Management Science Letters 5 (2015) 79-84

Contents lists available at GrowingScience

## Management Science Letters

homepage: www.GrowingScience.com/msl

## Investigating success factors influencing in e-CRM adoption: Evidence from banking industry

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Article history: Received September 18, 2014 Accepted 9 December 2014 Available online December 10 2014 <i>e-CRM</i> Banking industry Customer loyalty Technology adoption	This paper aims to examine the effects of technology adoption and quality of websites on customer satisfaction as well as customer loyalty in banking industry. It also investigates the effect of electronic customer satisfaction on customer loyalty and the effect of electronic customer satisfaction on customer loyalty on e-CRM. The study is accomplished among managers of bank Sepah in city of Qom, Iran. Using structural equation modeling, the study has confirmed that there was a positive and meaningful relationship between the effects of technology adoption and quality of web services on electronic customer satisfaction and customer loyalty. The results also confirm the positive effect of customer satisfaction on customer loyalty, electronic customer satisfaction as well as electronic customer loyalty on e-CRM.

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### **1. Introduction**

During the past few years, there has been tremendous changes in banking industry through adoption of different services such as electronic banking, automated tellers, point of sales, etc. (Ding & Straub, 2008; Kumar, 2010; Delone & Mclean, 2004). Mobile banking has been considered as one of the most value-added technology services. The penetration rate of this technology is undefined in the world, specifically in developing countries, Koo and Wati (2010) investigated the role of trust as a mediating variable in mobile banking environment by performing an empirical study in Indonesia. They reported that the trust could mediate the effects of information quality to perceived usefulness and end-user satisfaction. In addition, the relationships of system quality and perceived usefulness and system quality and end-user satisfaction were somehow mediated by trust. Moreover, trust also represented a direct impact on both end-user satisfaction and perceived usefulness. Finally, their result gave support of the positive relationship between perceived usefulness and end-user satisfaction.

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© 2014 Growing Science Ltd. All rights reserved. doi: 10.5267/j.msl.2014.12.005 According to Grabner-Kraeuter et al. (2007) and Butz Jr and Goodstein (1997), for more than two decades, customer relationship management (CRM) has become a buzzword among business practitioners and consultants. Many organizations have invested huge amounts of money to implement CRM strategies, techniques and infrastructure to absorb and retain profitable customers in today's increasingly competitive markets. Nevertheless, the existing academic literature and the practical applications of CRM may not provide definite help on how to evaluate the profitability of CRM projects. What is also missing is a comprehensive measurement system that allows a holistic assessment of the ongoing contribution of CRM initiatives to the financial performance of the business firm.

Grabner-Kraeuter et al. (2007) developed a framework for a systematic cost-benefit-assessment and for ongoing performance monitoring of CRM initiatives and proposed an integrated model to determine and measure the effectiveness and efficiency of CRM projects. According to Chen and Popovich (2003) CRM is a combination of people, processes and technology, which looks for understanding a firm's customers. It is a comprehensive technique to manage relationships by concentrating on customer retention and relationship development. CRM has evolved from advances in information technology and organizational changes in customer-centric processes. Many firms that successfully implement CRM may reap the rewards in customer loyalty and long run profitability but successful implementation is elusive to several firms, mostly because they do not understand that CRM needs company-wide, cross-functional, customer-focused business process re-engineering. Although a big portion of CRM is technology, viewing CRM as a technology-only solution may end up having undesirable outcomes. Managing a successful CRM implementation needs an integrated and balanced technique to technology, process, and people.

Kuo et al. (2009) tried to build an instrument to evaluate service quality of mobile value-added services and have a better understanding of the relationships among service quality, perceived value, customer satisfaction, and post-purchase intention. Kaul (2007) evaluated the Retail Service Quality Scale (RSQS) developed in the U.S. and considered valid across a variety of formats and cultural contexts. They argued for further research and extensive scale adaptation before scales developed in other countries such as the RSQS are applied in the Indian context. Zeithaml et al. (1996) offered a conceptual framework of the effect of service quality on particular behaviors that signal whether customers remain with or defect from a firm. They provided strong evidence of their being influenced by service quality. Their findings also disclosed differences in the nature of the quality-intentions link across various dimensions of behavioral intentions.

Wang et al. (1991) developed an integrative framework for customer value and CRM performance based on the identification of the key dimensions of customer value. They explored the decomposed impacts of customer value on CRM performance in terms of relationship quality and customer behaviors. Zineldin (2006) examinee and gave insight about triangle relationship between quality, customer relationship management (CRM) and customer loyalty (CL) which might lead to companies' competitiveness (CC). In their survey, changing in quality over time within different segments or related to specific products or categories of products/services could be applied as an indicator the level of loyalty. Lin and Sun (2009) investigated different factors influencing satisfaction and loyalty in online shopping. They reported that, first, customer e-satisfaction would positively impact on customer e-loyalty directly; second, technology acceptance factors could positively impact on customer e-satisfaction and e-loyalty directly; and fourth, specific holdup cost may positively impact on customer e-satisfaction directly.

## 2. The proposed study

This paper aims to examine the effects of technology adoption and quality of websites on customer satisfaction as well as customer loyalty in banking industry. In addition, the study investigates the effect of electronic customer satisfaction on customer loyalty and the effect of electronic customer satisfaction on customer loyalty on e-CRM (Zaynab, 2007). The study is accomplished among customers of bank

Sepah in city of Qom, Iran. The study has been accomplished among 94 middle as well as top-level managers who work for different branches on this bank. Fig. 1 demonstrates personal characteristics of the participants.



Fig. 1. Personal characteristics of the participants

As we can observe from the results of Fig. 1, most participants had good educational background and they were mostly middle aged. The study uses structural equation modeling to verify the hypotheses of the survey and in our survey, all statistical observations were within acceptable levels, which confirm the overall survey. Table 1 demonstrates the results of our findings.

# Table 1

The summary of statistical test

Latent	Manifest variables	Cross-loadings					loadings		AVE	/E Composit reliability	
variable		ADO	QU	SAT	LOY	ECRMP	loadings	CR	-	alpha	(PCA)
	ADO1	0.678	0.324	0.099	0.318	0.098	0.678	11.231			
Technology	ADO2	0.740	0.283	0.328	0.408	0.258	0.740	13.045			
Acceptance	ADO3	0.692	0.213	0.370	0.325	0.262	0.692	9.543	0.518	0.815	0.867
Model	ADO4	0.700	0.309	0.388	0.354	0.197	0.700	9.148			
(ADO)	ADO5	0.723	0.335	0.213	0.417	0.196	0.723	12.291			
	ADO6	0.781	0.308	0.418	0.356	0.254	0.781	14.347			
Service Quality (QU)	QU1	0.256	0.677	0.207	0.438	0.256	0.677	8.463	0.520	0.815	0.867
	QU2	0.331	0.629	0.231	0.292	0.212	0.629	7.564			
	QU3	0.265	0.686	0.213	0.308	0.115	0.686	8.959			
	QU4	0.322	0.774	0.436	0.404	0.325	0.774	15.948			
	QU5	0.301	0.758	0.329	0.403	0.448	0.758	15.040			
	QU6	0.298	0.787	0.456	0.394	0.397	0.787	13.350			
Customer	SAT1	0.427	0.349	0.847	0.513	0.532	0.847	22.867			
satisfaction	SAT2	0.409	0.401	0.862	0.514	0.504	0.862	24.655	0.715	0.801	0.883
(SAT)	SAT3	0.287	0.404	0.828	0.520	0.499	0.828	13.998			
Customer	LOY1	0.473	0.352	0.507	0.855	0.545	0.855	21.165			
loyalty	LOY2	0.468	0.477	0.575	0.868	0.612	0.868	31.264	0.757	0.839	0.903
(LOY)	LOY3	0.380	0.528	0.507	0.887	0.538	0.887	33.943			
CRM	CRMP1	0.297	0.398	0.463	0.525	0.822	0.822	15.906			
Performance	CRMP2	0.240	0.402	0.539	0.587	0.863	0.863	26.527	0.673	0.756	0.861
(ECRMP)	CRMP3	0.207	0.228	0.488	0.484	0.775	0.775	12.830			

### 3. Results, discussion and conclusion

According to the results of Table 1, all AVE values are greater than 0.50, they mostly maintain desirable Cronbach and PCA values. Table 2 and Fig. 2 show the summary of the effects of various variables on each other. As we can observe from the results, technology acceptance (TAM) influence

on electronic satisfaction (ESAT) and electronic loyalty (ELOY), positively. In addition, electronic service quality (ESQ) influences positively on ESAT and ELOY. Finally, ESAT and ELOY influence positively on e-CRM.



Goodness of fit index: Outer model =0.998, Inner model =0.890

Fig. 2. The results of exogenous and endogenous variables

The results of Table 2 also show that all t-student values are statistically significant. In addition, technology adoption as well as quality of services represent 28.7% of the changes on customer satisfaction. In addition, technology acceptance, service quality and customer satisfaction represent approximately 48.2% of the changes on customer loyalty and finally, customer satisfaction and customer loyalty represent 49.1% of the changes on CRM performance.

# Table 2

	En la comora	¥7-1	Standard	т	02	VID	D2	Б	Variable's
Exogenous	Endogenous	value	error	I	Q2	VIP	R²	F	R <sup>2</sup>
Technology Acceptance Model	Customer	0.316	0.059	5.35	0.205	0.988	0.287	3.384	0.14
Service Quality	satisfaction	0.323	0.069	4.663		1.012			0.147
Technology Acceptance Model	Customer loyalty	0.272	0.041	6.632	0.365	0.927	0.482	8.269	0.138
Service Quality		0.278	0.035	7.939		0.948			0.144
Customer satisfaction		0.327	0.029	11.156		1.114			0.199
Customer satisfaction	CRM Performance	0.376	0.036	10.377	0.33	0.963	0.491	5.974	0.228
Customer loyalty		0.405	0.037	10.859		1.035			0.263

The results of testing various factors

The results of this study are consistent with other findings (DeLone & McLean, 1992; Kotler et al., 2005; Chang et al., 2005; Akbar et al., 2010). Hu et al. (2009), for instance, reported that delivering high quality service and creating superior customer value can result in achieve high customer

satisfaction, thus effecting the firm's corporate image, and ultimately leading to consumer retention. Akbar et al. (2010) investigated the relationships between hotel service quality failure, customer perceived value, revitalization of service quality, customer satisfaction and loyalty in the hotel industry in Penang, Malaysia. They reported that hotel revitalization of service quality had positive impacts on customer loyalty, while perceived value and customer satisfaction were two important variables that mediated the relationships between hotel service quality and customer loyalty. They also found that hotel service quality had no profound and direct effects, but indirect positive impacts on customer satisfaction.

## Acknowledgement

The authors would like to thank the anonymous referees for constructive comments on earlier version of this paper.

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