Int. J. Manag. Bus. Res., 2 (4), 351- 361, Autumn 2012 © IAU

Mobile Banking Service Quality and Customer Satisfaction (Application of SERVQUAL Model)

¹S. F. Amiri Aghdaie, ^{*2} F. Faghani

¹, Department of management, University of Isfahan, Isfahan, Iran

², Faculty of Administrative Sciences Economy, University of Isfahan, Isfahan, Iran

ABSTRACT: This research aimed at applying SERVQUAI model to examine the relationship between mobile banking services and customer satisfaction. While the previous researchers had already examined the effect of qualities services on banking customer satisfaction, no previous study was done on mobile banking. Thus, the current paper attempted to fill the gap in the literature by applying SERVQUAL model to study the quality of the mobile banking services rendered by the banks in Iran. The researcher has used the customer satisfaction as the dependent variable and the five dimensions of service quality; namely, tangibles, reliability, responsiveness, assurance and empathy, as the independent variables. Results showed that the four variables tangible (0.204), reliability (0.342), responsiveness (0.282), and empathy (0.345) would correlate with satisfaction significantly. However, the assurance factor would have no relationship with CS. The ANOVA test showed that there was a significant correlation between mobile banking services and customer satisfaction.

Keywords: Mobile bank, Customer satisfaction, Service quality, SERVQUAL

INTRODUCTION

Modern management science philosophy considers customer satisfaction as a baseline standard of performance and a possible standard of excellence for any business organization. Especially, banks due to similar services compete together in order to achieve customer satisfaction. They try to create eases for their customers. E- Banking is a new system that most banks have used to achieve this objective. This system opens multiple routes to the customer service (e.g., ATM machines, telephones, Internet and mobile phones). Although, advancements in e-banking technology have already transformed the modern world, E banking is still an innovation in creating products and services through electronic channels with low cost. These products and

*Corresponding Author, Email: f.faghani1367@gmail.com

services include billing, credit, deposit management and electronic payment of products and services such as electronic money (Samadi and eskandari, 2012). Many researchers have studied E -banking (Rexha et al., 2003; Poon, 2007; Eriksson and Nilsson, 2007; Udo et al., 2010; Gilaninia and Mosavian, 2010; Zaribaf et al., 2011). A new approach in the field of banking services is the supply of financial and banking services with mobile phones. Mobile banking is as a wireless communication channel for creating value by customers in banking transactions (Taghavi Fard and Torabi, 2011). Mobile- banking is a new concept that emerged in the global economy in the recent years and has created new streaming in the fields of commerce and trade. Therefore, the attention of

some researchers have focused on this concept (Lee et al., 2003; Laforet and Li, 2005; Tobbin, 2007; Gu et al, 2009; Laukkanen and Kiviniemi, 2010; Lee et al., 2011; Taghavi Fard and Torabi, 2011; Singh, 2012; Zhou, 2012). In Iran, Ebusiness have got benefits such as the lack of legal restrictions. minimum needed requirements, high penetration rate of mobile and advanced wireless communication technology. However, financial resource of people is limited; consequently, banks are challenging each other in attracting customers. Several Iranian banks, including private and public banks, numerous financial and credit institutions need to exert many efforts to keep their customers in order to survive. The constraints of financial resource under which bank services are managed make it essential for the managers to understand and measure customers' expectations. In addition, any gap in service quality has to be identified from the customers' perspective (Rakesh, 2012). Thus, many researchers examined satisfaction and intention of banking customers (Moutinho and Smith, 2000; Mihelis et al., 2001; Wirtz, 2003; Laforet and Li, 2005; Liu et al., 2008; Gu et al. 2009; Bamdad and Rafiei, 2009; Udo et al., 2010; Gilaninia and Mosavian, 2010; Kazemi and Mohajer, 2010; Samadi and eskandari, 2011; Grigoroudis et al., 2012). Customers choose a products or services by considering their qualities. SERVQUAL model is one of the instruments used to measure the quality of services. This scale has been tested and/or adapted in a great number of studies conducted in various service settings, cultural contexts and geographic locations. For example, Islam (2012) examined application of SERVQUAL model in customer service of mobile operators. Zekiri have also proposed (2011)applying SERVQUAL model and factor analysis in assessing customer satisfaction with service quality in the case of mobile telecommunications in Macedonia. In the case of banking services, some of the previous studies only used SERVQUAL model to examine the quality perception of the customers (Newman, 2001; Kumar et al., 2009; Padhy, 2009; Agathee, 2010; Kumar et al., 2010; Ravichandran et al., 2010; Tsoukatos and Mastrojianni, 2010; Abdelghani, 2012; Rakesh, 2012; Seranmadevi and Saravanaraj, 2012;). In these previous studies,

effect of qualities services on banking customer satisfaction has been examined (Daniel and Berinyuy, 2010; Kazemi and Mohajer, 2010; Kumbhar, 2011; Samadi and Eskandari, 2011). Furthermore, no previous study on this subject has been done. Thus, the current paper attempted to fill the gap in the literature by applying SERVQUAL model to study the quality of the mobile banking services rendered by Iranian banks. The main purpose of the present study was to examine the relationship between qualities of MB services and satisfaction of customers with SERVQUAL approach.

Theoretical Framework

Figure 1 presents the study conceptual framework as well as showing the hypotheses relationships between the constructs. The researcher has used the customer satisfaction as the dependent variable and the five dimensions of service quality - tangibles, reliability, responsiveness, assurance and empathy- are the independent variables.

Mobile Banking

Mobile services are more attractive than current online services due to service ubiquity, a unique characteristic exclusive to the mobile environment (Tojib and Tsarenko, 2012). In Iran, the most important services provided in MB system are : balance enquiry, last three accounts transactions enquiry, draft, approved of Check amount, Check status enquiry, blocking card, buy prepaid recharge, installments payment, bills payment, received messages archives, ability of receiving various customer accounts information, shopping ability, hotel expenses payment, stock market status enquiry.

Service Quality and Customer Satisfaction

Banking industry has realized the significance of customer-centered philosophies and is turning to quality management approaches to help managing their businesses. Many scholars and service marketers have explored consumers' cognitive and affective responses to the perception of service attributes in order to benefit by providing what consumers need in an effective and efficient manner. Consumer satisfaction is considered the primary intervening constructs in the area of service marketing because ultimately it leads to the development of consumer loyalty or re-patronization of a product or service (Ravichandran et al., 2010).

Service quality and customer satisfaction are very important concepts, which must understand by companies that want to grow while keeping their competitive edge. In the modern competitive environments, delivering high service quality is the key for a sustainable competitive advantage. Customer satisfaction has a positive effect on an organization's profitability. Satisfied customers of any business repeat purchase, show brand loyalty, and give positive word of mouth. Many models have been developed to measure service quality delivered by firms in numerous businesses. It is important to review service quality models because of its relation with customer satisfaction. Thus, service quality has become a major area of interest of practitioners, managers and researchers because of its impact on customer satisfaction, customer loyalty, and of course, company profitability (Zekiri, 2011). Therefore, in this paper, main hypothesis is as follows:

 H_1 : MB service quality has a significant relationship with customer satisfaction in the IRAN Bank.

SERVQUAI Model

Service quality is one of the important attributes of service providers as they regard measuring the service quality from consumers' perspective as a top priority construct. Service quality is an indispensable factor for customer satisfaction, cost reduction, customer loyalty, customer relationship and retention, profitability and so on. Many have suggested that quality results from a comparison of perceived performance with expected performance based on the so-called "disconfirmation theory". Indeed, this notion was the basis for the SERVQUAL model, which views service quality as the gap between the expected level of service and customer perceptions of the level received. Berry, Parasuraman and Zeithaml (1988) are the creators of this instrument that is used to measure the customer perceptions of service quality (Islam, 2012). Therefore, the evaluation of service quality results from comparing the perception about received services with prior expectations of what those services should provide.

Previous studies did not support all factors structure proposed by Parasuraman et al. (1988). The universality of the scale and its dimensions has also been the subject of criticisms and it is believed that they require customization to the specific service sector in which they are applied.

The SERVQUAL model consists of five main dimensions, namely, tangibility, reliability, responsiveness, assurance and empathy.

Lim, Tang and Jackson (1999) define these five dimensions as given in table 1.

Isalam (2012) examined the application of SERQUAL model in customer services of mobile operators in Bangladesh based on four dimensions (tangibles, reliability, responsiveness and empathy). The following hypotheses were developed Based on the SERVQUAL model, and will subsequently be examined using different statistical techniques.

H2: Tangibility has a significant relationship with the Iran customer's satisfaction of MB services.

H3: Reliability has a significant relationship with the Iran customer's satisfaction of MB services.

H4: Responsiveness has a significant relationship with the Iran customer's satisfaction of MB services.

H5: Assurance has a significant relationship with the Iran customer's satisfaction of MB services.

H6: Empathy has a significant relationship with the Iran customer's satisfaction of MB services.

S. F. Amiri Aghdaie; F. Faghani

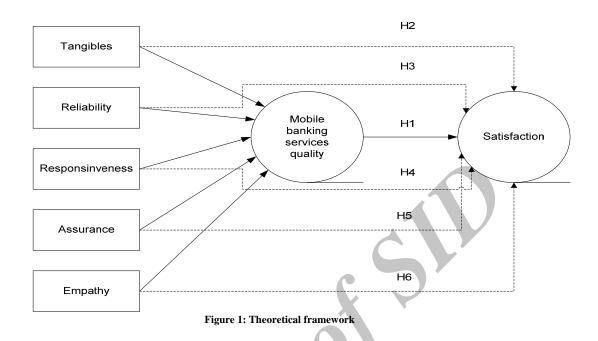


Table 1: Definitions of dimensions of SEVQUAL model

Dimension	Definition
Tangibles	Physical facilities, equipment, external appearance of store and appearance of personnel.
Reliability	Company's potential of performing the promised service dependably and accurately.
Responsiveness	Company's willingness to help customers and provide prompt service.
Assurance	Employees' knowledge and courtesy levels and their ability to inspire trust and confidence. This dimension also includes competence, courtesy, credibility, and security.
Empathy	Caring and personalized attention that the firm provides to its customers. This dimension also includes access, communication and understanding the customer.

Source: adopted by; Lim, Tang and Jackson (1999)

RESEARCH METHOD

The data were collected from three of the Iranian Google groups (in category: School & University Groups). An online questionnaire was mailed to them. The sample size used was 120 respondents. The respondents were selected on the basic of convenience sampling. Eight demographic variables were investigated as covariates in this research. These variables were as follow: age, gender, educational qualification, monthly income, use of mobile bank frequency, most place use of mobile bank services, most services used of mobile bank services, used Communication Company. Eighteen questions were developed based on SERVQUAL model. The model included questions covering five dimensions of the service that are tangibility, responsiveness, assurance, reliability and empathy. Likert scale was used to question the respondents on the five-point scale. The respondents were asked to rate on the scale between strongly agree and strongly disagree for measurement, customer satisfaction was designed 11 questions. One hundred seventy questionnaires were distributed and 120 were returned.

The current study used a mixture of statistical techniques to achieve the intended objective. First, descriptive statistics were employed to analyze the profile of the respondents, which is necessary in analyzing the result. Second, Pearson's correlation coefficient was used to measure the relationship between services quality and customers satisfaction. Then, regression analysis was used to estimate the cause and effect relationship between the variables of services quality and customers satisfaction. In addition, factor analysis technique was used as a preliminary stage to logistic regression analysis. SPSS 19 software was used to accomplish all the above-mentioned tests.

ANALYSIS AND RESULT Test of Hypotheses

According to the study results, each demographical variable had a varied response rate. There were 63 females and 57 males, ranging in age from less than 20 to greater than 50, 90 subjects (66.7%) were aged 20-30. As to educational background, 90 subjects were

master's degree graduates. In relation to income, 57 subjects had a monthly salary of less than 300 Iranian Rials. Mean use of mobile bank frequently is less than 1 per month and 48.9% peoples replied their most place use of it is everywhere. Most used services of mobile bank are balance enquiry and buy prepaid recharge. 50.4% respondents used of Hamrah-e-Avval communication company. These data are shown in table 2. When evaluating an instrument or conducting a research in general, attention need to be paid to two issues: reliability and validity. The mean technique used for the main dimensions. Reliability and internal consistency of the multi item scales for each of the constructs were measured using Cronbach Coefficient Alpha. Reliability refers to the consistency, stability and repeatability of a data collection method. Ideally, the minimally CCA for primary research should be 0.7. CCA values are computed for each construct separately which ranged from point 0.701 to 0.883. These data are shown in table 3.

Table 4 shows the mean value depicting the overall customers' satisfaction. As far as this descriptive statistics is concerned, customers' satisfaction on mobile banking service is above satisfactory level (with a mean value of 3.15 on a 5-point Likert scale). In addition, mean of the SERVQUAL dimensions are above satisfactory level. Result of descriptive analyze shows the man satisfaction (mean = 3.24, Std. Deviation= 0.33) is more than women satisfaction.

Calculate of correlation used to examine relationship between dependent variable and each independent variable. Results show the four variables tangible (0.204), reliability (0.342), responsiveness (0.282), and empathy (0.345) are significantly correlated with satisfaction (table 5). In other word, these four factors have positively relationship with customer satisfaction. However, the assurance factor does not have relationship with CS. These findings show that H2,H3,H4 and H6 hypotheses have confirmed. Nevertheless, H5 hypothesis does not have confirmed. The regression and ANOVA are used for test of first hypothesis. The overall regression and its ANOVA are summarized as follow:

S. F. Amiri Aghdaie; F. Faghani

	variables	Frequency	Percentage (%)	Mean	SD
	Less than 20	8	5.9		
	20-30	90	66.7		
Age	30-40	12	8.9	2.21	0.709
	40-50	9	6.7		
	Greater than 50	1	0.7		
	Less than diploma	4	3.0		
	diploma	3	2.2		
Educational qualification	Associates	4	3.0	4.58	0.940
qualification	Bachelor	18	13.3		
	Master or greater than	90	66.7		
Gender	male	57	42.2	1.53	0.501
Genuer	female	63	46.2	1.55	0.501
	Less than 300	57	42.2		
Monthly Income	300-500	18	13.3	2.21	1.321
(thousand)	500-700	8	5.9	2.21	1.521
	Greater than 700	37	27.4		
	Every day	0	0		
	3-4 per week	32	23.7		
Often use your MB	1-2 per month	19	14.1	3.45	1.036
	Less than 1 per month	52	38.5		
	never	17	12.6		
	Home	32	23.8		
Most place use of	Office	10	7.4	3.07	1.407
MB	Car	4	3.0	5.07	1.407
	Every where	66	48.9		
	balance enquiry	34	28.3		
	approved of Check amount	0	0		
	buy prepaid recharge	23	19.2		
	received messages archives	2	1.7		
	last three accounts transactions enquiry	19	15.8		
Most services of	Check status enquiry	0	0	5.02	3.612
МВ	bills payment	7	5.8		
	Send factor to Email	0	1.7		
	Money transfer	11	9.2		
	blocking card	13	10.8		
	installments payment	2	1.7		
	purchase	0	0		
	irancell	30	22.3		
Most Of CC	Hamrah-e-Avval	68	50.4	1.93	0.658
	both	22	16.3		

Table 2- Demographic factors of the respondents

Int. J. Manag. Bus. Res., 2 (4), 352-361, Autumn 2012

Table 3: Reliability Analysis

Dimension	Number of Question	Alpha Values
Tangible	1-5-6-7	0.788
Reliability	12-13	0.734
Responsiveness	8-15-17-18	0.701
Assurance	2-3-4	0.883
Empathy	9-10-11-14	0.826

		Table 4: Descript				
	Ν	Minimum	Maximum	Mean	Std. Deviation	
satisfaction	120	1.82	3.91	3.1591	0.40728	
tangible	120	2.75	5.00	3.3583	0.52132	
reliability	120	2.00	5.00	3.1417	0.66162	
responsiveness	120	2.00	5.00	3.2729	0.65945	
assurance	120	2.33	5.00	3.4472	0.62547	
empathy	120	2.50	5.00	3.2083	0.53387	
Valid N (list wise)	120					

Table 5: Correlat	ions

		satisfaction	tangible	reliability	responsiveness	assurance	empathy
satisfaction	Pearson Correlation	1	0.204	0.342	0.282	0.025	0.315
	Sig.		0.005	0.000	0.002	0.789	0.000
tangible	Pearson Correlation	0.204	1	0.461	0.816	0.750	0.747
	Sig.	0.005		0.000	0.000	0.000	0.000
reliability	Pearson Correlation	0.342	0.461	1	0.539	0.326	0.716
	Sig.	0.000	0.000		0.000	0.000	0.000
responsiveness	Pearson Correlation	0.282	0.816	0.539	1	0.483	0.687
-	Sig.	0.002	0.000	0.000		0.000	0.000
assurance	Pearson Correlation	0.025	0.750	0.326	0.483	1	0.438
	Sig.	0.789	0.000	0.000	0.000		0.000
empathy	Pearson Correlation	0.315	0.747	0.716	0.687	0.438	1
	Sig.	0.000	0.000	0.000	0.000	0.000	

From the ANOVA Test, it shows the table 7 Sig. value 0.05 is greater than the calculated Sig. value 0.002. It reflects the null hypothesis at 5% level of significance. It means there was a significant correlation between dependent variable and independent variables. Therefore, customer satisfaction level depends on quality dimension in mobile banking service. The overall predictability of the model is shown in the table 6 above. The adjusted R square value of .472 indicates that the model explains about 47% of the factors responsible for mobile Banking quality, which is significant (F=10.544, p < 002). F values imply that the model and data are well fit in explaining customer satisfaction in mobile banking. Table 8 reports that the standardized coefficient between MSBQ and CS is 0.286.

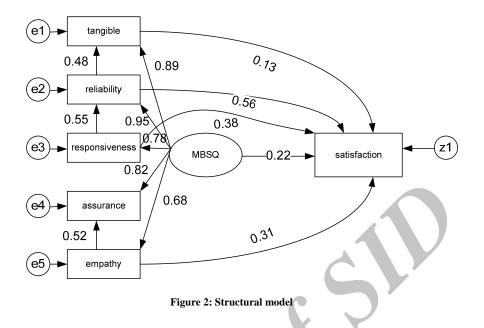
Test of Measurement Model

Figure 2 presents the best model for showing relationship between independent variables and dependent variables. First model fitness parameters did not showed a model goodness–of–fit. So, that model modified by creating new connections (reliability—> tangible, responsiveness—> reliability, reliability—> assurance). These connections are logical with attention to theirs correlation coefficients. The alternative model in this study also has a good level of fit (χ 2=103.8, d.f= 5, p=0.000, GFI=0.981, RMSEA=0.05, NFI=0.986, CFI=0.990).

Table 6: Model Summary									
Model	R	sted R Square	Std. Error of the l	Estimate					
1	0.586ª	0.331		0.471	0.39187				
a. Predictors: (Constant), MSBQ Table 7: ANOVA									
Model	Sun	n of Squares	df	Mean Square	F	Sig.			
Reg	ression	1.619	1	1.619	10.545	.002 ^a			
1 Re	sidual	18.120	118	.154					
Г	otal	19.740	119						
Predictors: (Cor Dependent Vari	astant), MSBQ able: satisfaction	Tab	le 8: Coeffic	ients					

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	3.940	0.243		16.208	0.000
1	MSBQ	0.238	0.073	0.286	3.247	0.002

a. Dependent Variable: satisfaction



DISCUSSION AND CALCULATION

The present paper has been used customer's perception of mobile banking quality. The article concludes that increase in service quality of the mobile banking can satisfy and develop customer satisfaction that ultimately retains valued customers. The research generally supports the result of previous research. Ravichandran et al. (2010) examined influence of service quality on customer satisfaction in banking industry. In addition, Khalil Mohammad Khalil observed that there is a relation between customer satisfaction in online banking service and tangible, reliability, responsiveness and empathy. kumbhar (2011) proposed that responsiveness, assurance, security, easy to use are the factors affecting the customer satisfaction in E- banking. Bank ATM service quality and customer satisfaction by Bamdad and Rafiei (2009) has been studied. Their results showed that the customer satisfaction level is average. In addition, they proposed that customers preferred use of the ATM than go to the bank. Lee et al. (2011) showed that the factors affected on customer intention to use of mobile banking services in order of importance are; personal connectivity. innovativeness, task-fit, connectivity, absorptive capacity and monetary value. The results of Gu et al. (2009) indicated

that key determinants of behavioral intention in mobile banking are perceived usefulness, trust and perceived ease-of-use. Laforet and Li (2009) identified the main barriers to mobile banking as well as the lack of awareness and understanding of the benefits. Therefore, Lack of understanding of mobile banking benefits is a reason for lake of customers unwilling. It is suggests that banker advertising should focus on the novel aspect for mobile banking. Bankers should also consider raising consumer awareness and acceptance of new technology-based banking services more, through advertising and rather than word-of-mouth promotion communication. Willingness of customers to use electronic banking, which is a banks desirable goal, increases when, access to modern banking is more, customers understanding of electronic banking, dependence of modern banking on electronic network and customers imagery about the benefits of using e-banking are better (Zari Baf and Hosseini, 2012). Present paper has been limited time and unavailability to customers of a special bank. SERVQUAL model is a widely accepted approach to measure the difference between and perception there are five gaps in the service quality concept; Islam (2012) has concentrated on reality gap analysis. Future researchers can concentrate on other dimensions.

REFERENCES

- Abdelghani, E. (2012). Applying Servqual to Banking Services: An Exploratory Study in Morocco. *Studies in Business and Economics*, 7(1), pp. 62-72.
- Agathee, U. S. (2012). An Assessment on Service Quality in the Mauritian Banking Sector. International Research Symposium in Service Management, pp: 1-16.
- Bamdad, N. and Rafiei Mehr Abadi, N. (2009). Customer Satisfaction Survey of Bank ATM Service Quality. *Journal of Humanities and Social Sciences and Management*, 31(4), pp. 39-58.
- Cronin, J. J. and Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56 (3), pp. 55-68.
- Daniel, Ch. N. and Berinyuy, L. P. (2010). Using the SEVQUAL Model to Assess Service Quality and Customer Satisfaction: An Empirical Study of Grocery Stores in Umea, Master Thesis, Umea School of Business.
- Eriksson K. and Nilsson, D. (2007). Determinates of the Continued Use of Self-Services Technology: The Case of Internet Banking. *Technovation*, 27 (4), pp. 159-167.
- Gilaninia, S. H. and Moussavian, S. J. (2010). Identifies the Factors Affecting the Propensity of Customers Using Electronic Banking Services. *Beyond the Management*, 11, pp. 103–133.
- Grigoroudis, E., Tsitsiridi, E. and Zopounidis, C. (2012). Linking Customer Satisfaction, Employee Appraisal and Business Performance: An Evaluation Methodology in the Banking Sector. *Annals of Operations Research*, 205 (1), pp. 5-27.
- Islam, R. M. D. (2012). Application of Servqual Model in Customer Service of Mobile Operators: A Study from the Context of Bangladesh. *European Journal* of Business and Management, 4 (1), pp. 47-54.
- Jamal, A. and Naser, K. (2002). Customer Satisfaction and Retail Banking: An Assessment of Some of the key Antecedents of Customer Satisfaction in Retail Banking. *International Journal of Bank Marketing*, 20 (4), pp. 146-160.
- Kazemi, M. and Mohajer, Sh. (2010). Ranking of Factors Affecting Customer Satisfaction of Service Quality in the EN Bank of Mashhad. *Journal of Industrial* Management, 10, pp. 91–103.
- Kumar, M., Kee, F. T. and Charles, V. (2010). Comparative Evaluation of Critical Factors in Delivering Service Quality of Banks: An Application of Dominance Analysis in Modified SERVQUAL Mode. *International Journal of Quality and Reliability Management*, 27 (3), pp. 351-377.
- Kumar, M., Kee, F.T. and Manshor, A.T. (2009). Determining the Relative Importance of Critical Factors in Delivering Service Quality of Banks: An Application of Dominance Analysis in

SERVQUAL Model. Managing Service Quality, 19 (2), pp. 211-228.

- Koivisto, M. and Urbaczewski, A. (2004). The Relationship between Quality of Service Perceived and Delivered in Mobile Internet Communications. *Information Systems and E-Business Management*, 2, pp. 309-323.
- Kumbhar, V. M. (2011). Factors Affecting the Customer Satisfaction in E- Banking: Some Evidences from Indian Banks. *Management Research and Practice*, 3 (4), pp. 1-14.
- Laforet, S. and Li, X. (2005). Consumer's Attitudes towards Online and Mobile Banking in China. *International Journal of Bank Marketing*, 23 (5), pp. 362-380.
- Laukkanen, T. and Kivinieme, V. (2010). The Role of Information in Mobile Banking Resistance. *International Journal of Bank Marketing*, 28 (5), pp. 372-388.
- Lee, Y-K., Park, J-H., Chung, N. and Blakeney, A. (2011). A Unified Perspective on the Factors Influencing Usage Intention toward Mobile Financial Services. *Journal of Business Research*, 65 (11), pp. 1-10.
- Lim, P. C., Tang, N. K. H. and Jackson, P. M. (1999).
 "An Innovative Framework for Health Care Performance Measurement. *Managing Service Quality*, 9 (6), pp. 423-433.
- Liu, X., Zeng, X., Xu, Y. and Koehi, L. (2008). A Fuzzy Model of Customer Satisfaction Index in E-Commerce. *Mathematic and Computers in Simulation*, 77 (5-6), pp. 512-521.
- Mihelis, G., Grigoroudis, E., Siskos, Y., Politis, Y. and Malandrokis, Y. (2001). Customer Satisfaction Measurement in the Private Bank Sector. *European Journal of Operational Research*, 301, pp. 347-360.
- Morna, S. Y., Lee, P. J., Mcgoldrick, K. A. and Keeling, J. D. (2003). Using ZMET to Explore Barriers to the Adoption of 3g Mobile Banking Services. *International Journal of Retail and Distribution Management*, 31 (6), pp. 340–348.
- Moutinho, L. and Smith, A. (2000), Modeling Bank Customer Satisfaction through Mediation of Attitudes towards Human and Automated Banking, *International Journal of Bank Marketing*, 18 (3), pp. 124-134.
- Newman, K. (2001). Interrogating SERVQUAL: A Critical Assessment of Service Quality Measurement in a High Street Retail Bank. *International Journal of Bank Marketing*, 19 (3), pp. 126-139.
- Oliver, R. L. and Desarbo, W. S. (1988). Response Determinates in Satisfaction Judgment. *Journal of Customer*, 14 (4), pp. 495-507.
- Padhy, P. K. (2009). Innovative Service Quality in the Banking Sector: An Assessment Based on

SERVQUAL Measures, SSRN, Service Industry: Challenges and Opportunities International Conference, Waljat Colleges of Applied Sciences, Rusayl, Muscat, Sultanate of Oman. Available: http://ssrn.com/abstract=1525593(September 2006).

- Poon, W-Ch. (2007). Users Adoption of E-Banking Services: The Malaysian Perspective. *Journal of Business and Industrial Marketing*, 23 (1), pp. 59-69.
- Rakesh, R. (2012). Quality Assessment of Banking Industry Using the Servqual Model. *Indian Streams Research Journal*, 2 (2), pp. 1-4.
- Ravichandran, K., Prabhakaran, S. and Kumar, A. S. (2010). Application of Servqual Model on Measuring Service Quality: A Bayesian Approach. *Enterprise Risk Management*, 1 (1), pp. 145-169.
- Rexha, N., Russel, Kingshott, R. Ph. J., Shang Aw, A. Sh. (2003). The Impact of the Relational Plan on Adoption of Electronic Banking. *Journal of Services Marketing*, 17 (1), pp. 53-67.
- Samadi, A. and Skandari, S. (2011). The Effect of Service Quality on Customer Satisfaction MELi bank of Toysergan City (based on SERVQUAL Model). *Journal of Management*, 21, pp. 30-40.
- Seranmadevi, R. and Saravanaraj, M. G. (2012). An Empirical Study on Quality of Internet Banking Services in Indian. *European Journal of Economics*, *Finance and Administrative Sciences*, 25, pp. 65-79.
- Sharma and Mehta (2004). Expectations, Performance Evaluation, and Consumers' Perceptions of Quality. *Journal of Marketing*, 57, pp. 18-34.
- Singh, A. B. (2012). Mobile Banking Based Money Order for India Post: Feasible Model and Assessing Demand Potential. *Procardia- Social and Behavioral Science*, 37, pp. 466-481.
- Taghavi-Fard, M. T. and Torabi, M. (2010). The Factors Affecting the Adoption of Mobile Banking Services by Customers and Rank Them (Case Study: Bank Tejarat In Tehran, Iran). *Journal Excavations Business Management*, 3, pp. 136-162.
- Tobbin, P. (2012). Toward a model of Adoption in Mobile Banking by the Unbanked: A Qualitative Study. *Info*, 14 (5), pp. 74-88.
- Tojib, D. and Tsarenko, Y. (2012). Post-Adoption Modeling of Advanced Mobile Service Use. *Journal of Business Research*, 65 (7), pp. 922-928.
- Tsoukatos, E. and Mastrojianni, E. (2010). Key Determinants of Service Quality in Retail Banking. *EuroMed Journal of Business*, 5 (1), pp. 85-100.
- Udo, G. J., Bagchi, K. K. and Kirs, P. J. (2010). An Assessment of Customer's E-Service Quality Perception, Satisfaction and Intention. *International Journal of Information Management*, 30 (6), pp. 481-492.
- Wirtz, J. (2003). Halo in Customer Satisfaction Measures: The Role of Purpose of Rating, Number of Attributes and Customer Involvement. *International Journal of Services Industry Management*, 14 (1), pp. 96-119.

- Zari Baf, M., Hosseini, S. M. and Bozorgmehr, B. (2012). Comparative Study of Electronic and Traditional Banking Preferences of User Behavior (Case study: Investigating the Use of Services Like Semnan E-banking Customers Bank). *Journal of Management*, 21, pp. 55-66.
- Zekiri, J. (2011). Applying SERVQUAL Model and Factor Analysis in Assessing Customer Satisfaction with Service Quality: The Case of Mobile Telecommunications in Macedonia. *International Bulletin of Business Administration*, 11, pp. 86-101.
- Zhou, T. (2012). Examining Mobile Banking User Adoption from the Perspectives of Trust and Flow Experience. *Information Technology Management*, 13 (1), pp. 27-37.
- Zhou, T. (2012). Understanding Users' Initial Trust in Mobile Banking: An Elaboration Likelihood Perspective, *Computers in Human Behavior*, 28 (4), pp. 1518-1525.