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Determinants of Users Trust for Branchless Banking in Pakistan

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Abstract

To capture the unbanked population, cellular companies in partnership with microfinance institutions/banks are offering branchless banking initiatives in the market. This trend is building competitive environment in banking sector. Current study aims to investigate the effects of service quality, system quality, reputation, structural assurance, perceived credibility and perceived financial cost on Users' Trust in branchless banking. Primary data was collected through a self-administered questionnaire from 120 undergraduate level students of a university in Pakistan.

Hierarchical multiple regression analysis was run for hypotheses testing. The study concluded that service quality, system quality, reputation and perceived credibility exert significant positive effects while perceived financial cost exert significant negative effect on Users' Trust. However, study could not prove a significant effect of structural assurance on Users' Trust. Results also indicate that 40.9% of the variation in Users' Trust in branchless banking can be accounted for by the respective changes in all six independent variables. Recommendations and limitations are also discussed in the study.

Keywords: Branchless banking; Users' trust; Service quality; System quality; Reputation; Perceived credibility; Perceived financial cost

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INTRODUCTION

In this competitive and fast moving world, key advantage for all organizations is to deliver new services to customers and diverting their minds towards trust to make it an advantage for the organization [1,2]. Modern technology has brought unprecedented changes in banking sector. And environment of banking sector has become more competitive with the arrival of branchless banking in the market. Branchless banking (BB) is a distribution channel strategy that allows customers to save, transmit and collect cash electronically via local retailer mediators instead of visiting any bank outlet [3]. BB offers a combination of virtual space and physical exchanges to extend and broaden the outreach of banking services [4]. Mobile banking is a kind of branchless banking that uses cell phone technology to provide added convenience to existing bank customers in developed markets and to offer new services to unbanked customers in emerging markets [5].

In banking sector, consumers accept those channels with which they are comfortable and reject those that instill fear and concern [6]. Adequate customer protection against risks of fraud and loss of privacy is central for users [7]. Trust is a significant predictor of consumer intention to use online/mobile banking [7,8]. And future commitment of customers for online/mobile banking depends on their perceived trust. So, trust is increasingly being recognized as the critical success factor for this emerging retail banking sector [9,10]. Examining trust greatly helps in explaining trust status which makes real behavior-based explanation more convincing [11]. Therefore, BB service providers should address determinants of Users' Trust to retain existing customers as well as attract new customers [12].

BB is likely to lead the market in coming years with reduced prices [13] superior services and tough competition to the competitors. Over the next five years, usage of mobile banking services will continue to grow at an accelerated rate [14]. Pakistan is one of the fastest developing markets for branchless banking in the world [15]. This

presents an enormous opportunity to provide banking services to huge untapped market. To seize the opportunity, banking sector should get unbanked to the mainstream by modifying banking services to meet their needs. And, main strength of branchless banking lies in its ability not only to cut costs but also to bring banking to the people of less developed regions having no bank accounts.

To capture the unbanked population in Pakistan, cellular companies in partnership with microfinance institutions/banks have introduced some branchless banking initiatives. In March 2008, for the first time ever anywhere in the world, State Bank of Pakistan (SBP) published initial policies for banks along with telecom companies interested in opting as service providers of branchless banking. In Pakistan eight branchless banking service providers are competing currently [16]. Through neighborhood retail stores, they offer banking services like cash withdrawal, sending/receiving funds, balance enquiry, airtime buying, utility bill payments, getting ATM card and insurance services. By pulling more and more individuals into official and virtual cash flow, BB plays a vital role in terms of increasing financial safety, assurance and reliability; and minimizing need of carrying cash which is uncomfortable to manage [17]. Users of internet/mobile banking believe in its potential benefits but do not trust it due to unfavorable conditions prevailing in the country [18]. This study aims to examine the determinants - service quality, system quality, reputation, structural assurance, perceived credibility and perceived financial cost - of Users' Trust in branchless banking.

LITERATURE REVIEW

Over the past decade, a paradigm shift in banking sector from traditional banking to electronically virtual banking has enabled the sector to offer a variety of added values to customers. In this regard, internet appeared to be beneficially novel with its versatile functionality relevant to communication technology [19,20]. Moreover, cellular technology has happened to be striding with similar rate along with its resourceful utility for banking services. Research from traditional banking has gradually progressed from customer focused approach towards automated teller machines [21] telephone banking [22], PC banking [23], mobile banking [24] and branchless banking [25]. Globally almost two and a half billion people do not own a financial account with either traditional bank or substitute financial body. However, for the past few years, the diffusion of BB had been significant and this trend expects to intensify further in future. The need for banking services as well as difficulty in reaching to such services by means of traditional bank branches are major drivers for the implementation of mobility facilitated financial services [26].

Users' trust

Users consider security and risk as major inhibitors to adopt mobile banking services [14,20,27-29]. Consumers fear that they may lose their money [30] and personal information while conducting transactions [31]. So, banks should provide fully secure mobile banking services. Research has found that trust exerts a negative effect on risk

[32,33] and positive effect on credibility of mobile banking [32] behavioral intentions [33] acceptance of internet banking [18] and customer loyalty [34,35]. Therefore, management should focus more on belief formation - Users' Trust - than on directly influencing behavioral intentions or actual behavior towards BB [36]. In this vein, current study considers three perspectives of trust: capability (ability), honesty (integrity) and goodwill (benevolence). For BB, these three perspectives can be considered with respect to banks and mobile network operators. Ability is consumers' perception about capability and proficiency of BB service provider to deliver the expected services [37]. Integrity presents consumers' perception of service provider being honest and fair regarding the conditions of transaction. Benevolence is the extent to which service provider tries to resolve users' concerns and intends to do good to them beyond profit motives. Absence of trust and low willingness to adopt technology has been discovered as the main bottlenecks in acceptance and implementation of branchless banking services [26]. The stimulating factors Integrity, ability, benevolence, ease of use, and perceived usefulness are found to be positively associated with trust which creates usage intention towards branchless banking [38].

Service quality

Service quality reflects reliability (trustworthiness), promptness and professionalism of service [39]. Users always expect to obtain ubiquitous branchless banking services. So, it requires continuous investment of resources and efforts from service providers because mobile networks have sometimes relatively slow responses, unstable connections and speed issues. If users do not obtain professional, reliable and rapid services they may conclude that service providers are deficient in ability and integrity to offer quality services [40]. Such concerns may yield a lack of user trust in branchless banking. It is argued that trust occurs only when customers are assured of service provider's ability and willingness to meet obligations [33].

H1: There is a positive effect of service quality on Users' Trust

System quality

System quality reflects easy usage, easy accessibility, speed and robustness of the system without failure. If users find it difficult to access branchless banking and usually face system failures then they may assume that service providers have not invested enough efforts and resources in system quality. This will reduce their trust in branchless banking [41]. A study found that ease of use and usefulness exert positive effects on attitude of mobile banking users [42]. Mukherjee et al. [10] reported that speed of response affects consumer trust in online banking positively. Ease of use exerts a significant impact on trust of mobile banking customers [35]. Zhou [43] found system quality to be a significant determinant of initial trust in mobile banking users.

H2: There is a positive effect of system quality on Users' Trust

Reputation

Reputation has been identified to be a significant determinant of Users' Trust [10]. When users come into direct experience with a service, they develop a strong perception or reputation about the service which ultimately forms trust in branchless banking [44]. A study reported that brand awareness positively affects attitude and intention to use mobile banking services [45].

H3: Reputation exerts a positive effect on Users' Trust

Structural assurance

Structural assurance is an organization-based mechanism. It represents the existence of sufficient technological and legal structures to ensure payment security [46]. BB achieves this by taking certain protection measures such as authorized guarantees, legal assurances and policies/regulations [47,48] to cover individual losses and various other kinds of risks involved. Structural assurance helps to increase users' feelings of control over branchless banking payments. It also enhances their faith in service because they are protected from informational, financial and other risks. Structural assurance is a strong predecessor of trust [49] which results in increased behavioral intentions towards branchless banking [33]. A study found structural assurance to be a strong determinant of users' initial trust in mobile banking [50]. Mukherjee [10] report that distortion of information and violation of rules and regulations exert a negative influence on consumer trust in online banking. Research reports that perceived risk exert a negative effect on behavioral intentions [12] and attitude towards internet banking [51].

H4: Structural assurance exerts a positive effect on Users' Trust

Perceived credibility

Acceptance of branchless banking can be attributed to perceived credibility of consumers which they have in the system. Consumers having low perceived credibility fear that bank will transfer their personal information or money to third party without their knowledge or permission [31,36]. Consumers with high perceived credibility confidently make transactions and keep up privacy of their personal information. Two important concepts under the construct of perceived credibility are privacy and security [52,53]. Studies conclude that perceived privacy and security are important determinants of consumer trust in online banking [7,10]. A study concludes that perceived credibility exert a strong influence on behavioral intentions for internet banking [36]. Research suggests that banks should improve security and privacy of their websites to increase trust [8] and behavioral intentions [36] of online banking users.

H5: Perceived credibility exerts a positive effect on Users' Trust

Perceived financial cost

Perceived financial cost refers to the transaction cost of conducting branchless banking transactions. It can be defined as the level to which a person believes that using BB services will cost money or charges. Empirical evidence reveals that branchless banking adoption is highly encouraged by economic factors - advantageous transaction/service fees [46,54]. Perceived financial cost is a salient factor influencing consumers to adopt branchless banking [55]. Zhu et al. [56] study reveals a strong relationship between perceived value of internet banking service and trust in the bank.

H6: Perceived financial cost affects Users' Trust (Figure 1)

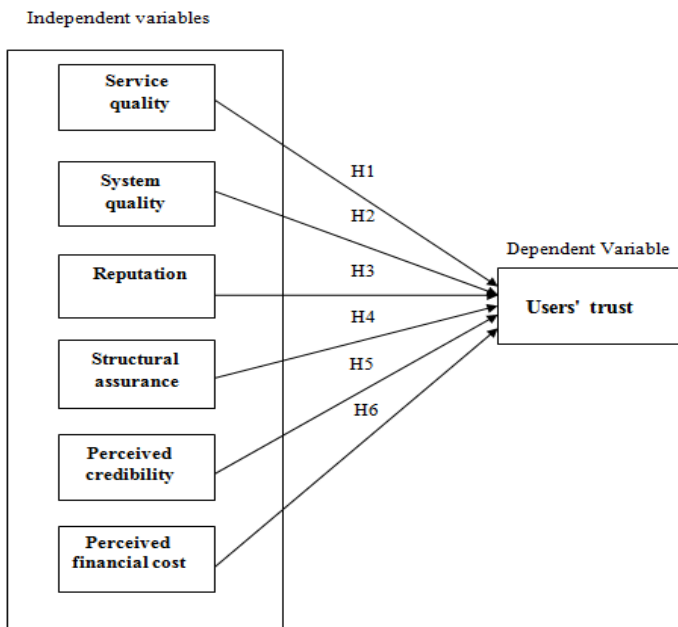


Figure 1: Theoretical framework

RESEARCH METHODOLOGY

Population of the study comprises of undergraduate level students of a public sector university in Pakistan. Students enrolled in different degree programs were conveniently selected for the study. Participants were initially enquired that whether they had ever performed/experienced branchless banking transaction/service or not. The students with affirmative response were asked to fill in the questionnaires. Researchers orally explained questions to them specially the terminologies and how to fill in the questionnaire. A total of 131 questionnaires were distributed out of which 120 completely filled questionnaires were received.

Scales used to measure independent and dependent variables - service quality, system quality, reputation, structural assurance, perceived credibility, perceived financial cost, users' trust - of the study were adopted from previous studies [56,57]. Individual questions were carefully edited to fit well with the context of branchless banking and

targeted population in Pakistan. Furthermore, pilot study was also carried out to ensure wording, sequencing and flow in the questionnaire. Respondents’ feedback was accommodated to make questionnaire more clear and understandable. A five-point Likert-type scale ranging from ‘Strongly Disagree’ to ‘Strongly Agree’ was used to record responses against these questions. Data were entered into an SPSS sheet. Descriptive statistics, correlation and hierarchical multiple regression analyses were performed to draw results.

Table 1: Descriptive statistics, reliability and correlation coefficients

Variables	Mean	Standard Deviation	Cronbach’s Alpha	Service Quality	System Quality	Reputation	Structural Assurance	Perceived Credibility	Perceived Financial Cost
Service Quality	3.6750	0.73775	0.794	1					
System Quality	3.8028	0.69746	0.720	0.522**	1				
Reputation	3.6361	0.75839	0.802	0.334**	0.511**	1			
Structural Assurance	3.3083	0.72162	0.702	0.094	0.048	0.003	1		
Perceived Credibility	3.7021	0.66207	0.736	0.481**	0.402**	0.336**	0.138	1	
Perceived Financial Cost	3.7833	0.90687	0.627	0.001	0.224*	0.062	0.026	0.114	1
Users’ Trust	3.5750	0.81072	0.834	0.499**	0.501**	0.433**	0.025	0.434**	-0.079

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

RESULTS AND DISCUSSION

Among participants of study 67% were male and 33% were female. Age ranges from 18 to 26 with a mean age of 21 years. Table 1 indicates that Cronbach’s alpha values range from 0.627 to 0.885 which is quite acceptable in such studies. Mean, standard deviation and correlation coefficient among all the variables are also shown in the table. To assess the effect of all the independent variables on users’ trust, hierarchical

multiple regression analysis was performed. Table 2 depicts six models having predictors added one by one sequentially. All models are significant as R square value is 0.249 in Model 1, 0.329 in Model 2, 0.361 in Model 3, 0.362 in Model 4, 0.383 in Model 5 and 0.409 in Model 6. Highest R square value among all models is 0.409 for Model 6. This reveals that 40.9% of the variation in Users' Trust can be accounted for by the respective changes in all the independent variables of the study. Change in R square is significant for Model 1 (24.9%, $p < 0.001$), Model 2 (7.9%, $p < 0.001$), Model 3 (3.3%, $p < 0.05$) and Model 6 (2.6%, $p < 0.05$) while it is not significant for Model 4 and Model 5.

Table 2: Hierarchical multiple regression analysis

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	1.559	0.795	0.485	0.539	0.269	0.694
Service Quality	0.549***	0.359***	0.337**	0.339**	0.273**	0.237*
System Quality		0.384***	0.271*	0.271*	0.243*	0.306**
Reputation			0.226*	0.225*	0.198*	0.185*
Structural Assurance				-0.018	-0.037	-0.034
Perceived Credibility					0.212	0.232*
Perceived Financial Cost						-0.151*
F Statistics	39.182***	28.650***	21.882***	16.288***	14.150***	13.051***
R Square	0.249	0.329	0.361	0.362	0.383	0.409
Adjusted R Square	0.243	0.317	0.345	0.338	0.356	0.378
R Square Change	0.249	0.079	0.033	0.000	0.021	0.026
Significance F Change	0.000***	0.000***	0.016**	0.830	0.050	0.027**

*** P < 0.001 ** P < 0.01 * P < 0.05

Hypothesis testing is performed on the results achieved in Model 6. This shows that service quality exerts a significant positive effect ($\beta=0.237^*$) on Users' trust thus H1 of the study is proved. This asserts that a one unit increase in service quality increases Users' Trust by 0.237. Finding is supported by previous research [40,53]. System quality brings in a significant positive effect ($\beta=0.306^{**}$) on Users' Trust. This approves H2. Result is supported by some earlier studies [43,50,53]. Reputation is found to be a significant determinant ($\beta=0.185^*$) of Users' Trust. This supports H3 of the study. However, structural assurance does not exert a significant effect ($\beta=-0.034$) on Users' trust. Thus H4 was not supported. The result is against a previous research [53] that reports a significant positive effect of structural assurance on Users' Trust in mobile banking. Perceived credibility proves to be a significant predictor ($\beta=0.232^*$) of Users' Trust. This approves H5. Similar results were achieved by Amin et al. [52] and Yu [57]. Perceived financial cost exerts a significant negative effect ($\beta=-0.151^*$) on Users' Trust. Thus H6 of the study is also supported. This asserts that a one unit increase in perceived financial cost decreases Users' trust by 0.151. Result is consistent with Zhou [43], Gu et al. [49] and Yu [57]. Model 6 also reveals that the highest beta value is for system quality (0.306), then for service quality (0.237) and then for perceived credibility (0.232).

CONCLUSION

The current study was conducted to examine the determinants of Users' Trust for progressing branchless banking industry in Pakistan. On the basis of hierarchical multiple regression analysis, this study proves that service quality, system quality, reputation, perceived credibility exert significant positive effect on Users' Trust in BB. However, perceived financial cost exerts a significant negative effect on Users' Trust. Somehow, study fails to prove a significant effect of structural assurance on Users' Trust. Model 6 proves that 40.9% of the variation in Users' Trust can be explained by the respective changes in all the independent variables of the study. The Model also signifies that out of all independent variables, system quality brings the strongest effect in Users' trust.

RECOMMENDATIONS

This study measures the effects of service quality, system quality, reputation, structural assurance, perceived credibility and perceived financial cost on Users' Trust in branchless banking. Therefore, BB service providers should aim to build trust of consumers by focusing on all the determinants. To increase trust in branchless banking, service providers should focus on the improvement of system quality, service quality, perceived credibility and reputation, because these factors affect User's Trust positively. Study also recommends that in order to encourage trust, management should work on

the price of BB services and bring it at par with competing banking options. Removal of problems and barriers may help them to increase financial inclusion rate [58].

LIMITATIONS AND SUGGESTIONS

First limitation of the study is its reliance on self-reported data collected from a single source that may have yielded biased results. Second limitation is survey design that was conducted by selecting students from only one university which restricts generalizability of the results. Third limitation is participants of the study that were students. Typical BB services they avail include cash withdrawal and money transfer. So, students do not constitute an ideal population to study Users' Trust. Small sample size is another limitation.

This study investigates only the variables related with BB service providers with no mediation and moderation of the variables. Future studies can be conducted by including variables pertaining to agents employed and technology used in the system. Future research can be carried out by introducing some moderating and mediating variables into the theoretical framework. Further research can also be conducted by adopting some qualitative research designs like experimental and interview methods. Future work can be executed with other participants like salaried persons and micro/small businessmen who use BB services more extensively. Survey based studies can also be conducted by collecting data through some objective measures from large sample sizes. Future researchers may plan studies to compare branchless banking, mobile banking and internet banking with respect to different interfaces and environments, technologies and equipment.

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