MOBILE BANKING SERVICES ADOPTION: INSIGHT FROM BRAND NAME PERSPECTIVES BASED ON UTAUT2 MODEL

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ABSTRACT

Mobile banking services give the opportunity to the customers to operate banking services through their mobile phones, tabs, and notepad. To attract the new customer and retain the existing customer's, mobile banking can play an important role in the development of the financial sectors as well as in Bangladesh. Here we proposed a model for understanding the importance of the brand name to adopt mobile banking services in Bangladesh applying the extended unified theory of acceptance and use of technology (UTAUT2) (Venkatesh, Thong, & Xu, 2012) model. In this study, data have been collected by questionnaire survey and analysed by structure equation modelling (SEM) with PLS (Partial least Squared). This research revealed that brand name to be found the most important antecedents of behaviour intention, usages behaviour, effort expectancy, performance expectancy. The findings of the model have the significant relationship to predict the impact of the brand name on mobile banking services adoption of Bangladesh.

Keywords: Brand name, m-banking, UTAUT2, PLS and Bangladesh.

INTRODUCTION

Mobile banking is the newest wonder among the mobile technological innovation (Shaikh et al., 2015; Lin, 2011). Many developed and developing countries introduced mobile banking services as the alternate delivery channel with the help of retail and microfinance banks and it has significant effects on the actual and potential consumers.(Safeena et al., 2012). That's why firms became more interested in achieved competitive advantages through investing in information technologies implementation (Oliveira et al., 2014). In recent year, financial firms trying to retain their customers and provide them better goods and services due to the growing tendencies of internet and web based application (Tan et al., 2000). Therefore, consumers and firms become benefited by using information technologies though it is difficult to measure the willingness to adopt the technologies (Lee et al., 2009; Liao et al., 2002). Since mobile banking services is considering the most important element of banks (Lin, 2011) because of emerging the internet banking (Lee et al., 2009) business application.

In Bangladesh, the Mobile Financial Services (MFS) was issued on 22 September 2011 which were subsequently amended on 20 December 2011. Bangladesh Bank, the central bank of Bangladesh, following a Bank-led model, defines the Mobile Financial Services as –"Mobile

Financial Services (MFS) is an approach to offering financial and banking services via mobile wireless networks which enable the user to execute banking transactions. That is, any mobile account holder can make deposits, withdraw, and to send or receive funds from their mobile account. However, the central bank also specifies that these services are, often, enabled by the use of bank agents that allow mobile account holders to transact an independent agent location outside of bank branches"(Nabi, 2012).

To cope with the world economy and fulfil the customer needs most of the banks are willing to introduce mobile banking services though they have already introduced internet banking. Due to acceptance of e-commerce in Bangladeshi consumers(Hoque et al., 2015), it is easier to the customer to adopt mobile banking more easily and effectively.

Though the mobile banking is now established in worldwide but still it is growing as much expected by comparing the other country. In Bangladesh, 18 banks are now offering mobile banking services from 97 banks, the recent scenario of mobile financial service provider are presented below (Table -1).

Mobile Financial Services (MFS) comparative summary statement of July 2017 and August 2017				
Serial no.	Description	Amount in July, 2017	Amount in August, 2017	% Change (July 2017 to August 2017)
1	No. of Banks currently providing the Services	17	18	5.88%
2	No. of agents	772,109	767,768	-0.56%
3	No. of registered clients in Lac	544.33	569.95	4.71%
4	No. of active accounts in Lac	283.18	307.30	8.52%
5	No. of total transaction	152,314,614	175,717,557	15.36%
6	Total transaction in taka (in crore BDT)	23,369.14	32,182.96	37.72%
7	No. of daily average transaction	4,913,375	5,668,308	15.36%
8	Average daily transaction (in crore BDT)	753.84	1,038.16	37.72%
9	Additional information	Amount (in crore BDT)	Amount (in crore BDT)	
a.	Inward Remittance	7.71	9.29	20.49%
b.	Cash In transaction	9,502.00	13,688.56	44.06%
c.	Cash Out Transaction	9,106.85	11,939.58	31.11%
d.	P2P transaction	3,615.41	4,597.16	27.15%
e.	Salary Disbursement (B2P)	198.04	591.84	198.85%

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f.	Utility Bill Payment (P2B)	203.36	312.13	53.49%
g.	Merchant Payment	100.16	137.21	36.99%
h.	Government Payment	237.49	502.72	111.68%
i.	Others	398.13	404.48	1.59%

Table-1: Mobile Financial Services (MFS), Source: (https://www.bb.org.bd).

According to data provided by Bangladesh Telecommunication Regulatory Commission (BTRC), that the total number of mobile phone subscribers has reached 139.302 million by the end of August 2017, (www.btrc.gov.bd.). And among these the total number of internet subscribers has reached 77.142 million by the end of August, 2017 (55.38% people has internet connection on their mobile phone http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-august-2017). Among them means 71.883 % mobile internet user. users, around 41.60 million (Bangladesh Bank, www.bb.org.bd) are registered under mobile banking services which means 70.56%, around 98.302 million, people have not yet adopted mobile banking services. This provides a good indication of the low rate of mobile banking users compared with the total population who usages the internet.

Therefore, banks or financial firms should identify the reasons or factors that influence the users to adopt the mobile banking services and this can be measured by analysing the impact of the brand name of the particular banks to adopt mobile banking services. Recently brands play an inseparable part of marketing strategy (Grace et al., 2005) and also increasing being seen with the diffusion of technological development. Brands help to identify the product and provides a commitment or bond with the producer. It also reduces consumer perceived risk, search cost, the signal of the quality of product or services in term of monetary and symbolic value. The previous research revealed that how consumers think about the brand and respond to brands (Chernatony et al., 1998; Keller, 1998; Benetton et al., 1994). Before the literature of the study little emphasize on services branding than product branding (Turley et al., 1995).Though product and service branding to be found equal from literature. The different author contributed for understanding the consumer branding in different perspectives (Berry, 2000; Chernatony et al., 1998; Keller, 1998). Among the scholars mentioned the brand name in his model under the brand dimensions (Keller, 1998).

The previous study reveals that brand name is important for consumers to purchase the physical goods but very few studies concern about the impact of the brand name on m-banking services adoption , though (Cheng et al., 2010) studied about internet banking perspectives. Though researchers developed the basis for understanding the brand name on their consumer's acquisition of services but they have the lacking due to their research was not empirically tested (Berry, 2000).

Author revealed that two research work published based on UTAUT2 model, these are: online purchasing ticket (Rodríguez et al ,2014) and cloud based e-invoice Lian (2015) . And also researchers found only five published research studies based on UTAUT2 model, these are Baptista and Oliveira (2015), Mahfuz et al (2016);Mahfuz, Khanam, and Hu (2016);Mahfuz, Khanam, and Mutharasu (2016) ;Mahfuz, Khanam, and Hu (2015) those are

related with mobile banking services. Though some prior studies related with mobile banking in Bangladesh perspectives are given below Dewan and Dewan (2009), Sohel Ahmed, Rayhan, Ariful Islam, and Mahjabin (2011), Parvin (1970), Alam, Patwary, and Rahim (2013), Islam (2013), Kabir (2013), Imran, Quimno, and Hussain (2016) using TAM model and Siddik, Sun, Yanjuan, and Kabiraj (2014) used TAM and DTPB model. Therefore, this study motivated the researchers to identify that none of the research had been done by using UTAUT2 model to mobile banking services adoption in Bangladesh along with brand name perspectives.

That's why in this study proposed a research model to measure the impact of the brand name on m-banking services adoption by extending the UTAUT2 model and to know about the influences those on the adoption of m-banking, especially for Bangladeshi consumer perspectives. However, Alalwan, Dwivedi, and Rana (2017) suggest that mobile banking activities success depends on how and the what extent the consumer adopt the services and also motivated to accept these services.

LITERATURE REVIEW

The Concepts Mobile banking

The impact of mobile technology has increased the acceptance of mobile banking (Chen, 2013). Mobile banking defined as using the m-commerce application which can facilitate the consumers to operate their banking transaction through the mobile device (Oliveira et al., 2014). This mobile banking service mainly depends on four things technologies, communication protocols and banking services (Kim et al., 2009; Luarn et al., 2005). Mobile banking is related to the mobile device and telecommunication (Baptista et al., 2015). Mobile banking may define as the service used by the consumer through their mobile device or mobile phone to access their banking activities (Pousttchi et al., 2004). It can also define as an electronic procedure to conducted mobile communication techniques to mobile devices (Anderson, 2010). Some prior studies related to mobile banking in Bangladesh perspectives are given below (Ahad et al., 2012) using TAM model and (Siddik et al., 2014) used TAM and DTPB model.

About UTAUT2

The (UTAUT2) (Venkatesh et al., 2012) presents a justification for the taking and apply of information and communication technologies (ICTs) by consumers. It constitutes an extension of the UTAUT (Venkatesh et al., 2003) designated as UTAUT2 (Venkatesh et al., 2012), which was devised to give details the acceptance and use of ICT specifically by the consumer, since the UTAUT was originally devised in order to explicate the issues that affect the acceptance and use of ICT by employees where UTAUT (Venkatesh et al., 2003) was an extension of the popular TAM(Davis, 1989; Davis et al., 1989). To overcome the limitation of UTAUT model, researchers proposed the UTAUT2 model. Author scrutinized the UTAUT2 model and revealed the limitation of that model. Therefore in this study, fill up the limitation of the main UTAUT2 model by applying the different technology in different country perspectives and extend the main model by adding brand name variable which has the impact on the adoption of internet banking (Cheng et al., 2010) also studied in this research. Researcher(Laukkanen,

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Sinkkonen, Kivijärvi, & Laukkanen, 2007) found that for the consumer market, adopting of the internet and mobile technology is considered as a foremost area. . Table 2 is the summary of m-banking adoption based on UTAUT, UTAUT+ and UTAUT2 model.

Theory	Author(s)	Countries and sampling[1]	Findings Significant direct relationship with ATT, INT and USE[2]
UTAUT2	Ali Abdallah Alalwan (2017)	**Jordan (343)**	PERE → INT (0.19); EE → INT (0.18);SI → INT 0.10);FC →INT (0.15); HM INT (0.20); TR INT (0.26); PV INT (0.15); BI → ADP (0.47)
	(Baptista & Oliveira, 2015)	Mozambic(252)	UE → INT (0.121); PE → INT (0.362); EE → INT (0.039); SI → INT(- 0.022); FC →INT (0.55); BI → USE (0.121)HM → BI(.184)HT→BI(.401) PV→ BI(.059)
UTAUT+	(F. O. Bankole, Bankole, & Brown, 2011)	Nigeria (231)	UE → INT (0.319);EE → INT(0.1041);PD→ INT (0.138); INT→ USE (0.307)
	(O. Bankole & Cloete, 2011)	SA, Nigeria (451)	NA
UTAUT	(Martins, Oliveira, & Popovič, 2014)	Portugal (194)	PERE → INT (0.40); EE → INT (0.10);SI → INT 0.10);FC →INT (0.18); BI →USE (0.64).
	(Yu, 2012)	Taiwan (441)	PERE → INT (0.318); EE → INT (0.080); SI INT 0.721);CRE INT(0.147);COS → INT (0.352);FC → INT (0.560); SE→INT (0.165)
	(Saeed, 2011)	USA (223)	NA
	(K. S. Tan, Chong, Loh, & Lin, 2010)	Malaysia (184)	PU → INT (0.439); PEOU →INT (0.291); CONV →INT (0.051);SEC →INT(0.4 97).
	(Luo, Li, Zhang, & Shim, 2010)	USA (122)	PERE → INT (0.499); TRU→ INT (0.131); RIS INT (0.231); TRU → INT (0.177); SE INT (0.167).
	(Zhou, Lu, & Wang, 2010)	China (250)	PE →USE (0.37); SI→ USE (0.22); FC→USE (0.24); TTF → USE (0.30).

Table 2: Summary of m-banking adoption based on UTAUT, UTAUT+ and UTAUT2 model

Notes: [1]Total number of responses of the respective study (Sample size)

[2]ATT =Attitude toward use/m-banking; INT= Intention and USE= Usages. BI=Behavioural Intention; ADP=Adoption; PERE=Performance expectancy; EF=Effort expectancy; SI=Social influence; FC=Facilitation conditions; HB=Habit; HM=Hedonic Motivation; PV=Price Value; PD=Power Distance; USE=User Behaviour; CRE=Credibility; COS=Cost; SE=Self-efficacy; PU=Perceived Usefulness; PEOU=Perceived ease of use; CONV=Convenience; SEC=Security; RIS=Perceived risk; TRU=Trust; TTF=Task technology fit.

Brand Name

The word "brand", represents sometimes for a company name, a product name or a sole identifier like as a logo or trademark. The author defined that (Dave, 2003) "a brand stands for the immediate image, emotions, or perceptions people experience when they think of a company or product". The American Marketing Association defines the brand as "name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition". In many studied noted that brand name assists the consumer in recalling brand benefits during consumer evaluations and making product inferences and valuations (Zinkhan et al., 1987). It is especially important when there is the lack of information and brand name act as an alternate source of the missing information (Degeratu et al., 2000) of the required services. Previous research has defined the brand as"a convenient and appropriate label for describing an object

of concerted marketing efforts" (Shrimp, 2003). A brand name can enhance consumers' trust in the goods and services of the producer or the provider (Aaker, 2012). A good brand of a products or services symbolizes all the explicit and implicit quality, image, lifestyle, and status related to possessing and using the products or service. To the best knowledge, two research had been done by using the UTAUT2 model to mobile banking services adoption (Baptista et al., 2015) but few research in Bangladesh perspective and the limitation of the main UTAUT2 model was to test the model in the less technologically advance country, with different mobile technology and identify the relevant factors to contribute the existing model (Venkatesh et al., 2012).

RESEARCH MODEL

Based on the literature we can propose a model (Figure-1) along with the hypothesize that are given below:
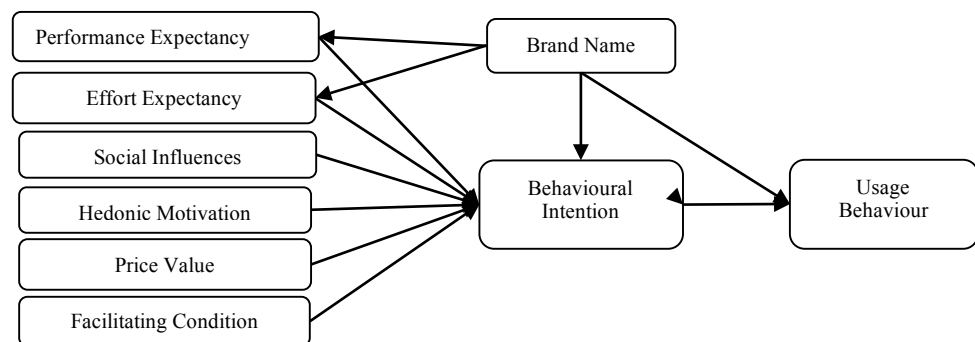

Figure 1. The proposed research models

HYPOTHESIS OF THE STUDY

Performance Expectancy According to the authors, it is similar to the perceived usefulness of TAM (Martins et al., 2014; Oliveira et al., 2014; Kim et al., 2009;) and the relative advantage of IDT. (Luo et al., 2010) and (Riffai et al., 2012) concluded that performance expectancy is the main reason for a user to adopt the mBanking technology. According to (Venkatesh et al., 2012) it means "The degree to which using a technology will provide benefits to consumers in performing certain activities". Effort expectancy construct represents the perceived ease of use (TAM) of an IS (Kuo et al., 2009; Luarn et al., 2005) (Martins et al., 2014; Oliveira et al., 2014; Y. S. Wang et al., 2006) and also has a positive influence on the behavioural intention. According to (Venkatesh et al., 2012) "The degree of ease/effort associated with consumers' use of the technology" The consumers will use more mobile banking services if they face fewer problems (Karjaluoto et al., 2010). It also depends upon the ease of use to conduct the m-banking transaction (Lin, 2011). Social influence According to (Venkatesh et al., 2012) "The consumers perceive that important others (e.g. family and friends) believe that they should use a particular technology". The individual may feel trendy and professional by using a new service technology such as mBanking. The facilitating condition is a UTAUT2 construct that is considered to have a direct effect on the technology adoption. According to (Venkatesh et al., 2012) "Consumers' perceptions of the resources and support available to perform a behaviour. A user who has access to the mobile banking tutorial,

online chat and or demo, will be more interested in adopting mobile banking services (Baptista et al., 2015). Hedonic motivation author define (Venkatesh et al., 2012) "The pleasure or enjoyment derived from using a technology". The researcher found that hedonic motivation is considering the most important factor and the acceptance will be greater to intention if consumers find more services from mobile services Zhang (Baptista et al., 2015) (Zhang et al., 2012). Price value It is important to note that (Venkatesh et al., 2012) included into the UTAUT2 the price value construct. It provides more economic benefits than its monetary costs to its users. According to (Dodds et al., 1991) "Consumers' cognitive trade-off between the perceived benefits of the applications and the monetary cost of using them" The monetary cost includes transaction cost, device cost, service provider cost. Behavioural Intention According to (Taylor et al., 1995) The Strength of one's intention to use the technology in the future. Individual behaviour is influenced by the individual intention revealed by the prior psychological theories(Yu, 2012), which is supported by the UTAUT and UTAUT2 models and find significant influences on technology usages. The prior studies find that it has significant effects on usages behaviour. Brand Name According to (Dave, 2003) "A brand stands for the immediate image, emotions, or perceptions people experience when they think of a company or product" The prior study revealed that brand name has impact on internet banking adoption (Cheng et al., 2010). Since internet banking and mobile banking activities are to some extent similar. Therefore, we can assume that brand names have also impact on mobile banking adoption and we hypothesize.

H1-H6: The influence of performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM) and price value (PV) on behavioural intention (BI) will be positive. (Venkatesh et al., 2012)

H7-H10: Brand name (BN) will positively influence performance expectancy (PE), effort expectancy (EE), behavioural intention (BI). Cheng et al., 2010)

H11: Brand name (BN) will positively influence usage behaviour (UB). Self

H12: Behavioural Intention (BI) will have a significant positive influence on usage behaviour (UB) to use m-banking services. Venkatesh et al., 2012).

RESEARCH METHODOLOGY

This is an empirical study. To conduct this study, we proposed a model based on the UTAUT2 model and extent the model by adding the brand name as an external variable. Here, the brand name identified the relevant factors that (Venkatesh et al., 2012)overcome the limitation of the UTAUT2 models brand name. A comprehensive questionnaire designed to collect data from the respondent by adopting the instruments and scales developed from the literature review. The population of the study is considered who have at least one mobile bank account in Dhaka city Bangladesh. The researchers of the study used convenient sampling for data collection because it is cost effective (Eze et al., 2011).The prior studies noted that small sample is appropriate for partial least square (PLS) (Chin et al., 1999). In this study, we collected 115 data from the respondent. According to (Barclay et al., 1995; Chin, 1998) to the analysis by PLS, it required the sample 10 times for the following possibilities: a) the largest number of indicator b) the depending variables (behaviour intention and usages behaviour that

interacting through the independent variables .This study required 110 samples to make data analysis by PLS which is supported by the prior studies. Here, the largest no of predictor leading to endogenous construct is three and we have no formative construct. The previous research suggests that 100 to 200 sample is generally good to run the path modelling(Hoyle, 1995). This study required 110 samples to make data analysis by PLS which is supported by the prior studies. A few number of prospective respondent were not interested in participating to in the survey due to their personal reason and non-qualification of the sample (Chaudhuri et al., 2001), which was revealed by the prior brand loyalty studies. The quantitative method was applied to collect the data. The items and scales for the UTAUT2 constructs were adapted from (Venkatesh et al., 2012; Venkatesh et al., 2003) usages behaviour from (Im et al., 2011) ,brand name from (Grace et al., 2005) to improve content validity (Straub et al., 2004). To collect data, the questionnaire design was divided into two sections. The first section is comprised of six questions which consist of demographic profile and sources of getting interested in information technology and mobile banking. The second section consists of 34 questions of 9 constructs. Nominal and interval scaling was used to measure the instruments of the study. Nominal scaling (male /female) was used to assign subject to certain category or group. Interval scaling such as 7 points Likert scale (Likert, 1932) was used to collect data from the respondent because it is most common and used method to collect data. These findings revealed by the prior studies (Venkatesh et al., 2012; Venkatesh et al., 2003). The data were analysed through partial least squared (PLS) as the preliminary test of the hypothesis. It offers many advantages and considering powerful tools. It is a general term that has been used to the models to evaluate the validity of the original empirical data (Ringle et al., 2005). PlS developed by (Wold, 1980) which facilities the analysis of more independent and dependent construct relationship and estimates the contribution of multiple construct measures. For data analysis, SPSS and SmartPLS 2.0 were used (Ringle et al., 2005). This is appropriate statistical tools for different marketing research situations (Henseler et al., 2009) and studying complex model (Chin, 1998).The main analysis was done by following two stages (Anderson et al., 1988), to test the proposed model with reliability and validity assessment and then go for structural model assessment and test of the hypothesis of the study.

RESULT AND DISCUSSION

Expert researchers differentiate between measurement and structural models and explicitly take measurement error into account (Henseler et al., 2009). Smart PLS 2.0M3 (Ringle et al., 2005) was the software used to analyze the relationships defined by our theoretical model.

Demographic and other Information

In this Study, total one hundred fifteen respondent data was analyzed. Among them, male respondents and female respondents were respectively 78 and 37. The ratio of the male respondent is twice than female. Here, most of the respondent's age between 20-30 years and the most interesting things is the young generation whose age below 20 is 16.5 percent. Most of the respondents had bachelor and master's degree. Mobile banking users are highly

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educated, young and wealthy person with good knowledge of using internet technology (Karjaluoto, 2002) revealed by the previous studies. Therefore, they are knowledgeable to use the mobile banking. Many prior studies have shown that demographic factors impacts on online banking (Lai et al., 2005; Lassar et al., 2005; Burke, 2002; Sathye, 1999). Here, the respondents were asked about the experience of using information technology, which is also satisfactory and the most important matter is that they are using mobile banking mobile banking several times as well as occasionally.

The measurement model and structural model

In our study, measurement model was tested by the internal reliability, convergent and discriminant validity (Hair et al., 2013) where internal reliability is determined by Cronbach's alpha (CA) and composite reliability (CR)and the acceptance level of indicator is 0.70 (Hair et al., 1992) .In this study, the calculated value (Table 3) CA (range from .82 to .96) both the basic and extended model of the study and CR (range from 0.88 to 0.97) is more than the acceptance value both the basic and extended model of the study. It represents that the constructs have good constructs' reliability(Straub, 1989). The convergent validity is acceptable when constructs have an average variance extracted (AVE) of at least 0.50 (Henseler et al., 2009; Hair et al., 1992; Fornell & Larcker, 1981) where in our study also support this because AVE values stands from 0.65 to 0.92 both the basic and extended model of the study from Table 4. (Gaski, 1984) argued that the discriminant validity exists if the correlation between two constructs is not higher than their respective reliabilities estimates. In this study discriminant validity was verified (table 3). On the other hand, that square root of the AVE of each construct needs to be much larger than any correlation between this construct and any other construct (Gefen et al., 2005; Chin, 1998; Fornell et al., 1981;). The factor loading should be higher than 0.70 whereas each loading below 0.40 should be eliminated from the study(Churchill, 1979) which indicate the good indicator reliability of the construct. The measurement model findings indicate that the model has good construct reliability and the constructs are statistically different and can be used to test the structural model. The structural model was developed to identify the relationships among the constructs in the research model. The bootstrap method was used to test the hypothesis (Efron et al., 1994).

R^2, And Square root of AVE (in bold on diagonal) and factor correlation coefficients.

	Findings with brand name effect									Findings without brand name effect							
	Cronbach Alpha(CA), Composite reliability(CR), Average variance Extracted (AVE)									Cronbach Alpha(CA), Composite reliability(CR), Average variance Extracted (AVE)							
	BI	BN	EF	FC	HM	PE	PV	SI	UB	BI	EF	FC	HM	PE	PV	SI	UB
CA	0.96	0.92	0.92	0.9	0.89	0.82	0.87	0.94		0.96	0.92	0.9	0.89	0.82	0.87	0.94	
CR	0.97	0.95	0.95	0.93	0.92	0.88	0.91	0.95		0.97	0.95	0.93	0.92	0.88	0.91	0.95	
AVE	0.92	0.82	0.81	0.76	0.79	0.65	0.77	0.84		0.92	0.81	0.76	0.79	0.65	0.77	0.84	
	Factor loading									Factor loading							
Item1	0.95	0.93	0.89	0.90	0.85	0.87	0.87	0.92		0.95	0.90	0.90	0.83	0.87	0.87	0.92	
Item2	0.97	0.92	0.91	0.90	0.87	0.8	0.97	0.93		0.97	0.90	0.90	0.80	0.97	0.97	0.93	
Item3	0.95	0.94	0.90	0.85	0.94	0.87	0.78	0.91		0.95	0.89	0.85	0.87	0.78	0.78	0.91	
Item4		0.82	0.91	0.83	-	0.67	-	0.9			0.91	0.83	-	0.87	-	0.90	
	R^2 value									R^2 value							
R^2	.29		.32			.83			.50	.25							.32
	Square root of AVE (in bold on diagonal)									Square root of AVE (in bold on diagonal)							
BI	.95									.95							
BN	0.29	.90															
EF	0.37	0.56	.90							0.38	.90						

FC	0.2	0.37	0.44	**.87**						0.2	0.44	**.87**					
HM	-0.08	-0.08	-0.03	0.02	**.88**					-0.08	-0.02	0.02	**.88**				
PE	0.41	0.91	0.59	0.39	-0.03	**.80**				0.43	0.59	0.4	-0.01	**.80**			
PV	-0.12	-0.09	-0.02	0.12	0.41	-0.1	**.87**			-0.12	-0.02	0.12	0.41	-0.09	**.87**		
SI	0.42	0.51	0.47	0.45	0.01	0.61	0.02	**.91**		0.42	0.47	0.45	0.01	0.63	0.02	**.91**	
UB	0.57	0.57	0.56	0.36	-0.03	0.6	-0.07	0.52	1	0.57	0.57	0.36	-0.03	0.6	-0.07	0.52	1

Table 3. Cronbach Alpha(CA), Composite reliability(CR), Average variance Extracted (AVE) ,

Note: Cronbach Alpha (CA); Composite reliability (CR); Average variance Extracted (AVE); BI=Behavioural Intention; BN= Brand Name; PE=Performance expectancy; EF=Effort expectancy; SI=Social influence; FC=Facilitation conditions; HM=Hedonic Motivation; PV=Price Value; USE=User Behaviour.

In our study tested the relationship between dependent and independent variables by path coefficient (β). (Hair et al., 2014) mentioned path coefficients with standardized values above 0.20 are usually significant and those with values below 0.10 are usually not significant. The model explains 29% of the variance in intention to use m-banking (0.29), 32 % and 83% variance explained in effort expectancy (0.32) and performance expectancy (0.83) respectively and 50 % of the variance in actual use of m-banking (0.50).

Result of Hypothesis Testing

In this study, we tested the hypothesis in two ways. First, we tested the basic UTAUT2 model of the study and then tested the extended UTAUT2 model. In the basic model Hypothesis, 4 and 6 were supported and the rest of the hypothesis was not supported. On the other hand, Hypothesis 1, 3, 5 7, 8 and 10 found supported and others were found not supported to our study. The summary of the study presented in table 4.
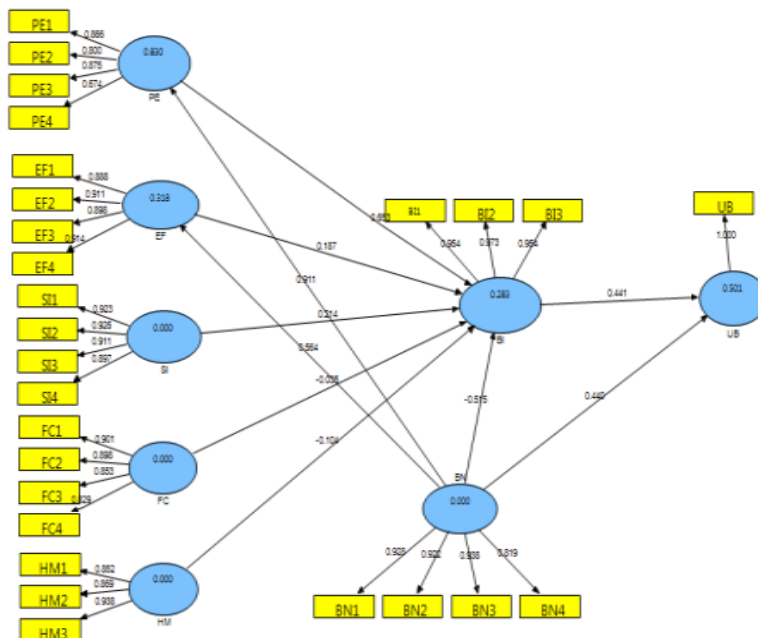

Figure 2.Path Model of the Mobile banking adoption

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DISCUSSIONS

The performance expectancy relationship findings are consistent with the previous studies (Baptista et al., 2015; Oliveira et al., 2014; Zhou et al., 2010) of mobile banking. It means that the respondents were more concern about the performance expectancy. But not supported by our basic model analysis. Therefore, we conclude that after adding the brand name as an external variable, it has an impact on behaviour intention.   The rest of the variables of the extended UTAUT2 model in our study did not validate the behaviour intention such as effort expectancy, facilitation condition, hedonic motivation, and habit and price value.

Hypothesis		Path Coefficient		t Statistics		p-value		Comments		No. of Item
		With Brand name	Without Brand name	With Brand name	Without Brand name	With Brand name	Without Brand name	With Brand name	Without Brand name	
H1	PE -> BI	0.53	0.16	1.96	1.11	0.052	0.269	Supported	Not Supported	
H2	EF -> BI	0.18	0.17	1.5	1.42	0.136	0.158	Not Supported	Not Supported	
H3	FC -> BI	0.01	-0.01	0.27	0.47	0.787	0.639	Not Supported	Not Supported	
H4	SI -> BI	0.23	0.25	2.08	2.31	0.039	0.022	Supported	Supported	
H5	PV -> BI	-0.08	-0.09	0.58	0.68	0.563	0.497	Not Supported	Not Supported	
H6	HM -> BI	-0.08	-0.05	0.68	0.36	0.497	0.719	Not Supported	Not Supported	
H7	BI -> UB	0.45	0.57	4.44	6.21	0.000	0.000	Supported	Supported	
H8	BN -> BI	-0.42		1.65		0.101		Supported		
H9	BN -> EF	0.56		6.66		0.000		Supported		
H10	BN -> PE	0.91		29.1		0.000		Supported		
H11	BN -> UB	0.42		3.9		0.000		Supported		

R^2 for BI=.25 and R^2 for UB=.32; R2 for BI=.29, R^2 for EF=.32, R^2 for PF=.83 and R^2 for UB=.50.

Table 4. Bootstrapping Results: Beta, T statistics, P-value

The effort expectancy is supported by (Baptista et al., 2015; Faria, 2013; Zhou et al., 2010) but contradicts with but contradicts with (Venkatesh et al., 2012; Im et al., 2011; Cheng et al., 2010; Carlsson et al., 2006). It means that mobile banking is easing to use in Bangladesh and become familiar very quickly in that region. The social influences findings are consistent with the prior studies (Baptista et al., 2015; Oliveira et al., 2014; Wang et al., 2012; Kim et al., 2009). The facilitating condition also not supported by our extended model of the study is supported by the previous studies (Baptista et al., 2015; Oliveira et al., 2014; Im et al., 2011) but contradicts with (Baptista & Oliveira, 2015; Mahfuz et al., 2013; Yu, 2012; Zhou et al., 2010). Therefore, we conclude that the users don't expect to help them to adopt mobile banking services and less emphasis on it. The price value is consistent with the prior studies (Baptista et al., 2015; Yang et al., 2012) and contradicts by other scholars (Venkatesh et al., 2012; Luarn et al., 2005) . The hedonic motivation finding is not supported by our study and they thought mobile banking services have no relationship with the fun, enjoyable. but contradicts with the (Raman et al., 2013; Venkatesh et al., 2012)

THEORETICAL CONTRIBUTIONS

Through this study author try to contribute in theoretical aspect as well as practical aspect. The main purpose is to facilitate the mobile banking services to the end user. Other theoretical contributions are the following:

A. The study represents a contribution to the existing Bangladeshi customer to enhance their knowledge about how to use and accept the mobile banking services technology.

B. This study provides a fruitful direction to the mobile banking users in Bangladesh perspectives and also encourage the customer to accept the mobile banking services through examining the important aspect of it.

C. In order to accept the technology acceptance (mobile banking services) from consumer perspective which is the basic theoretical foundation of UTAUT2 model (Venkatesh et al., 2012). Therefore, in this study provide the in-depth intention towards the use of mobile banking services of Bangladeshi customers.

D. This study examines in a developing country (Bangladesh) perspective which is the limitation provided in the main UTAUT2 model and also incorporated new technology (Mobile banking) and industry (Banking).

E. This study extended the UTAUT2 model through included a new construct (brand name) which is proposed in the main model Venkatesh et al. (2012). Therefore, in this study author revealed that brand name has significant importance to improve the behaviour intention to adopt mobile banking services.

F. In addition, consumers' acceptance of mobile banking services accelerates the potential customers to take this technology.

From practical Contribution

This study contributes both the academic and financial industry perspectives for developing and implementing the effective promotional strategies and marketing activities for mobile banking services adoption. Because effective promotion and marketing activities are very important to encourage the users to adopt mobile banking services in Bangladesh.

The brand name has no direct relation with the behaviour intention and usages behaviour, but it stimulates the users to adopt this service from the other financial firms.

In order to effort expectancy or ease of use of mobile banking services, financial firms should provide the high-quality online services, by designing the consumers application software and hardware more user-friendly (Cheng et al., 2010).

A. From practical perspective, the statistical results support the crucial role of the following factors: behavioural intention, performance expectancy, effort expectancy, and trust. In this way banks can motivate their customers to accept mobile banking services.

B. One to one marketing activities consider the most important factors to persuade potential mobile banking services users to accept online banking rather than traditional banking Laukkanen, Sinkkonen, and Laukkanen (2009).

C. Through this study banks can create positive impression to their customer mind to take the maximum advantages by using easier, useful and valuable applications (Dwivedi et al., 2009; Ho et al., 2008; Jaruwachirathanakul et al., 2005).

D. This study provided a clue for the Bangladeshi banks about the important influence of brand name to adopt mobile banking services.

E. The findings of the study provided an insight to expand the financial services by SSTs and 24/7 services to improve the performance expectancy of mobile banking services

Mobile Banking Services Adoption: Insight from Brand Name Perspectives based on UTAUT2 Model

(Simintiras et al., 2014; Zhou, 2012; Zhou et al., 2010).

LIMITATION OF THE STUDY

The further study can be compared with different country perspectives or one country perspectives by considering cultural dimensions or perceived risk, trust as the external variable which can explain behavioural intention and usages behaviour better than our research. Since, mobile banking services is dependent on the telecom operators, the further study required to study the impact of mobile operators service quality on behaviour intention and use of mobile banking (Baptista et al., 2015). The impact of new regulations to accept the services and the performance of the software, is a considerable issue to adopt mobile banking services (Lytras et al., 2011). The original model has some moderators, but we make our study simple by excluding those as well as we do not take a cross cultural approach which may limit the generalizability of our study. And to some extent, our study required qualitative research to know more insight the findings for further study.

CONCLUSION

The objectives of the study the impact of the brand name on mobile banking services adoptions. In this study, all the relationship related to the brand name is supported by path analysis; the future of mobile banking in Bangladesh is enormous. It will help the end user to transact more frequently and conveniently especially the consumer who are living in the remote location as we as the busy consumers. The result reveals that brand name is a vital factor for Bangladeshi consumers to adopt it. To facilitate their services banks can use all media advertisings; redesign their website to attract their customers. In our study customers are benefited by using mobile banking service in Bangladesh e-commerce service provider and users can take financial advantage from the adoption (Hoque et al., 2015). The study is formulated and empirically tested to explain to the decision to adopt m-banking services adoption. Since, brand name effects on adoption of m-banking services, therefore further study should concentrate on initial trust which stimulates users to adopt this service. Because the impact of the brand name also depends on the level of trust of the bank or financial firms.

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