# Factors affecting performance electronic customer relationship management (e- CRM) in sepah Bank, in Qom. (Summer 95)

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#### Abstract:

Customer relationship electronic management (e-CRM), business key strategy letter and tasks necessary for customer – oriented marketing services is the implementation and expansion of recent years is an important issue for many companies, organizations and industries, especially in the banking industry. This study examines the factors affecting the performance of customer relationship electronic management deals with Bank sepah, the research method is descriptive and correlational and a functional, statistical population consists of senior managers, middle and operational Qom province Bank sepah. According to the data as it passes through questionaries' and using the international standard questions gathered from ninety – four managers .The Bank's review and test using SPSS and PLS have been analyzed. In order to test the hypothesis and Cornbrash's alpha coefficient of variance was used to examine the conceptual model with structural equation discovery. The overall results of the validity and reliability study suggests that structures technology adoption, and quality of web services through e customer satisfaction and loyalty, consumer electronics affect the performance of electronic customer relationship management.

**Key words:** CRM, e-CRM, Internet, Satisfaction and customer loyalty, Quality Web services, Technology adoption.

#### Introduction:

The emergence of E-Business has changed many aspects of the current trade that began in all industries, especially banking industry to review your important relationship today and that one of them and somehow the most important of them is review the relationship between the customer and the bank.

Many banks are faced with the demands of sophisticated customers need the channels of access to emergency services and high-levels multiple (such as the internet, email...). And on the other hand, these requests include all areas where the customer interacts with the bank is (such as sales, marketing, service, etc.), respectively. To overcome these challenges, many banks electronic management with customer relationship (e-CRM) turn. New ways to manage the customers and their related processes rely entirely through an internet site to provide products, services, information, etc. to the customer, efficient and effective manner in charge. Customer relationship management or e – CRM as a result of trade and commerce came to the scene. E – Commerce, a way of dealing with customers, partners and suppliers around the world via the web. Today, banks put customers at the heart of all its activities and marketing strategies and offer their services on the according to their review. On the other hand, given the fact that the most important concern of business today, communication and relationship management with clients. Which aims to develop sustainable and long-term bonds for their own customers.

Today customer satisfaction is as important as to where Dominik of the pioneers of quality, customer satisfaction same quality with calls, customer sentiment about a product (service) will determine which product (service) market has been successful or not. Considering the importance of looking for solutions which can be customer satisfaction, can be identified as the main driver for the banks to fallow their progress are indeed major improvement in the way its customers are banks. In other words, no business can survive without customers there. It is vital that any bank framework for understanding the analysis and assessment of your customers is available.

#### -Research literature:

# 1-1-Speech issue:

Many banks need in today's digital world demands complex customers are facing an urgent high-level services over multiple access channels. (Such as the internet, email, fax, web, etc.), and the other hand, these demands includes all areas where the customer interacts with the bank (such as sales, marketing, services, etc.), respectively. To overcome these challenges, many banks turn electronic of customer relationship management (e-CRM)<sup>1</sup>. Customer Relationship Management is the only potent weapon that a manager makes sure of obtaining customer loyalty. (Anderson, Kerr, 2002).

Jill Dyche<sup>2</sup> (2001), customer relationship management electronic sales, services and customer relationship via the web knows. He knows the system, which means a set of customer relationship management, customer relationship management electronic is one of the channels that your organizations can benefit from it to develop management strategies.

In addition, this type of strategic management for large organizations can cost effective and rapid communication is personalized with the customer. The aim of this system is improving customer service. Customer retention and provide valuable analytical data. The motivation to enhance customer value by helping customers stay loyal valuable. CRM also helps the customers to be viewed as an asset. This allows CRM to customers that its relations with suppliers more than any other method, manage, maintain customer although this method maybe more difficult (MUazu, 2007).

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1-Electronic customer relationship management.

2-Jill Dyche.

The philosophical basis of relationship management, customer relationship marketing, customer retention, profitability and satisfaction through business management processes work. Bose <sup>3</sup> claims that because customer preferences and buying habits are different. Customer relationship management, if there were all the same customers was little need for customer relationship management. Therefore understanding the drivers of customer and customer needs, organizations improve specific suggestions for maximizing overall customer value helps. (Chin and popovich, 2003). The overall customer relationship management is based on the principles of relationship marketing. Changes in market demand and fierce competition led to move from transaction marketing to relationship marketing is primary customer relationship management in 1950 but emerged in 1990 as a term and medium business consultants and users income.(Grabber- Kreutzer et al, 2007)

To access a company's customer relationship management have a set of tools, technologies and process in order to improve the relationship with the customer to boost sales do. According to Ding and straub<sup>4</sup> (2008) quality measurement system measures the performance of the hardware, software, and operation of means. Quality systems, information technology capability in processing and providing information to the benefit of users. Quality system by Mclean<sup>5</sup> is defined as the technical level of information technology.

Nelson and colleagues<sup>6</sup> (2006) five key measures of the quality of the system include: accessibility, reliability, flexibility, response time and integration have been identified. Or extracted from the system and timeliness refers to the degree which the system will provide a timely response to a request for information. (Chulmo and Witty, 2010, 1805)

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<sup>3-</sup>Bose.

<sup>4-</sup>Ding and Straus, 2008

<sup>5-</sup>Mclean.

٦- Nelson Et Al

# 2-1- Importance and Significance of the research:

## Theory significance:

In 1980 for the first time implication of CRM (Customer Relationship Management) Considered that basis of it was attraction, protection and customer satisfaction growth, next in 1990 has been discussed in new form of CRM with title of e-CRM. Since customer relationship electronic management is a new concept in the information technology sector. In each Bank, organizations or industry for durability and profitability in a competitive market needed to implement such projects will be new and the implementation of its agents. Concurrent with the development of information technology. Technologies and new concepts in the commercial arena has been suggested that one of the most important of them is talk about "customer relationship management". Achievement of satisfaction and customer loyalty in the competitive environment in all business, particularly in the service sector has become one of the principle strategies, it is necessary to note that customer relationship management is not only a technological tool but also a new philosophy of business, so banks and all industries that employ this method. In a competitive environment will have more successful and the ability to attract and retain more customers than its competitors. It is clear that the successes achieved in the light of customer satisfaction and loyalty.

## Practical importance:

- Successful application of e-CRM (application based on the organizations and how it was) both for customers and for banks (organizations and companies) is beneficial.
- Banks must learn customer relationship electronic management, while the results show that the bank spent vast sums don't use it.
- Very few studies have been done in the field of the system performance and customer satisfaction.
- Create a culture of using e-CRM system in the new electronic world as a competitive advantage and saving time in various industries.

### 3-1-Research Hypotheses are:

- *Year Statisfaction associated with technology adoption.*
- Y- Electronic customer loyalty associated with technology adoption.
- τ- The quality of service associated with the satisfaction of customer electronic.
- ٤- The quality of service associated with customer electronic loyalty.
- •- E-customer satisfaction associated with customer loyalty.
- **T-** *E-client satisfaction linked with e-CRM* <sup>8</sup> *performance.*
- **Y-** *E-client loyalty is linked to the performance of an e-CRM.*

# -Research Methodology:

1-2- **Personal characteristics:** In this study, ninety-four senior managers, middle and operating sepah Bank in Qom province was selected and measured using twenty-one items and five items of demographic data and demographic structure of the sample is known. The sample consists of five individual characteristics and demographic characteristics include: age, gender, Level of education, discipline and management posts. Statistical indices associated with these features is presented in Table 1.

Man features	Subgroup	the frequency	the frequency percent	mod or diagram
gender	male	84	89.4	male
0	female	10	10.6	
	20-30 years	7	7.4	
	31-40 years	43	45.7	Between 31
age	41-50 years	38	40.4	Until
	More than 50 years	6	6.4	40 years
Organizational	Senior manager	7	7.4	Onerating manager
post	Middle manager	31	33.0	Operating manager

	Operating manager	56	59.6	
	Diploma	36	38.3	
educations	Upper diploma	9	9.6	Diploma
eaucanons	bachelor	32	34.0	
	MA	16	17.0	
	PHD	1	11	

Table 1: Frequency and the frequency percent of man features and demographic characteristics of statistical sample.

## 2-2- Research Method:

The study of method and nature descriptive – survey, correlation and is applied. And so descriptive that explores the situation available deals and because of that survey, a questionnaire was used for data collection from the top and middle managers and operational sepah bank survey was conducted in Qom.

# 3-2- Sampling and Sample Size:

In this study, our population of senior managers, middle and operational, all the branches of sepah Bank is 124 people in Qom. Out of which 94 persons were determined as the sample size was estimated based on the sample of 94 questionnaires were distributed in the sample.

# 4-2- Methods and tools for data collection:

In this study, data collection in the basis of theory and research literature and also history of research subject have been used from librarian studies like books and Persian and Latin articles, also information via searching of electronic resources and field study ( a questionnaire as one of the most common methods of gathering detailed data ) is used.

# 5-2- Reliability and Validity:

Indicators of load factor and load factor support is a part of validity of items. The main factor loadings coefficients of all items associated with the structure of the positive values greater than 0.70 is paramount. And all of them critical ratio statistics is larger than 1.96 that from the significant and has been cited in

connection with support structures operating several items of any structural loads of the highest coefficient with each other and other items of more structural factors that the validity of multi- component loading supported. The average variance extracted every five structure is larger than 50.0 that there was support convergent validity and finally, the square of correlation between the constructs of five structures that are smaller than the average variance extracted of diagnostic validity supported. Indicators: coefficient "Cronbach's Alpha" and "Dillon-Gold stein's Rho", every five structures that are larger than 70.0 reliability and internal consistency composite structures has supported the measure. Thus, the measure of the reliability and validity of assessment tools HBM has supported. The reliability and validity of the measurement is shown in Table 2.

Row		•,	Load fa	ctor or	multi-p	Load factor based on solidarity				
S	structure	items	AD O	QU	SA T	LO Y	ECR MP	Factor loadings	Error	The critical test
		<b>ADO</b> 1	0.678	0.099	0.099	0.318	0.098	0.678	0.060	11.231
		ADO2	0.740	0.283	0.328	0.408	0.258	0.740	0.057	13.045
	Adoption	ADO3	0.692	0.213	0.370	0.325	0.262	0.692	0.072	9.543
1	Of	ADO4	0.700	0.309	0.388	0.354	0.197	0.700	0.077	9.148
	technology	ADO5	0.723	0.335	0.213	0.417	0.196	0.723	0.059	12.291
		<b>ADO</b> 6	0.781	0.308	0.418	0.356	0.254	0.781	0.054	14.347
	Website Service	<b>Q</b> U1	0.256	0.677	0.207	0.438	0.256	0.677	0.080	8.463
2	Quality	<b>Q</b> U2	0.331	0.629	0.231	0.292	0.212	0.629	0.083	7.564
		QU3	0.265	0.686	0.213	0.308	0.115	0.686	0.077	8.959

		QU4	0.322	0.774	0.436	0.404	0.325	0.774	0.049	15.948
		QU5	0.301	0.758	0.329	0.403	0.448	0.758	0.050	15.040
		<b>Q</b> U6	0.298	0.787	0.456	0.394	0.397	0.847	0.059	13.350
		SA1	0.427	0.349	0.847	0.513	0.532	0.847	0.037	22.867
3	Electronic Client	SA2	0.409	0.401	0.862	0.514	0.504	0.862	0.035	24.655
	satisfaction	SA3	0.287	0.404	0.828	0.520	0.499	0.828	0.059	13.998
			ADO	QU	SAT	LOY	ECR MP	Factor loading	error	The critical test
		<b>LOY</b> 1	0.473	0.352	0.507	0.855	0.545	0.855	0.040	21.165
4	Electroni c Customer	LOY2	0.468	0.477	0.575	0.868	0.612	0.868	0.028	31.264
	loyalty	LOY3	0.380	0.528	0.507	0.887	0.538	0.887	0.026	33.943
	Performance	CRMP1	0.297	0.398	0.463	0.525	0.822	0.822	0.052	15.906
5	relationship management with electronic	CRMP2	0.240	0.402	0.539	0.587	0.863	0.863	0.033	26.527
	customer	CRMP3	0.207	0.228	0.488	0.484	0.775	0.775	0.060	12.830

Table 2: Results validity and load factor crossover study assessment tool constructs conceptual model

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Table3: Results validity and load factor crossover study assessment tool constructs a conceptual model.

### 6-2- Results of Model and Research Hypothesis:

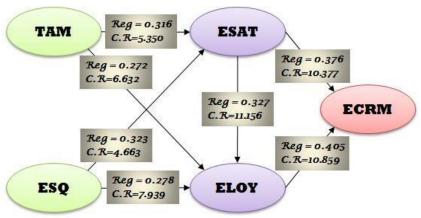
The results of the structural model has shown that the intensity values for each of seven proposed route in the direct and proven statistical indicators calculated for all routes is larger than 1.96 and 2.58. Thus, the indices are calculated from direct and significant impact of technology adoption and service quality website loyalty customer satisfaction and has supported customer electronics. Also the result of the effect of customer electronic satisfaction on the performance of direct electronic customer relationship management has supported a direct and significant. Electronic customer's loyalty and the effect of electronic customer satisfaction and electronic customer loyalty on the performance of direct electronic relationship management with customer has a direct and significant support. Studies model

consists of three equations. Coefficient of determination for affected structures to the satisfaction of customer electronic is 0.287 which indicates explanatory electronic customer satisfaction by two factors, the factor structure of the website is the acceptance of technology and quality services. Approximately, 0.15 devote to the quality of website service and about 14.0 belongs to the factor of technology adoption. Coefficient of determination for affected structures electronic customer loyalty is the amount 0.482 which indicates explanatory of the customer electronic loyalty by three structural factors are technology adoption factor, quality of services and satisfaction of customer electronic website, that about 0.20 of all belongs to electronic customer satisfaction, and about 0.14 of that is for the quality of website services and about 0.14 devoted to technology adoption factor. Structure determination coefficient for sensitive electronic customer relationship management performance is the amount 0.491. Which indicates explanatory of electronic relationship management performance with customer by two structures of electronic customer satisfaction and electronic customer loyalty that is about 0.26 devoted to customer electronic loyalty structure and about 0.23 is for customer electronic satisfaction structure. The three critical values and high determination coefficient equations are meaningful. the average of redundancy index for E-mail client satisfaction is amount 0.205, for the faithful customer electronic is amount 0.365 and for electronic customer relationship management performance is 0.330 That Positive values indicate their good quality and acceptable structural model and the ability to predict structures constructs in predicting customer electronics satisfaction, customer electronics loyalty, and electronic customer relationship management performance. Coefficients variables in predicting three Structural customer electronics satisfaction, loyalty of customer electronics and electronic customer relationship management functionality is greater than 80/0, which shows structures are important predictors in the prediction of related structures.

		impact co	efficients a	and their		dundancy and portance	determina their test	tion coeffic	ient and
Effective	Struct ural				index				
structures	bondi ng	Estimated coefficien t	Estimat ed Error	Critical Statistics	Redu ndan cy	Importance	Structure	Equation	Critical statistics

Factor of technolo gy adoptio	Electronic	0.316	0.059	5.350	0.205	0.988	0.140	0.287	3.384
Website Service Quality		0.323	0.069	4.663		1.012	0.147		
Adoptio n of Technol	Electronic loyalty	0.272	0.041	6.632	0.365	0.927	0.138	8.269	
Website Service Quality	Electi	0.278	0.035	7.939		0.948	0.144		
E-mail client satisfaction	Electronic relationship management performance with customer	0.327	0.029	11.156		1.114	0.228	0.491	5.97 4
E-mail client loyalty	gement mer	0.963	1, • ٣ 0	0.228		• , ۲٦٣	1, • ٣0		

Table 3: coefficients of influence, diagnosis, redundancy and determine the parameters of the model test



Goodness of fit index: Outer model =0.998, Inner model =0.890 Figure 1

#### **Research Model:**

The model of this study concluded several different models (5 models) from external sources extracted in the international conference examined each of the resources of two or more variables of interest in this study measures have the relationship between those variables are discussed. Sun and lines (2009), Consumer Behaviors Taiwan's major shopping Web sites (e.g., Taiwan Yahoo, Unmill, bay) have examined the factors that affect customer satisfaction and loyalty in online shopping, in the form of an integrated model is expressed freely.

Following the conclusion of this resource model variables that are most important and most effective of these variables was obtained.

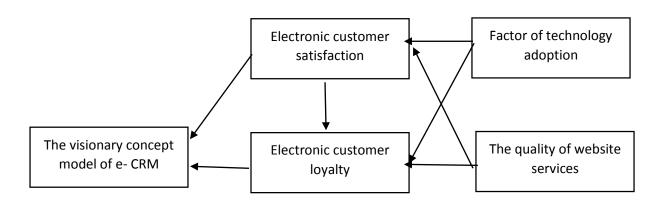


Figure 2: The model of theory conception of e-CRM
Fusion model, yang and colleagues (2004) and Lin & Sun (2009)

# Research findings

In this study, based on the vision and model number of investigators, including Sun and Lin, Wang et al., Zine Dine it is assumed that the two primary drivers include: Acceptance of technology by the organization and provision of services through the website with the quality of the structural increase customer satisfaction, customer electronics and electronic loyalty and at the interface between the structures customer electronics satisfaction affects customer loyalty

electronic and E-mail client satisfaction and loyalty, customer electronics and the influence of technology adoption and service quality web sites affects the performance of electronic customer relationship management. The results of the test has been supporting a positive effect on all routes.

Hypothesis 1 result:	Customer electronic satisfaction is related to technology acceptance letter.
As a result of H2:*	Customer technology adoption associated with electronic loyalty.
As a result of H3:*	The quality of services associated with the satisfaction of customer electronics.
As a result of H4:*	Loyalty associated with service quality consumer electronics.
As a result of H5:	E-loyalty customer satisfaction associated with consumer electronics.
As a result of H6:	E-mail client satisfaction associated with electronic customer relationship management performance.
As a result of H7:	E-loyalty customer is associated with electronic customer relationship management performance.

(\*: *Hypothesis*.)

Table4: Summary results

# **Practical suggestions related to findings:**

#### The first proposed hypothesis based on the results:

- Training given to staff.
- Staff should be justified about this issue to the customer and customer orientation for the bank, creates value and competitive advantage has made many contributions.
- Recommended in elderly customer relationship management strategy based on macroeconomic prospects and strategies of development and long-term programs and short-term in order to be clear for it.

#### The second proposed hypothesis based on the results:

- Using the experience of other organizations and companies contributing to the implementation of customer relationship management strategy and successfully implement customer relationship management.
- Taking into account the need to establish training programs for personnel in accordance with customer relationship management, can adopt the technology underlying electronic loyalty to the bank.

#### Offers based on results of third hypothesis:

- Information technology needs to create information systems, creating data base and create a system in order to Integration of customer interaction which for creating Integrated Systems to support customer relationship management and increased performance offered in this area.
- The use of electronic customer relationship management software in order to successfully implement is recommended.

### According to the proposed hypothesis quarter results:

 Because the software is now offered by many of them do not have the necessary efficiency as a result, the Bank utilizes the appropriate software can enable customer relationship management in achieving objectives.  In the discussion of the organization, the integrity of customer interaction processes, understand how to design websites and portals banking operations is remarkable.

#### Offers its fifth hypothesis, based on results:

- Bank management to increase customer e-satisfaction surveys have been made to the need to act.
- Based on the expectations of the customers and their needs to develop programs to increase customer satisfaction act.

#### According to the results of its sixth hypothesis offers:

- Bank management to provide the necessary conditions to increase customer loyalty electronics.
- To increase customer loyalty, marketing and information technology in the field of customer information systematically and act under the web within the organization.

## Offers its seventh hypothesis, based on results:

- To maintain current customers and reach new forms of Survey fixed and long-term customer relationship that requires strong management is required.
- Product-centric to customer-centric paradigm shift according to which the bank is required to meet the needs and demands of customers and identify and maintain relationships with their valued customers adopt special commissions.

#### **Research limitations:**

- The effect of influencing bonding structures have been studied from the
  perspective of managers and is likely to affect the result of bias and
  prejudice managers in your organization is located. The population due to
  lack of knowledge and information management for customers in the
  technology adoption.
- Considering that the population of this study is limited to the population of statistical society is sepah bank in Qom province so as a gained result is not able to generalization to other banks and it must be observed cautious in generalizing.
- Since the evaluation of conceptual models, the effect of other factors not under control, so the internal structures are influenced by other structures in the model has not been studied.
- Iranian leaders often do not have enough knowledge of scientific concepts of information management and technology, so this lack of accurate knowledge of the data collection is difficult.

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