamic mobile banking because there are few investigations accessible on Islamic mobile banking that have observed Islamic m-banking acceptability in developing nations have been done out (Afshan & Sharif, 2016; Mohammadi, 2015; Sharma, Govindaluri, Al-Muharrami, & Tarhini, 2017).

2. Theoretical Framework and Hypotheses

The technical Adoption Model (TAM) is utilized for an individual's adoption of information systems. In other words, the Technological Acceptance Model (TAM) provides a relationship that builds customer's consent to accept and apply technology and this model has been used as a hypothetical background depicting the interaction between the parts. Particularly, the Technology Acceptance Model (TAM) is founded upon two obsolete views: perceived ease of use (PEOU) and perceived utility (PU), as the input precursor of acceptance of the central processing unit. Davis (1989) found out that PU & PEOU had a rigid influence on the intention to use (INT) (Venkatesh & Davis, 2000). TAM was further modified by Social Influence (SI) an external variable presented by Babdullah in 2019 (Baabdullah, Alalwan, Rana, Kizgin, & Patil, 2019).

2.1 Hypotheses Development

2.1.1 Perceived Usefulness and TAM

Perceived usefulness is defined as “the degree to which individuals consider that he/she will be an advantage by using mobile banking services” (Jeong & Yoon, 2013). PU (Perceived Usefulness) in terms of mobile banking is very useful for performing all financial transactions through cellular phones and this variable is also important for the acceptance of technology by using the Technological Acceptance Model (TAM) and is positively associated with Islamic m-banking.

H1: Perceived usefulness affects the intention to use Islamic mobile banking by using TAM.

2.1.2 Perceived ease of use (PEOU)

According to Davis in 1989, “a degree to which individual experiences, utilize of explicit structure is free of effort is Perceived ease of use” (Davis, 1989). In terms of mobile banking facilities, online banking systems should be readily utilized and also learned quickly. According to Choraria (2013), simplicity of use is the most significant criterion for Internet trade firms. Previous study demonstrates that perceived ease of use (PEOU) favorably influences customers’ objectives with the assistance of mobile appliances and the dependency on mobile phone apps (Zhang, Weng, & Zhu, 2018).

H2: Perceived ease of use affects intention to use Islamic mobile banking by using TAM.

2.1.3 Intention to use (INT)

It is an individual’s trend to act in a certain technique toward a product or service. The intention to use is a consumer’s expected performance towards services (Aziz, Husin, Hussin, & Afaq, 2019). Previous studies have emphasized intention as an input component in deciding a client's adoption of the latest technology (Adapa & Roy, 2017). Earlier several researches found that intention to use (INT) is a dependent element that is based on TAM (Technological Acceptance Model). Many investigators described the association b/w intention to use (INT) & Behavioral Adoption (BA) (Aijaz Ahmed Shaikh & Karjaluo, 2016). These scientists observed good outcomes b/w intention to use (INT) and Behavioral Adoption (BA).

H3: Perceived ease of use (PEOU) affects perceived usefulness (PU) in Islamic mobile banking by using TAM.

2.1.4 Behavioral Adoption (BA)

The notion of behavioral adoption (BA) derives from consumer thinking. Behavioral adoption (BA) is determined by liking/disliking individuals for an outside reason (Mian & Rizwan, 2013). Behavior Adoption (BA) is the drive of customers to embrace new creative approaches (Fonchamnyo, 2013). Intention to use (INT) depends on the BA (Behavioral Adoption) of the customers towards Islamic mobile banking and BA (Behavioral Adoption) is considered the most important variable of TAM (Technological Acceptance Model) (Sheeran Irani, 2007). Behavioral adoption (BA) helps to understand the behavior of customers about adopting the latest technologies (Mahardika, Thomas, Ewing, & Japutra, 2019). Prior research has guided to effects concerning the association b/w behavioral adoption and intention to use. According to the researchers, the Technological Acceptance Model (TAM) is called a strong model which is used to explain and also suppose the intention of use or practice and also acceptance of behavior adoption (Hansen, Saridakis, & Benson, 2018).

H4: Intention to use (INT) affects customer’s behavioral adoption of Islamic mobile banking.

2.1.5 Social Influence (SI)

According to (Püschel, Afonso Mazzon, & Mauro C. Hernandez, 2010), SI (Social Influence) is the most significant factor in Islamic mobile banking. (Park, Yang, & Lehto, 2007) also, explains that SI (Social Influence) has demonstrated a substantial correlation between intention to use (INT) and influences on the attitudes of the consumers towards the adoption of Islamic mobile banking by employing TAM (Technological Acceptance Model). Social Influence (SI) depends on the perception of the consumers towards Islamic mobile banking and it depends on customers' point of view and thinking of customers towards Islamic mobile banking. In several prior research, SI (Social Influence) is connected with the behavior adoptions of consumers (Chan, 2004; Park et al., 2007; Riquelme & Rios, 2010).

H5: Social Influence affects Intention to use Islamic mobile banking.

2.2 Integration of TAM (Technological Acceptance Model) and Conceptual Framework

The technical Acceptance Model (TAM) is the framework that encompasses arrangement and endorsement across vast places and applications to be comfortable with the notion of customers utilizing modern computerization and technology (Noorazam & Azan, 2023; Venkatesh & Davis, 2000). Although the Technological Acceptance Model (TAM) has been used widely to analyze the approval and acceptance of Informational Technology and Technological Acceptance Model (TAM) has not produced consistently advanced explanations or evaluations of ways (Venkatesh, Morris, Davis, & Davis, 2003). The technological Acceptance Model (TAM) has developed and created the different elements that affect consumers, types of technologies, acceptance of technologies, and conditions (Chen, Fan, & Farn, 2007). Thus, a growing inquiry has concentrated on approving to Technological Acceptance Model (TAM) to examine the acceptance of technology due to the appreciation and helpful ability of the structure at the same time (Wu & Chen, 2005). As the purpose of this investigation is the adoption of Islamic m-banking, the consolidation of the Technological Acceptance Model (TAM) for the study design provides physically powerful support to the acceptance of Islamic m-banking investigation and explanation for technology and cooperative approach affecting the aspiration to use Islamic m-banking and it also based on the literature of Islamic mobile banking adoption that generally relies on Technological Acceptance Model (TAM) and changes of Technological Acceptance Model (TAM) (Aijaz A Shaikh & Karjaluoto, 2015).

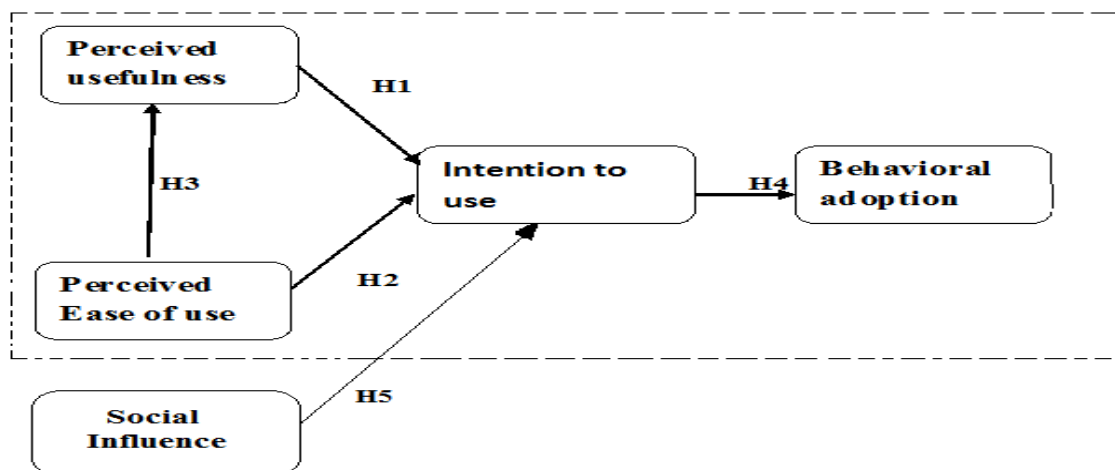


Fig 1 Conceptual framework of TAM and Social Influence on Behavioral adoption for Islamic Mobile Banking

3 Methods

3.1 Participants and Procedures

The focused population in the article is users of five Independent Islamic banking sectors of Multan (Pakistan). The survey method practice has been used in this research (Questionnaires). There are only six banks that are working as fully-fledged Islamic banks and only sixteen conventional financial banks contain Islamic branches (SBP, 2018; Aijaz A Shaikh & Karjaluo, 2015). The target population in this study is users of Islamic M-banking from these fully-fledged Islamic banks of Pakistan which includes: Al-Baraka Bank (Pakistan) Limited, Dubai Islamic Bank, MCB Islamic Bank Limited, Bank Alfalah, and Meezan Bank Limited.

In this research, the Purposive sampling method was used for data collection from a defined population. So, there were almost 350 respondents for the survey of which there are around 300 genuine replies. 50 respondents did not complete the questionnaire.

3.2 Measurement Scales

The instruments used in this research study are adapted from the literature which includes constructs of TAM and Social influence. These are, the scale to measure perceived usefulness (7 items, $\alpha=0.789$) was adapted from (Jamshidi & Hussin, 2016; Venkatesh et al., 2003). The perceived ease of use (7 items, $\alpha=0.737$) was adapted from (Jamshidi & Hussin, 2016; Venkatesh et al., 2003). The Intentions to use Islamic mobile banking (4 items, $\alpha=0.693$) was adapted from (Lee, Lee, & Kwon, 2005). The behavior adoption (7 items, $\alpha=0.732$) was adapted (Luarn & Lin, 2005; Venkatesh et al., 2003) and the social influence (7 items, $\alpha=0.659$) was adapted from (Venkatesh, Thong, & Xu, 2012). Responses were collected on a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). A detailed description of the measurement instrument is provided in Appendix 1

4. Analysis and Results

4.1 Respondent Profile

Table 1 represents the demographic distribution of 300 respondents having data of the sample. As shown in the table, the sample contains 61.3% males and 38.7% females, mostly in the age bracket of 25-35 years (52.7%) and less than 25 years (26.7%). In terms of education level, most of the participants had high education around 51% having a master's degree. Most of the participants of the sample were using Islamic mobile banking for 2-3 years (39%) and those less than 1 year (38%).

Table 1. Demographic distribution of the respondents (n=300)

Variable	Category	Distribution Frequency	Percentage
Age	Less than 25	80	26.7
	25-35	158	52.7
	36-45	43	14.3
	Above than 45	19	6.3
Gender	Male	184	61.3
	Female	116	38.7
Education	Undergraduate	38	12.7
	Bachelors	75	25.0
	Masters	153	51.0
	PhD	15	5.0
	Other	19	6.3
	Student	74	24.7

Occupation status	Employed	137	45.7
	Self-employed	48	16.0
	Unemployed	32	10.7
	Other	9	3.0
Using Islamic Mobile Banking Services Since	Less than 1 year	114	38.0
	2 years to 3 years	117	39.0
	4 years to 5 years	44	14.7
	More than 5 year	25	8.3

4.2 Measurement Model Validation

Table 2 Measurement properties of the model

Con.	Items	VIF	λ		AVEs	\sqrt{AVEs}	CR	α
Perceived Usefulness	<i>PU1</i>	1.706	.699		0.441	0.661	0.847	0.789
	<i>PU2</i>	1.553	.630					
	<i>PU3</i>	1.299	.602					
	<i>PU4</i>	1.436	.693					
	<i>PU5</i>	1.406	.679					
	<i>PU6</i>	1.464	.681					
	<i>PU7</i>	1.395	.662					
Perceived Ease of Use	<i>PEOU1</i>	1.706	.701		0.488	0.698	0.826	0.737
	<i>PEOU2</i>	1.511	.743					
	<i>PEOU3</i>	1.407	.727					
	<i>PEOU4</i>	1.321	.673					
	<i>PEOU5</i>	1.260	.644					
Intention to Use	<i>INT1</i>	1.225	.625		0.522	0.722	0.812	0.693
	<i>INT2</i>	1.499	.762					
	<i>INT3</i>	1.399	.784					
	<i>INT4</i>	1.233	.755					
Behavioral Adoption	<i>BA1</i>	1.403	.738		0.554	0.74	0.933	0.732
	<i>BA2</i>	1.346	.731					
	<i>BA3</i>	1.496	.787					
	<i>BA4</i>	1.342	.720					
Social Influence	<i>SI1</i>	1.23	.740		0.722	0.495	0.929	0.659
	<i>SI2</i>	1.41	.766					
	<i>SI3</i>	1.40	.780					
	<i>SI4</i>	1.13	.490					

Note: Principle factor analysis carried out with Varimax rotation; Communalities = Com.; λ = Factor loading; Average variance explained = AVE; Square root of AVEs = \sqrt{AVE} ; CR = Composite reliabilities; α = Cronbach's Alpha; Variance Inflation factor = VIF.

4.3 SEM Analysis and Hypothesis Test

4.3.1 Direct Effect of the Model

PU is positively linked to intention to use (INT) to accept Islamic m-banking such as ($p > 0.05$, β PU value = 0.241), ($p > 0.05$, β intention to use value = 0.611). PEOU is positively related to Intention to use (INT) to accept Islamic m-banking such as ($p > 0.05$, β PEOU value=0.386), (β Intention to use value = 0.611, $p > 0.05$). Intention to Use (INT) is positively related to Behavioral

Adoption to adopt Islamic m-banking such as (β Intention to use value = 0.611, $p > 0.05$). Perceived Ease of Use (PEOU) is positively related with Perceived Usefulness (PU) to adopt Islamic mobile banking like as (β PEOU = 0.386, $p > 0.05$), (PU = 0.241, $p > 0.05$). Social influence (SI) is positively related to Intention to use (INT) to adopt Islamic m-banking such as (β SI = 0.187, $p > 0.05$), (β intention to use = 0.611, $p > 0.05$).

Table 3: Direct Effect of the model

Independent Variable (X)	Dependent Variable (Y)	Estimate	T-Statistics	P	Status
INT	BA	0.611	13.805	0.000	Supported
PEOU	INT	0.386	6.424	0.000	Supported
PEOU	PU	0.641	16.374	0.000	Supported
PU	INT	0.241	3.995	0.000	Supported
SI	INT	0.187	3.902	0.000	Supported

Note; Intention to use= INT, Behavioral Adoption= BA, Perceived Ease of use= PEOU, Perceived Usefulness= PU, Social Influence= SI, t= T Statistics

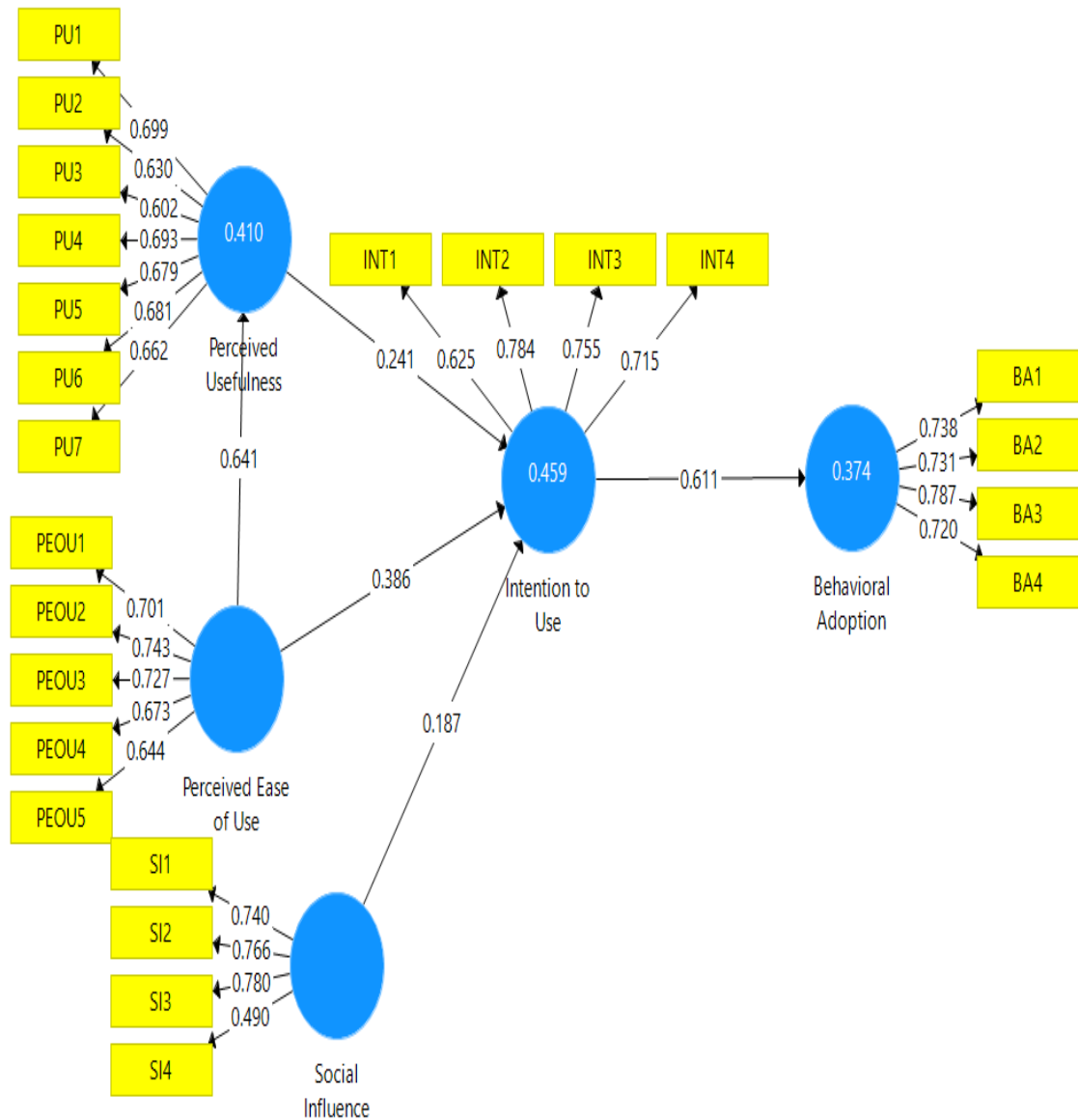
4.3.2. Indirect Effect of the model

In Table 4, INT (Intention to Use) mediates b/w PEOU & Behavioral Adoption (BA) and it is positively associated with Behavioral Adoption (BA) ($p > 0.05$, $\beta = 0.578$). The relationship of PEOU (Perceived Ease of Use) with Behavioral Adoption (BA) is negatively mediated through PU (Perceived usefulness) & INT (Intention to use) ($p > 0.05$, $\beta = 0.072$). PU mediates b/w PEOU (Perceived Ease of Use) and Intention to use (INT). That is negatively connected to use ($p > 0.05$, $\beta = 0.072$). Intention to use (INT) mediates between Social Influence (SI) and Behavioral Adoption (BA). That's positively related to Behavioral Adoption ($\beta = 1.580$, $p > 0.05$). Intention to use (INT) mediates b/w PU (Perceived Usefulness) plus Behavioral Adoption (BA). That's negatively related to Behavioral Adoption ($\beta = 0.415$, $p > 0.05$).

Table 3: Coefficients of the estimated structural model

Hypothesised Structural Paths	Coefficient	t-value	Decision
H1: Perceived Ease of use-> Intention to use-> Behavioral Adoption	0.578	0.001	Supported
H2: Perceived Ease of use-> Perceived Usefulness-> Intention to Use-> Behavioral Adoption	0.061	0.656	Rejected
H3: Perceived Ease of use-> Perceived Usefulness-> Intention to use	0.072	0.0657	Rejected
H4: Social Influence-> Intention to use-> Behavioral Adoption	1.58	0.005	Supported
H5: Perceived Usefulness-> Intention to use-> Behavioral Adoption	0.415	0.648	Rejected

Fig 1: Estimated Model of the Study



5. Discussion

This study shows a positive relationship b/w Perceived usefulness (PU) and intention to use (INT) in m-banking (β value = 0.241, $p < 0.05$). Thus, H1 has been supported. While in a previous study, this hypothesis is also supported (Priya, Vikas Gandhi, & Shaikh, 2018). In the technological Acceptance Model (TAM), perceived usefulness (PU) was measured as an important and direct factor effect on intention to use (INT) in Islamic mobile banking (Davis, 1989). Various researchers illustrated the outcome that perceived usefulness (PU) was the most important determinant for acceptance of Islamic m-banking (Baabdullah et al., 2019). In previous times, past studies pointed out that perceived usefulness (PU) is very effective on customers' intention (INT), which utilizes Islamic M-banking techniques for their dealings (Alalwan et al., 2017; Baptista & Oliveira, 2015). Perceived usefulness (PU) and intention to use (INT) these two variables of Islamic mobile banking that are connected (Kumar & Shenbagaraman, 2017). Previous research observed this build-in of different technologies exposes that perceived usefulness (PU) is the most important factor for the adoption of new technologies (Ratten, 2015; Singh & Srivastava, 2018) using TAM.

The findings that PEOU has a positive association with INT (Intention to Use) in Islamic m-banking by using the Technological Acceptance Model ($p < 0.05$, β value = 0.386) are consistent with the literature (Priya, Gandhi, & Shaikh, 2018). In the technological acceptance Model (TAM), PEOU was measured as an enter factor effect on the intention to use Islamic mobile banking (Davis, 1989). Different researchers show the result that PEOU (Perceived Ease of Use) was an important determinant for the adoption of Islamic mobile banking (Baabdullah et al., 2019). In previous times, past studies pointed out that PU (perceived usefulness), and PEOU (Perceived Ease of use) are very effective for customers' intentions, which utilize Islamic Mobile banking techniques for their dealings (Alalwan et al., 2017). Kumar & Shenbagaraman (2017) said that variables PEOU (perceived Ease of Use) and intention to use (INT) Islamic m-banking are associated with one another.

The results also show that Perceived Ease of Use (PEOU) is positively linked with Perceived Usefulness (PU) in Islamic m-banking by using TAM (Technological Acceptance Model) (β value = 0.641, $p < 0.05$).

While in the previous research, this effect is supported in a lot of studies (Makanyeza, 2017). PEOU (Perceived ease of use) is concerned second main variable of the Technological acceptance model (TAM) which is associated with an individual who can utilize the latest technology without any effort such as Islamic m-banking (Raza et al., 2019). PEOU plays an important part in finding out consumers' intention to use (INT) to adopt Islamic m-banking (Alalwan et al., 2017). Association b/w PU (perceived usefulness) and PEOU (perceived ease of use) have been suggested that PEOU (perceived ease of use) of technology & PU (perceived usefulness) of technology demonstrates the outcomes that enhanced implementation of the latest technology (Aijaz A Shaikh & Karjaluo, 2015).

Furthermore, The intention to Use (INT) has a positive relationship with behavioral adoption (BA) in Islamic mobile banking by using TAM ($p < 0.05$ β value = 0.601). In this study, results illustrate that Intention to use is positively linked with Behavioral adoption (BA) in Islamic mobile banking. In previous studies, this effect is also supported (Sudarsono, Afandi, & Perdana, 2023). If the intention to use (INT) is positive then it affects behavioral adoption (BA) in which they utilize the method like an appliance of Islamic mobile banking, which positively affects consumers' behavior to accept Islamic m-banking (Salim Abdulrahman, 2019)

This study revealed that social influence (SI) shows a positive relationship with Intention to Use (INT) in Islamic mobile banking by using the Technological Acceptance Model (β value = 0.187, $p < 0.05$). Previous studies, of Islamic m-banking adoption, have shown a correlation between social influence (SI) and intention to use (INT) of Islamic mobile banking (Amin, Hamid, Lada, & Anis, 2008; Dasgupta, Paul, & Fuloria, 2011; Sudarsono et al., 2023; Tan & Leby Lau, 2016). In past studies customers influence each other, they analyzed the utilization of a product as a community and therefore, influenced new customers to adopt the new product as well.

6. Recommendation and Implementation

This research was carried out to search out those aspects that influenced the consumers' acceptance of Islamic m-banking. Details on client prototypes that make use of expertise and technological know-how will benefit financial industries like banks. There are a lot of theoretical handouts on this subject. Initially, the innovative application of the Technological Acceptance Model (TAM) is used in the study to check the intentions of the customers about Islamic Mobile Banking. Nowadays, everyone prefers technology and also finding innovative technologies that satisfy the

requirements of dissimilar m-banking appliances. Furthermore, the significant result of the perceived usefulness of nature in observing an individual's intention to adopt portable mobile banking is to demonstrate progress and enhance the versatility of the financial industry.

Similarly, other customers believe that flexible mobile banks may be customized for effectiveness. Additionally, mobile banking can be seen as a form of expenditure towards value. (Mohammadi and Mehrad, 2017). Mobile banking techniques are designed to be linked to the internet-based online shopping method, which facilitates consumers' purchasing needs. Financial institutions must appropriately enhance their infrastructure with new inventive solutions, enabling users to employ instant Internet banking services.

The managers or bankers should guide customers on how to save money in the right way and save data. Individuals universally appreciate novel and advanced technology, favoring innovative techniques. Financial institutions are obligated to allocate funds towards investigating and addressing customer challenges related to adopting new technology. Additionally, they should invest in the research and development of the banking system. This approach can generate economic ideas that contribute to the growth and advancement of the innovative system. The external component of social influence is also a very important variable that impacts the consumer's inclination to use Islamic m-banking. Banks could augment clients' awareness by furnishing instructions on cutting-edge technologies. One effective method to enhance client awareness of Islamic mobile banking is by offering free training sessions on online banking.

Islamic mobile banking is improving slowly in financial sectors however Islamic mobile banking gives no difficulties in accomplishing financial transactions without visiting any bank and there is no restriction on time. Islamic cell phones make our lives easy. Islamic mobile banking saves time and consumers do not make any effort but customers have little awareness about Islamic mobile banking and clients feel concerned with internet banking. Bankers should gain knowledge about Islamic mobile banking. Bankers should also spend time instructing people on the benefits of Islamic mobile banking and establish the trust of the public regarding Islamic mobile banking. Bank management should also spend effort strengthening the advantages given by mobile banking. Islamic Banks should also spend on long-lasting relationship tactics with their clients. Bank personnel and staff should also be educated to be active advocates of mobile banking services not only within branch locations but in further areas and work settings as messengers, informers, and models of utilizing Islamic mobile banking.

Factors of both variables (Perceived Ease of use & perceived usefulness) equally contain important effects shift toward financial industries. PEOU (Perceived Ease of use) and PU (perceived usefulness) will also alter the INT (intention to use) of clients toward Islamic m-banking. Therefore, financial institutes can also produce other ease of their Islamic m-banking with the incorporation of further new features such as online shopping using mobile devices.

7. Limitation

The first constraint of our research is we collected data just in Multan City Pakistan neglecting other cities where mobile banking is developing swiftly other than stagnation in its earlier phase. The second limitation of this research is considering only one external variable, neglecting other external factors. This research has been covering only users of the Islamic mobile banking of (Multan) Pakistan, specifically ignoring bankers. For that reason, further study is intended to be

carried out to explore the most essential extraneous factors that may be causing a challenge particularly not towards clients during adoption of the Islamic m-banking. This research focuses on the mixed population, on the other hand, the perception of teenagers, notably company owners and working women is overlooked.

8. Future research opportunities

Future investigation options include enhancement in future studies by expanding sample size and future investigations can investigate the link between the variables in different regions. Future studies will be undertaken by adding other factors and by modifying the sample procedure. Upcoming research can consider the influence of m-banking on conventional plus Islamic banks both of Multan (Pakistan). The future study focuses on greater understanding & the value of the uptake of technological information.

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Appendix 1

Questionnaire

Demographic Items

You don't have to use all these items, just use the ones you may interested in and need for your survey or study

Directions; Please fill out the following items as accurately as possible. For multiply choice questions please circle one answer only.

- a) What is your age?
 - 1) Less than 25 years
 - 2) 25-35 years
 - 3) 36-45 years
 - 4) Above than 45 years
- b) What is your gender?
 - 1) Male
 - 2) Female
- c) Marital status?
 - 1) Single
 - 2) Married
- d) What is your education?
 - 1) Undergraduate
 - 2) Bachelors
 - 3) Masters
 - 4) PhD
 - 5) Other
- e) What is your occupation status?
 - 1) Students
 - 2) Employed
 - 3) Self-employed
 - 4) Unemployed
 - 5) Others
- f) Using Islamic mobile banking service since?
 - 1) Less than 1 year
 - 2) 2 years to 3 years
 - 3) 4 years to 5 years
 - 4) More than 5 years
- g) The user of which Islamic bank?
 - 1) Meezan bank limited
 - 2) Dubai Islamic Bank Pakistan
 - 3) Al-Baraka Bank limited
 - 4) MCB Islamic Bank Limited
 - 5) Bank Alfalah

For each of the questions below, circle the response that best characterizes how you feel about the statement, where; 1=Strongly Disagree, 2= Disagree, 3= Neither Agree Nor Disagree, 4= Agree, and 5= Strongly Agree.

Items	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Perceived usefulness					
Islamic mobile banking helps in my everyday life.	1	2	3	4	5
I think Islamic mobile banking saves me time.	1	2	3	4	5
Islamic mobile banking Increases my productivity.	1	2	3	4	5
I think that using Islamic mobile banking would enable me to accomplish my task more quickly.	1	2	3	4	5
I think that using Islamic mobile banking would make it easier for me to carry out my tasks.	1	2	3	4	5
I think Islamic mobile banking is useful.	1	2	3	4	5
Overall, I think that using Islamic mobile banking is advantageous.	1	2	3	4	5
Perceived ease-of-use					
Islamic Mobile Banking is easy to use.	1	2	3	4	5
Islamic Mobile Banking can be learned quickly.	1	2	3	4	5
Islamic Mobile Banking is not difficult to learn	1	2	3	4	5
My interaction with my mobile devices when facilitating Islamic banking services is clear and understandable.	1	2	3	4	5
I find it easy to use my mobile devices to facilitate Islamic banking services.	1	2	3	4	5
Intention to use					
Given the chance, I intend to use Islamic mobile banking.	1	2	3	4	5
I expect my use of Islamic mobile banking to continue in the future.	1	2	3	4	5
I intend to use my mobile devices to facilitate banking services as much as possible	1	2	3	4	5
I have the intention to use Islamic mobile banking to conduct payments.	1	2	3	4	5
Behavioral adoption					
I plan to increase my use of Islamic	1	2	3	4	5

mobile banking in the future.					
My mobile device is one of my favorite technologies to facilitate banking services.	1	2	3	4	5
I will frequently use Islamic mobile banking in the future.	1	2	3	4	5
I will strongly recommend others to use the Islamic mobile banking service.	1	2	3	4	5
Social Influence					
People who are important to me think that I should use Islamic Mobile banking.	1	2	3	4	5
People who influence my behavior think that I should use Islamic Mobile banking	1	2	3	4	5
People whose opinions I value prefer that I use Islamic Mobile banking.	1	2	3	4	5
Most people around me use Islamic mobile banking	1	2	3	4	5