Analyzing the Effects of e-CRM on customers Loyalty: A case study of Parsmodir Khazar Enterprise

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Abstract-The objective of this study is to appraise the impact of electronic customer relationship management in creating customer loyalty in Parsmodir Khazar Enterprise. This study is based on descriptive-measuring method. The sampling was conducted using 170 customers. The two researcher-made questionnaires were used to conduct this study are validated by scholars and by Cronbach's alpha. The calculated Crobach's Alpha in the study for e-CRM questionnaire is 0.709 and for customer loyalty questionnaire is 0.832. These values are acceptable and confirm reliability of the questionnaire. Using a correlation and regression method, the results of research show which factors are effective and which factors are not effective for enhancing e-CRM in Parsmodir Khazar Enterprise. Analysis of the results illustrated that e-CRM implementation has a statistically significant positive relationship with customer loyalty factors. The manager of this firm can use this result to implement the e-CRM optimally and can match it with Iranian culture to create more loyalty.

Keywords: CRM, e-CRM, Loyalty, customer, Management

1. Introduction

In the last two decades, new technologies have played a crucial role in human life and have greatly altered his lifestyle. E-business revolution has changed the landscape of customer relationship management (CRM). The electronic Customer Relationship Management (e-CRM) applications have developed quickly from a new idea to a strategic imperative for businesses. Using information technology (IT), firms are moving toward the intellectual and knowledge oriented based methods and CRM is getting more effective. Using e-CRM in a company, connection with customer gets less time and becomes faster. In today's turbulent environment, the competition power is increasing. Customers want to get services from linking channels such as email, website and the others.

The purpose of this study is to evaluate the impact of electronic customer relationship management in creating the loyalty of customers in Parsmodir Khazar Enterprise (www.parsmodir.com). The first section of this study is a review about electronic customer relationship management and its influences on customer loyalty. In next part, we discuss the main factors of every dependent and independent variables of our research. Finally, we find an equation that can be used by managers of Parsmodir Khazar Enterprise to create customer loyalty in their company.

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2. Literature Review

2.1 CRM & e-CRM

CRM is defined as the management approach that involves identifying, attracting, developing and maintaining successful customer relationships over time in order to increase retention of profitable customers (Bradshaw and Brash 2001). CRM is a strategy that can help companies to build and manage long-term relationships with their customers (Blery& Michalakopoulos, 2006). Researchers have shown that CRM implementation can provide better customer service. CRM also improve management of customer expectations and loyalty (Cho, Im, Hiltz, &Fjermestad, 2001).

e-CRM is a tool for maintaining connections with customers using the Internet and assessing its benefits (Ab Hamid, 2005). e-CRM benefits from customer satisfaction, online sales, website patronage and loyalty (Feinberg and Kadam, 2002). Fjermestad and Romano (2003) suggest that successful e-CRM requires attracting and keeping economically valuable customers while repelling and eliminating economically invaluable *customers.* According to Forrester's Research (2001), e-CRM is the consolidation of traditional CRM with e-business market place applications.

2.2 Loyalty

On average, it costs a company more to attract a new customer than it does to implement a retention strategy (Kelley, Gilbert, & Mannicom, 2003,). Yin and Kannan (1999) defines hard-core loyalty as a consistence-repeatable purchasing behavior. Another definition of loyalty is driving buyers to resist changes in brands despite the situations encountered purchasing and consumption (O'Reilly & Paper, 2009). Factors that reflect higher customer loyalty are: higher satisfaction, commitment, Legal Undertaking, trust of the customers and switching cost (Afsaret al., 2010). Ruiz-Molina et al. (2009) examine customer loyalty to test a model that reflects the different types of relational benefits perceived by customers. Zhang & Bloemer (2008) improve a model that explains how value congruence affects the key components of consumer-brand relationship quality and outcomes, including satisfaction, trust, affective commitment and loyalty. Few companies seem to succeed in creating loyalty despite knowing mechanisms related in generating customer loyalty (Ribbink et al., 2004).

It is unavoidable to be determinant about the success not only in a traditional environment but also in an online market space (Wolfinbarger and Gilly, 2003). In this study we estimate the relationship between CRM and customer loyalty in electronic situation.

2.2.1 Customer satisfaction

 The relationship between customer satisfaction and loyalty has been the subject of several studies. Studies show that service quality affect customer loyalty and customer satisfaction (Afsar et al, 2010). Customer satisfaction is high when customer receives maximum profit at his minimum input (Bilal Afsar, June, 2010). Thus, we consider this factor as an important factor for customer loyalty in this research.

2.2.2 Legal undertaking

Firm's legal undertaking to the customers is an important factor for improving customer loyalty. Several researches indicate that relational loyalty cause returning a higher commitment of customers to organizations. It cannot just be repeating purchase intentions (Shankar, et al 2003). A firm's trustworthiness has positive relation to his or her level of commitment to the firm(Morgan and Hunt 1994).

2.2.3 Reliability

Gefen et al., (2003) declare that consumer belief about certain characteristics of the supplier is reliabile. Lin and Wang (2006) also demonstrated that reliability has a positive impact on customer loyalty in commerce. Higher levels of reliability cause higher loyalty in the direction of e-services website(Cyr et al. 2007). Schlosser et al.

(2006) emphasize on reliability as determinant of customer loyalty. Loyalty has a positive relationship with trust (Lauren and Lin, 2003). When customer's trust on an organization is increased, it shows rising loyalty.

2.2.4 Empathy

Empathy is a relationship in business that allow two parties to understand the situation from the other's perspective(Chattananon & Trimetsoontorn, 2009). In the networking situation, empathy is an independent variable that describes franchisor–franchisee working relationships (Sin et al, 2002). Also, it isn't equated with sympathy. Marketers is empathetic while still negotiate with customers(Murphy et al, (2007)). The empathy, reliability, customer satisfaction and legal undertaking are the factors that are used for estimating the customer loyalty in E-Commerce in this research. Parsmodir Khazar Enterprise is a science and research firm with more than 1000 customers. The goal of this company is to guide scholars and researchers to develop new knowledge and to teach it. This company does more than 99% of its services online. Thus, it is necessary to enhance the customer's loyalty in Parsmodir Khazar Enterprise.
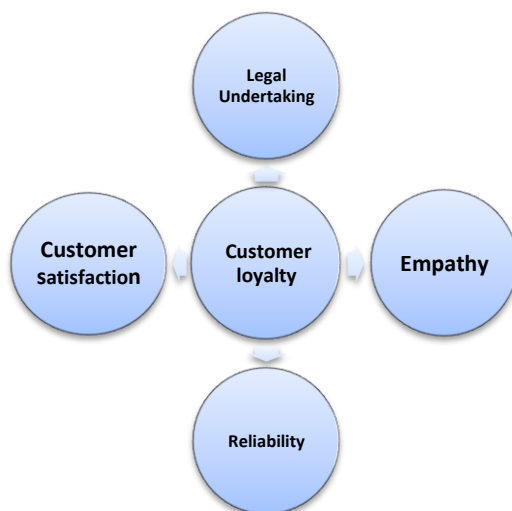
Figure 1: Research Model

3. Research Methodology

3.1 Type of study

This survey is an applied survey since the aim of it is to collect, describes, analyze, and give a framework. This research is based on a descriptive-measuring method. In this study, we analyze the impact of customer's loyalty on Parsmodir Khazar Enterprise. We measure the effectiveness of e-CRM on their company. Statistical population of this survey involves the whole customers of this company that use minimum one year from these firm services.

3.2 Sampling method and sample size

Sampling method of this research is a stochastic sampling. The size of the statistical sample for this research was adopted using following formula, which is equal to 170 persons.

$$n = \left(\frac{z_{a/2} \times \sigma}{\varepsilon} \right)^2 = \left(\frac{1.96 \times 0.667}{0.1} \right)^2 = 170$$

3.3 Data collection method

In this study, two methods were used to collect information. These methods are a library method and a field method. The first method includes studying books, articles, journal, researches, and internet-based informational banks. The second method is distributing questionnaires among customers. The method of gathering information from customers is two researcher-made questionnaires. First questionnaire is about e-CRM with 9 questions and

the second is about customers of loyalty with 16 questions. These questionnaires planed on four measures which are legal undertaken, empathy ,reliability and customer satisfaction.

3.4 Validity and Reliability of questionnaire

Every question of the questionnaire was designed after performing a literature review. In order to examine validity of questionnaire, content validity and structural validity were used. To examine content validity, the questionnaire was offered to supervisors and advisors. Then their corrections and modifications were applied in the questionnaire.

In order to examine reliability of questionnaire, Cronbach's Alpha was used. Based on this method, the first 30 primary questionnaires were distributed among customer. Then, its Cronbach's Alpha was calculated for this questionnaire. Calculated Cronbach's Alpha in the study for e-CRM questionnaire is 0.709 and for customer loyalty questionnaire is 0.832. These values are acceptable value and confirm reliability of questionnaire. The methods used to analysis data are correlation and regression.

4. Findings

This study has been performed with the following hypotheses:

H1) There is an association between Applicability of e-CRM and customer satisfaction

H2) There is an association between Applicability of e-CRM and Legal Undertaking

H3) There is an association between Applicability of e-CRM and Reliability

H4) There is an association between Applicability of e-CRM and Empathy

In order to test the first hypothesis, we calculate means of answers that were propounded about e-CRM. Then, the mean of answers to every one of indicators of Customer satisfaction is calculated. Finally, the relationship among them is examined using regression analysis. The results are presented in table 1.

Table 1: e-CRM and customer satisfaction regression result

	Sum of Squares	df	Mean Squares	F	Sig	R	R Square	Adjusted R Square
Regression	63.93	1	63.93	46.86	0.000	0.476	0.218	0.213
Residual	229.23	168	1.36					
Total	293.17	169						

As it's shown in table 1 the coefficient of correlation between e-CRM and customer satisfaction is 0.476 and the coefficient of determination is 0.213. The mean e-CRM indexes determine more than 23% of changes in customer satisfaction variable. Considering the amount of statistics, F variance analysis is equal to 46.84 with degrees of freedom (1,168) and with significant level 0.000. Comparing this significant level with $\alpha=0.05$, it observe that H0 which indicate no relationship between e-CRM and customer satisfaction is rejected. H1 confirmed that that it is meaningful. We use the same method for other hypotheses. The results are shown in table 2 (the relationship between e-CRM and customer satisfaction).

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Table 2: e-CRM and Legal Undertaking regression results

	Sum of Squares	df	Mean Squares	F	Sig	R	R Square	Adjusted R Square
Regression	89.99	1	89.99	70.94	0.000	0.545	0.297	0.293
Residual	213.11	168	1.26					
Total	303.11	169						

As it's shown in table 2, the coefficient of correlation between e-CRM and legal undertaking is 0.545. The coefficient of determination is 0.293 that means e-CRM indexes determine more than 29% of changes in legal undertaking variable. Considering the amount of statistics, F variance analysis is equal to 70.94 with degrees of freedom 1,168 and with significant level 0.000. Comparing this significant level with α=0.05, it is observed that H0 which indicate no relationship between e-CRM and Legal Undertaking is rejected and H1 is confirmed.

Table 3 show e-CRM and Reliability regression results.

Table 3: e-CRM and Reliability regression results

	Sum of Squares	df	Mean Squares	F	Sig	R	R Square	Adjusted R Square
Regression	99.13	1	99.13	82.58	0.000	0.574	0.33	0.326
Residual	201.66	168	1.2					
Total	300.8	169						

As it's shown in table 3 the coefficient of correlation between e-CRM and Reliability is 0.574. The coefficient of determination is 0.326 that is mean e-CRM indexes determine more than 32% of changes in the reliability variable. Considering the amount of statistic F variance that is equal to 82.58 with degrees of freedom 1,168 and with significant level 0.000 and comparison this significant level with α=0.05, it observe that H0 which indicate no relationship between e-CRM and legal undertaking is rejected and H1is confirmed.

Table 4 shows e-CRM and Empathy regression results.

Table 4: e-CRM and Empathy regression results

	Sum of Squares	df	Mean Squares	F	Sig	R	R Square	Adjusted R Square
Regression	56.889	1	56.89	46.55	0.000	0.466	0.217	0.212
Residual	205.313	168	1.22					
Total	262.212	169						

As it's shown in table 4, the coefficient of correlation between e-CRM and Empathy is 0.446. The coefficient of determination is 0.212. Mean of e-CRM indexes determines more than 21% of changes in the empathy variable. Considering the amount of statistic F variance analysis that is equal to 82.58 with degrees of freedom 1,168 and with significant level of 0.000 and comparing this significant level with α=0.05, it observe that H0 which indicate no relationship between e-CRM and legal undertaking is rejected and H1 is confirmed.

5. Results

There is a meaningful relationship between using of e-CRM in Parsmodir Khazar firm and customer loyalty. This relationship is shown in figure 2.
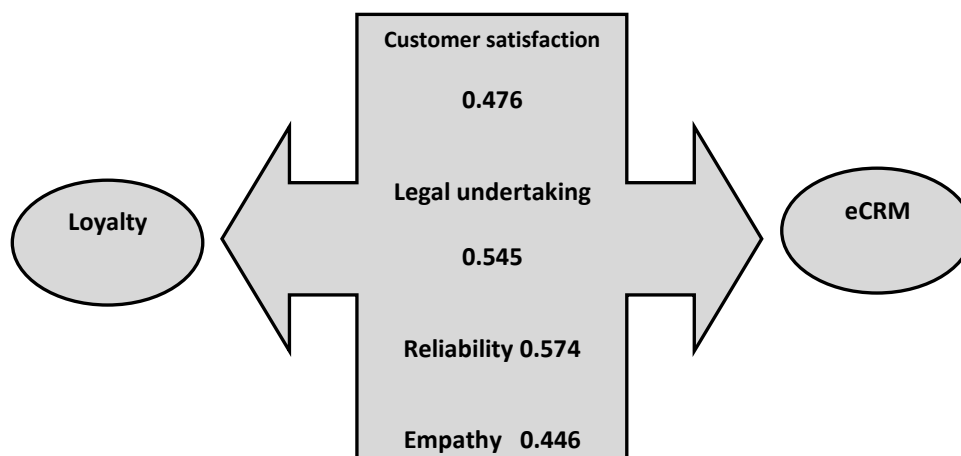
Figure 2: Relationship between e-CRM and Loyalty factors in Parsmodir Enterprise

Using e-CRM impresses the loyalty of customers. Thus, the results of this study determine that existence of e-CRM in Parsmodir firm leads to the increase of customer satisfaction, better empathy with customers and increase of legal undertaking to the customer.

References

1. Ab Hamid, N. R. (2005), E-CRM: are we there yet? Journal of American Academy of Business, 6(1), 51-57.
2. Afsar, B, Ur Rehman, Z, Qureshi, J. A, and Shahjehan, A, (2010), 'Determinants of customer loyalty in the banking sector: the case of Pakistan'. African Journal of Business Management, 4: 1040-1047.
3. Adebanjo, D. (2003). Classifying and selecting E-CRM applications: an analysis-based proposal. Management Science, 41(6), pp 570-577.
4. Bilal Afsar*, Z. U. (June, 2010). Determinants of customer loyalty in the banking sector:. African Journal of Business Management, 1040-1047.
5. Blery, E. K., & Michalakopoulos, M. G. (2006), An e-CRM application in the telecommunications sector: A case study from Greece. EuroMed Journal of Business, 1(2), 5-14.
6. Bradshaw,D , and Brash, C. (2001), Management customer relationships in the e-business world" how to personalize computer relationships for increased profitability. International Journal of Retail & Distribution Management, 29: 520 – 530
7. Chattananon, A, & Trimetsoontorn, J, (2009). Relationship marketing: a Thai case. International Journal of Emerging Markets, 4(3), 252-274.
8. Cho, Y., Im, I., Hiltz, S. R, & Fjermestad, J, (2001), Causes and outcomes of online customer complaining behavior: Implications for customer relationship management (CRM). Paper presented at the Proceedings of the Seventh Americas Conference in Information Systems (AMCIS), Boston.
9. Cyr, D., Hassanein, K., Head, M. and Ivanov, A. (2007), 'The Role of Social Presence in Establishing Loyalty in e-Service Environments', Interacting with Computers, 19(1), 43-56.
10. Feinberg, R., and Kadam, R. (2002), e-CRM web service attributes as determinants of customer satisfaction with Websites. International Journal of Service Industry Management, 13: 432 – 451.

11.   Forrester, (2001), [Online] Available: http://www.forrester.com Gilbert, D. C. (1996), Relationship marketing and airline loyalty schemes. Tourism Management, 17(8), 575-582.

12.   Fjermestad, J., & Romano, N. C. (2003), Electronic customer relationship management: revisiting the general principles of usability and resistance: an integrative implementation framework. Business Process Management Journal, 9(5), 572-591.

13.   Kelley, L. L., Gilbert, D. & Mannicom, R,(2003), How e-CRM Can Enhance Customer Loyalty. Marketing Intelligence and Planning, 21(4), 239-248.

14.   Lauren, P. and Lin, H. H, (2003). A Customer Loyalty Model for E-Service Context, Journal of Electronic Commerce Res, 4- 4.

15.   Murphy, P.E, Laczniak, G.R & Wood, G, (2007), An ethical basis for relationship marketing: a virtue ethics perspective, European Journal of Marketing, 41(1), 37-57.

16.   Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," Journal of Marketing, 58 (July), 20-38.

17.   O'Reilly, K. & Paper, D, (2009), Stakeholder Perceptions RegardingeCRM: A Franchise Case Study. The International Journal of an Emerging Transdiscipline, 12, 191-215.

18.   Ribbink, D., van Riel, A.C.R., Liljander, V. and Streukens, S. (2004), 'Comfort Your Online Customer: Quality, Trust and Loyalty on the Internet', Managing Service Quality, 14(6), 446-456.

19.   Ruiz-Molina, M., Gil-Saura, I, & Berenguer-Contrí, G, (2009), Relational Benefits and Loyalty in Retailing: An Inter-Sector Comparison. International Journal of Retail and Distribution Management, 37(6), 493-509.

20.   Schlosser, A.E., White, T.B. and Lloyd, S.M. (2006), "Converting web site visitors into buyers: how web site investment increases consumer trusting beliefs and online purchase intentions", Journal of Marketing, Vol. 70 No. 2, pp. 133-48.

21.   Sin, L., Tse, A., Yau , O, Lee, J., & Chow, R. (2002), The effect of relationship marketing orientation on business performance in a service-oriented economy.Journal of Services Marketing, 16(7), 656-676.

22.   Wolfinbarger, M. F. and Gilly, M. C. (2003).eTailQ: Dimensionalising, measuring and predicting eTail quality. Journal of Retailing, 79, 183-198.