Original Research

The Effect of Service Quality of Mobile Banking Technology on Customer Brand Image

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Abstract

Banking is one of the largest financial institution which constantly provides better customer services. To improve the service quality, banking services are expanded to mobile technology. This research study is based on random sampling and self-structured questionnaire to investigate the effect of mobile banking service quality on brand image of Mellat bank customers in Zanjan city. So, the basic aim of this research endeavor was to find out what service quality dimensions can promote brand image of bank. Result based on stepwise regression showed that the convenience dimension had stronger effect on brand image.

Keywords: Mobile Banking, Service Quality, Brand Image, Convenience, Reliability, Responsiveness, Security.

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1. Introduction

Today almost all commercial Public, Private or Foreign National banks are offering automated self-service banking services [1]. As the products offered by the banks are more or less identical, banks are trying to have edge over rivals on other parameters which may enhance customer satisfaction and loyalty. This is because organizations having satisfied and loyal customers will be able to survive and compete in future [2-3]. Today almost every bank is using technology to deliver services to customers. With time automated banking services acceptance is increasing among bank customers.

This is apparent from the reduction in transactions through branches and the increase in the transactions through automated self-service modes in many of the banks. Mobile Banking is a process of no branch banking which provides financial services to unbanked communities in both urban and rural areas at affordable cost. The aim of the service is not to destroy branch banking, but to consider those people under the umbrella of banking service that are away from banking facilities. Through M-banking one can avail various services i.e.; utility bill payment, Fund Transfer, Shopping, Cash Withdrawn from selected ATM or Cash point and many more exciting facilities. [8].

There is a lot of enthusiasm with mobile banking, as the banking regulator is promoting commercial banks to develop the financial service. A rising number of people are now taking mobile financial services as it gives them a hassle-free transaction at an affordable cost [9].automated self-service modes in many of the banks. Both satisfaction, loyalty and business performances [2, 4, 5]. Study of service quality of automated banking services is required because it leads to competitive advantage and customer attractiveness [4, 6].

Service quality has become a useful weapon for the organization since it helps them differentiate from other competitors [7] .In these study service quality has been measured taking into consideration mobile banking and its effect on customer brand image.

The remainder of the paper is organized as follows: The first sections present the literature review on mobile banking service quality and customer brand image. Next, the paper discusses the research methodology used in the paper as well as the survey instrument used for data collection. Finally, results are presented along with conclusion.

2. Literature Review

2.1. Service Quality

Service quality is one of the critical success factors that influence the competitiveness of an organization. A bank can differentiate itself from competitors by providing high quality service. Service quality has been one of the most attractive areas for researchers over the last decade in the retail banking sector. With time numerous models have been developed for measuring service quality. In literature, main conceptualizations of service quality are either based on the disconfirmation between perception and expectation [10,11,12], or performance only approach[13].When customers evaluate the quality of the service they receive from a banking institution they use different criteria, which are likely to differ in their importance, usually some being more important than others are. While several criteria are important only a few are most important. These determinant attributes are the ones that will define service quality from the consumer's perspective [14].

Based on different conceptualizations, alternative scales have been proposed for service quality measurement [15,16,17,18,19]. Various definitions of the term 'service quality' have been proposed in the past, and based on different definitions; different scales for measuring service quality have been put forward[20]. Service quality is determined by the comparison made by the customers between their expectations and experiences [21, 22].Parasuraman et al. (2005) developed a multi-item scale for assessment of electronic service quality, which they named as E-S-QUAL. The four dimensions of E-S-QUAL are efficiency, fulfillment, system availability and privacy. Service recovery is also an important factor affecting service quality perception of customers in technology-based services.

2.2. Brand Image

According to Hsieh, Pan, and Setiono (2004), "a successful brand image enables consumers to identify the needs that the brand satisfies and to differentiate the brand from its competitors, and

consequently increases the likelihood that consumers will purchase the brand" [23].A company or its product/services which constantly holds a favorable image by the public, would definitely gain a better position in the market, sustainable competitive advantage, and increase market share or performance [24]. Reynolds (1965) noted that "an image is the mental construct developed by the consumer on the basis of a few selected impressions among the flood of the total impressions; it comes into being through a creative process in which these selected impressions are elaborated, embellished, and ordered" [25].

Brand image has been conceptualized and operationalized in several ways [26, 27]. It has been measured based on attributes [28, 29]; brand benefits/ values [23, 30]; measuring image based on the above definition would help marketers to identify the strengths. There are five dimensions in brand image benefits: experiential, symbolic, social, functional and appearance enhances.

The items used for measuring the emotional and social benefits were adapted from Sweeney and Soutar's (2001) scales, whereas symbolic benefit measurement was taken from Tsai (2005). For functional benefits measurements [31, 32].

3. Research Methodology

This survey is conducted to in order to study the impact of mobile banking service quality on customer brand image. Data was collected using self-administered paper-based questionnaires with seventeen items for measuring service quality of mobile banking and twelve items for evaluating brand image benefits from 100 customers of Mellat bank branches in Zanjan province who have the experience of using mobile bank service.

3.1. Theoretical Framework and Hypotheses Development

The main objective of this study is to show the relation between mobile banking service quality and brand image. The five hypotheses of this survey are as fallow:

H1: There is a positive relationship between Mobile banking service quality and brand image.

H2: There is a positive relationship between Mobile banking responsiveness and brand image.

H3: There is a positive relationship between Mobile banking efficiency & Convenience and brand image.

H4: There is a positive relationship between Mobile banking assurance and security and brand image.

H5: There is a positive relationship between Mobile banking reliability and brand image.

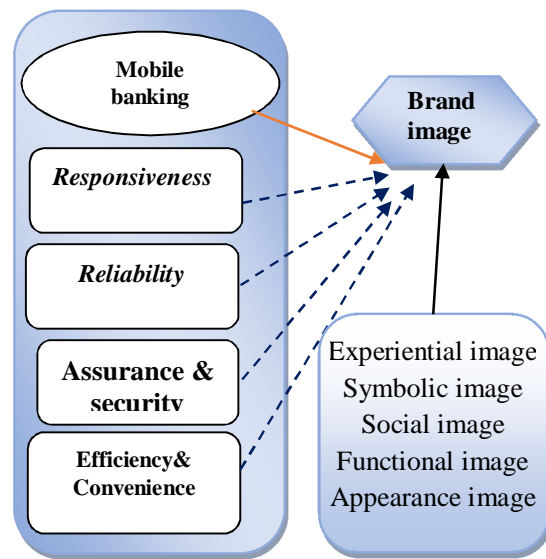The development of related hypotheses to the proposed mode l are discussed next.

Figure 1. The Theoretical Framework

3.2. Questionnaire Reliability &Validity

For the reliability of the variable used, all were found to show satisfactory Cronbach Alpha value of 0.792 Thus, all variables are considered reliable and Face validity of the questionnaire was obtained by confirmation of advisor.

Cronbach's Alpha Based on Standardized Items	Cronbach's Alpha Based on Standardized Items	No of Items
0.792	0.793	31

Table 1. Reliability Analysis for All Variables

Table 2 shows correlation coefficient between dimension of Mobile banking Service Quality and brand image. Pearson correlation coefficient showed a significant positive correlation between the independent and dependent variables. As can be seen in table1 p-value for all variables are less than 0.05 that confirmed the relations.

For the first hypothesis, it is anticipated that there is a positive relationship between Mobile banking reliability and brand image.

Table 2. Correlation Coefficient Between Dimension of Mobile Banking Service Quality and Brand Image

Correlations		servicequality	brandimage	responsivness	reliability	convenience	sequrity
servicequality	Pearson Correlation	1	.526**	.628**	.819**	.797**	.641**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	384	378	384	384	384	384
brandimage	Pearson Correlation	.526**	1	.343**	.396**	.468**	.282**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	378	378	378	378	378	378
responsivness	Pearson Correlation	.628**	.343**	1	.329**	.443**	.251**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	384	378	384	384	384	384
reliability	Pearson Correlation	.819**	.396**	.329**	1	.451**	.628**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	384	378	384	384	384	384
convenience	Pearson Correlation	.797**	.468**	.443**	.451**	1	.164**
	Sig. (2-tailed)	.000	.000	.000	.000		.001
	N	384	378	384	384	384	384
sequrity	Pearson Correlation	.641**	.282**	.251**	.628**	.164**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.001	
	N	384	378	384	384	384	384
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 3 depicts the results of stepwise regression procedure where all dimensions of service quality proposed by Parasuraman et al., (1988) regressed on dependent variable (brand image). The results indicated that about 28% variance (adjusted R2=0.28) was explained by perceptions regarding "convenience", "responsiveness", "security" ,and "reliability". The convenience alone explained 21% variability (R2 change = .21) whereas security, accounted for only 4% (R2 change = .04) and responsiveness 1% (R2 change = .01) and reliability 0.8% variance respectively in building Mallet Bank brand image.

Table 4 shows ANOVA results in which predictive strength (F_1, 376:105.39 , P<0.05) of the model suggesting its appropriateness for explaining variance in brand image.

Table 5 reflects that convenience (beta = 0.34, t = 6.33, p < 0.05) had stronger positive impact on brand image than did security (beta = 0.121, t = 2.09, p < 0.05) and responsiveness (beta =0.114, t = 2.26, p < 0.05) and reliability (beta = 0.129, t = 2.03, p < 0.05) have positive impact on dependent variable from the empirical model.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
					Change Statistics					
1	.468[a]	.219	.217	4.76	.219	105.3	1	376	.000	
2	.515[b]	.265	.261	4.63	.046	23.66	1	375	.000	
3	.525[c]	.276	.270	4.60	.011	5.506	1	374	.019	
4	.533[d]	.284	.276	4.58	.008	4.152	1	373	.042	1.765
a. Predictors: (Constant), convenience										
b. Predictors: (Constant), convenience, security										
c. Predictors: (Constant), convenience, security, responsiveness										

Table 4. ANOVA (Dependent Variable: Brand Image Brand Image)

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	2397.642	1	2397.642	105.392	.000[b]
	Residual	8553.871	376	22.750		
	Total	10951.513	377			
a. Dependent Variable: brand image						
b. Predictors: (Constant), convenience						
c. Predictors: (Constant), convenience, security						
d. Predictors: (Constant), convenience, security, responsiveness						
e. Predictors: (Constant), convenience, security, responsiveness, reliability						

Table 5: Coefficient (Dependent Variable: Brand Image)

Coefficients									
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Correlations**		
		B	Std. Error	Beta			Zero-order	Partial	Part
4	(Constant)	24.92	2.12		11.7	.000			
	convenience	.525	.083	.341	6.33	.000	.468	.312	.27
	security	.322	.154	.121	2.09	.037	.282	.108	.092
	responsiveness	.389	.172	.114	2.26	.024	.343	.116	.099
	reliability	.299	.147	.129	2.03	.042	.396	.105	.089
a. Dependent Variable: brand image									

Alipoor, V.

This finding supports Malik and Naeem and Nasir [33] studies that explain SERVQUAL dimensions have positive impact on brand image. Further, Andreassen and Lindestad's

[34] contention that the perception of service quality was an important factor in influencing image because services were difficult to evaluate. In addition, this result supports Zeithaml's proposition that service quality was customers' judgment about the overall excellence or superiority of a service or, in other words, the image [35]. The study results support Kayaman and Arasli's [36] findings that brand image developed from all of customers' service experiences [32, 33, and 34]. These results are partially in agreement with Kayaman and Arasli observations that reliability and empathy perceptions have a developmental role in brand image.

4. Conclusion

The main goal of current research was to ascertain the impact of Mobile banking service quality dimensions on brand image of 100 customer of Mellat Bank. The article concludes that increase in service quality of the mobile banking can satisfy and develop customer brand image that ultimately retains valued customers. According to results, it can be concluded that all dimension of service quality of mobile banking have positive effect on brand image of Mellat bank among customers. The results showed that among the dimension of service quality, convenience has greater impact on brand image of Mellat bank. Science the convenience of mobile banking is the most important point in this target community, as is giving customers the opportunity to take more control over their finances through transactional and informational services so banks should pay more attention to ease of use of such services. Those banks which will manage to convince public authorities that their mobile services are swift, reliable and responsive will have a huge advantage as they will gain access to a part of the market which was previously unapproachable.

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