

## The Effect of Customer Relationship Management on Market Performance. Case Study from Science and Technology Park of East Azarbaijan (Iran)

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### Abstract

Nowadays, customer relationship management is crucial for progress of business. This subject includes cognition and detection of customer needs, behaviors and life cycle. Furthermore, it requires information to create value for customers. Customer relationship management is one of important factors that causes to valuable relationship with customers. In this research, our aim is to identify the influence of customer relationship management on market performance from different perspectives. These perspectives include manager perspective, customer perspective and from interest model of communication from customer perspective. We conducted survey among firms in science and technology park of East Azarbaijan in Iran. There are positive and significant relationship between customer relationship management and market performance, customer commitment, satisfaction and confidence. Our findings state that market-based approach has positive and significant affect on market performance, customer loyalty, commitment, satisfaction, confidence.

**Keywords:** customer relationship management, market performance, market-based approach, science and Technology Park.

### INTRODUCTION

The implementation of customer relationship management (CRM) is increasingly taking centre stage in organizations' corporate strategies (Greenberg, 2002; Bohling et al., 2006). It aims to create, develop and enhance personal and valuable relationships with customers, by providing personalized and customized products and services (Goodhue et al., 2002; McKim, 2002). CRM is an integration of technologies, people and business processes that is used to satisfy the customers' needs and to improve interactions with clients (Bose, 2002; Foss et al., 2008; Becker et al., 2009). Often built around complex software packages, such CRM systems promise to enable companies to respond efficiently, and sometimes instantly, to shifting customer desires, thereby bolstering revenue and retention, and reducing marketing costs (Rigby et al., 2002).

CRM has been viewed as business strategy that enables seamless integration of every area of business that touches the customer—namely marketing, sales, customer service and field support—through integrated management of people, process, and technology. According to IDC, the worldwide CRM analytics software market in 2006 reached US\$1.3 billion, with a growth rate of 14.7%. Meanwhile, the worldwide CRM software market is expected to grow at a healthy compound annual rate

at 12.6% in the next five years. In fact, CRM is believed to be a magic wand that could produce customer satisfaction and business profits (Carol & Probir, 2009).

According to Swift (2001), CRM is an enterprise approach to understanding and influencing customer behavior through meaningful communications in order to improve customer acquisition, customer retention, customer loyalty, and customer profitability. The goal of CRM is to achieve a competitive advantage in customer management and ultimately increase profit levels (Gartner Group, 2006, 2007).

Science and technology parks have been viewed sceptically in much of the academic literature when judged in terms of technology development or urban renewal. Academic studies of science and technology parks have generally tended to be quite critical of their underlying assumption and actual performance. Perhaps the best known and most critical work in this respect is that of Massey et al. (1992), who regarded such as "high tech fantasies"().

The remainder of the paper is organised as follows. Section 1 provides a literature review of the affect of customer relationship management on market performance. Section 2 describes the research methodology to carry out the empirical work. Finally Section 3, the analysis and managerial implications of the results are presented and discussed.

### Literature Review

Increasing competition and decreasing customer loyalty have led to the emergence of concepts that focus on the nurturing of relationships to customers. Therefore, there is a major change in the way companies organize themselves, as businesses switch from product-based to customer-based structures. A key driver of this change is the advent of CRM which is underpinned by information and communication technologies (Ryals & Knox, 2001). Day and Van Den Bulte (2002) define CRM as a cross-functional process for achieving a continuing dialogue with customers, across all their contact and access points, with personalized treatment of the most valuable customers, to increase customer retention and the effectiveness of marketing initiatives.

CRM is the strategic application of people, processes and technology to improve and sustain profitable relationships with customers and partners. CRM provides transform organizations into customer-centric enterprises that maximize the value of every customer (Skaates & Seppanen, 2002). CRM is based on the ability to facilitate communication and decision-making to provide consistent, high-quality, and cost-effective services to all stakeholders (Andrade, 2003). CRM can help businesses enhance their customer relationships by attracting more profitable customers and establishing stronger and more durable customer relationships (Falk, 2004).

CRM focus on managing the relationship between a business and its current and prospective customer base as a key to success (Gebert et al., 2002; Falk, 2004). To be effective, a CRM strategy must encompass and integrate all customer-facing activities. It should ensure that no matter where, when, or how a customer interacts with the company, the contact is personalized, consistent, and demonstrates that the company knows and values that customer. Business benefits include (O'zgener, 2001; Andrade, 2003):

- Gathering and integrating information on customers.
- Nurturing and maintaining company's customer base.
- Developing a closer relationship with customers.
- Increasing customer satisfaction.
- Declining customer acquisition costs.
- Ensuring sustainable competitive advantage.
- Maximizing profitability due to increased sales.
- Increasing customer loyalty as a result of more personal and efficient service.
  - Enabling micro-segmentation of markets according to customers' needs and wants.
  - Collaborating with customers for joint value-creation.
  - Acquiring well-accepted outcomes of data-mining activities.
  - Supporting effective sales efforts through better management of the sales process.

Kang (2004) found that the perceived benefits in the insurance industry were management efficiency, cost reduction, improved customer services, and increased sales and profits. O'Leary et al. (2004) found that firms using the Internet gained more accurate consumer data collection, improved interactions and relationships with customers, and reduced costs. Ko et al. (2004) also found that CRM helped boost profits, improve customer relationships, increase instances of customer repurchase, and develop a customer database.

In connection with the result of customer relationship management, there are three main models as follows: customer relationship management model from management perspective,

customer relationship management from customer perspective and customer relationship management from interest of customer and communication model. In this research we apply the extended model of customer.

The main assumption of customer relationship management model from manager perspective is for improving customer relationship management from three elements as follows, market knowledge and customer relationship management fit in terms of process and exist. (Goodhue and Thompson, 1995). Customer relationship management model from the viewpoint of the customer (Ang and Buttle, 2002); this model to the results of the implementation of Customer Relationship Management system focuses on three variables of customer satisfaction, commitment and loyalty for measuring company's market performance. Interest and communication model of customer relationship management is expanded model customer relationship management from customer perspective that influence the implementation of customer relationship management indirectly.

### Hypothesis

H1: Increased market CRM system in firms, the market performance of firms increases.

It includes several other hypothesis:

1-1: Increased market CRM system in firms, loyalty of customers increases .

1-2 : Increased market CRM system in firms, commitment of customers increases.

1-3: Increased market CRM system in firms, satisfaction of customers increases.

1-4: Increased market CRM system in firms, confidence of customers increase.

H2: Existence of market-based approach in firms have positive affect on market performance.

It includes several other hypothesis:

2-1: Existence of market-based approach in firms have positive affect on loyalty of customers.

2-2: Existence of market-based approach in firms have positive affect on commitment of customers.

2-3: Existence of market-based approach in firms have positive affect on satisfaction of customers.

2-4: Existence of market-based approach in firms have positive affect on confidence of customers.

## METHODOLOGY

### Sample and Data collection

To examine the effect of customer relationship management on market performance, we conducted a survey from March to June 2010 among firms that are located in Science and Technology of Iran (East Azarbaijan province). East Azarbaijan is industrialized province in Iran. We choose a written survey in form of a questionnaire. It was based on 5-likert scale and contains 25 questions. All of our respondents were in charge of firms with in Science and Technology Park. Questionnaires were distributed by ourselves and we follow and chase the result of them by phone. We received 31 questionnaires that were filled completely and accurately.

### Measurement

We evaluate our construct measurement in this study by examining the reliability and validity of the measurement scale.

**Table.1.** Reliability Statistics

Cronbach's Alpha	N of Items
.887	25

To examine reliability, we consider cronbachs alpha, by using SPSS software that is presented in table (1) . Since Cronbach's alpha (0.88) is larger than 0.6, the reliability is acceptable.

In this study, we investigate customer relationship management on market performance in SMEs that are located in science and technology park of East Azarbaijan in Iran. Each section of the questionnaire indicates a particular variable, thus for analyzing desired section and analyzing the amount of variables on market performance, regression analysis is suggested as analysis method.

We apply SPSS software version 16 for analyzing data. Thus we used following pattern for analyzing data:

$$Mar.p = \alpha + \beta Mar.o + \gamma Crm + U_t$$

Mar.p = Firm Market Performance.

Mar.o = Market-based Approach.

Crm = Customer Relationship Management.

U = Disturbing part.

$\alpha$ , respectively indicate width of source, influence of market orientation on market performance and influence of customer relationship management on market performance in firms.

Our main purpose is investigating effect of CRM as independent variable on market performance variable. Market performance includes customer loyalty, customer commitment, customer satisfaction and customer confidence. Market orientation is as mediator variable.

Table 2 contains regression analysis of variance to evaluate the existence of linear association between variables. In this model, Sig. is less than 5 percent, thus we assume that the model is linear.

According to Table 3, column B, respectively, the constant regression coefficients are presented and therefore this model as a regression equation is

$$Mar.p = -1.790 + 1.597 X1 + 2.056 X2$$

And our secondary hypothesizes are

$$Loy = -.359 + .203 X1 + .712 X2$$

$$Com = -2.106 + .556 X1 + .422 X2$$

$$Sat = 1.030 + .410 X1 + .426 X2$$

$$Con = -.354 + .427 X1 + .496 X2$$

To compare the effects of three variables in the regression model on the dependent variable, the standard coefficients are used. Therefore, the results to be explained are as follows:

- Variable coefficient of customer relationship management and market performance respectively equal 0.427 and 0.540. Besides it is statistically significant at 0.003. This result represents a significant and positive effect on CRM on market performance.

- Variable coefficient of variable CRM and market-based approach for customer loyalty equals 0.176 and 0.605 that showed non-significant effect of CRM on customer commitment. But market-based approach is significant with CRM.

- Variable coefficient of variable CRM and market-based approach for customer commitment equals 0.486 and 0.362 that showed significant and positive effect on CRM on market performance for customer commitment.

- Variable coefficient of variable CRM and market-based approach for customer satisfaction equals 0.337 and 0.343 that showed significant and positive effect on CRM on market performance for customer satisfaction.

- Variable coefficient of variable CRM and market-based approach for customer confidence equals 0.481 and 0.548 that showed significant and positive effect on CRM on market performance for customer confidence.

**Table.2.** Anova

Dependent Variable	Model	Sum of Squares	df	Mean Square	F	Sig.
Mar.p	Regression	1036.094	2	518.047	14.752	.000
	Residual	983.261	28	35.116		
	Total	2019.355	30			
Loy	Regression	79.917	2	39.958	9.914	.001
	Residual	112.857	28	4.031		
	Total	192.774	30			
Com	Regression	75.248	2	37.624	9.222	.001
	Residual	114.236	28	4.080		
	Total	189.484	30			
Sat	Regression	53.814	2	26.907	4.698	.017
	Residual	160.379	28	5.728		
	Total	214.194	30			
Con	Regression	65.732	2	32.866	19.091	.000
	Residual	48.203	28	1.722		
	Total	113.935	30			

Table.3. Coefficients

Dependent Variable	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Mar.p	Constant	-1.790	12.336		-.145	.886
	Crm	1.597	.494	.427	3.229	.003
	Mar.o	2.056	.504	.540	4.077	.000
Loy	Constant	-.359	4.179		-.086	.932
	Crm	.203	.167	.176	1.212	.236
	Mar.o	.712	.171	.605	4.166	.000
Com	Constant	-2.106	4.205		-.501	.620
	Crm	.556	.169	.486	3.302	.003
	cus	.422	.172	.362	2.455	.021
Sat	Constant	1.030	4.982		.207	.838
	Crm	.410	.200	.337	2.054	.049
	Mar.o	.426	.204	.343	2.093	.046
Con	Constant	-.354	2.731		-.130	.898
	Crm	.427	.109	.481	3.901	.001
	Mar.o	.496	.112	.548	4.443	.000

## FINDING AND RESULT

There are three main perspectives from CRM including: from managers perspective, from customer and from interest of customers and communication model. This study investigates to identify relationship between CRM and market performance from customer perspective. The frame work was applied to East Azarbaijan (Iran) in small-medium enterprises in science and technology park. The results of analysis show that there is positive and significant affect of CRM on market performance and customer commitment, satisfaction and confidence as a dependant variables. Moreover, we couldn't find any relationship between customer loyalty and CRM.

Besides, the results indicate that there is positive and significant affect of market-based approach on market performance, customer loyalty, customer commitment, customer satisfaction and customer confidence.

## REFERENCES

- [1] Andrade, S. (2003). Using customer relationship management strategies. *Applied Clinical Trials*, 37, 37–41.
- [2] Ang, Lawrence., & F.A. Buttle. (2002). ROI on CRM: A Customer-journey Approach. [www.CRM2DAY.com](http://www.CRM2DAY.com)
- [3] Becker, J.U., Greve, G., & Albers, S. (2009). The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention. *Int. J. Res. Market*, 26 (3), 207–215.
- [4] Bohling, T., Bowman, D., Lavalle, S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan, R. (2006). CRM implementation: effectiveness issues and insights. *J. Serv. Res*, 9 (2), 184–194.
- [5] Bose, R. (2002). Customer relationship management: key components for IT success. *Ind. Manage, Data Syst*, 102 (1/2), 89–97.
- [6] Carol, Xiaojuan Ou., & Probir, Kumar B. (2009). Determinants of Successful Customer Relationship Management. *Journal of Information Technology Management Volume XX(1)*.
- [7] Day, G. S., & Van den Bulte, C. (2002). Superiority in customer relationship management: Consequences for competitive advantage and performance. The Wharton School, University of Pennsylvania, 1–49.
- [8] Falk, M. (2004). ICT-Linked firm reorganisation and productivity gains. WIFO Working Papers, No. 216, 1–44.
- [9] Foss, B., Stone, M., & Ekinci, Y. (2008). What makes for CRM system success or failure? *J. Database Market, Customer Strat. Manage*, 15 (2), 68–78.
- [10] Gartner Group. (2006). Report highlight for market trends: CRM services, Asia/Pacific, 2006–2007.
- [11] Gebert, H., Geib, M., Kolbe, L., & Riempp, G. (2002). Towards customer knowledge management: Integrating customer relationship management and knowledge management concepts. The second International Conference on Electronic Business, Taipei, Taiwan, 262–272.
- [12] Goodhue, Dale & Rinald L. Thompson. (1995). Task-Technology Fit and Individual Performance, *MIS Quarterly*, 36-213.
- [13] Greenberg, P. (2002). CRM at the Speed of Light: Capturing and Keeping Customers in Internet Real Time. second ed, McGraw-Hill, Berkeley, London.
- [14] Hennig-Thurau, T., Kevin Gwinner., & Dwayne Gremler. Undrestanding Relationship Marketing Outcomes: An Integration of Relational Benefits and Relationship Quality. *Journal of Service Research*, 2002, 4(2), 230–247.

- [15] Kang J.C. (2004). A study on the factors associated with the success of CRM in the insurance company. *Korean Data Inf Sci Soc*, 15(1):197224.
- [16] Ko E., Lee S.J., & Woo J.Y. (2004). Current CRM adoption in the Korean apparel industry. Spring conference proceedings of Korean Society of Clothing & Textiles, Seoul.
- [17] McKim, B. (2002). CRM: beyond the hoopla. *Target Market*, 25 (7), 38–39. Mendoza
- [18] L.E., Marius., A, Perez., & Griman, A.C. (2007). Critical success factors for a customer relationship management strategy. *Inform, Softw, Technol*, 49, 913–945.
- [19] O’Leary, C., Rao, S., & Perry, C. (2004). Improving customer relationship management through database/*Internet marketing: a theory building action research project*. *Eur J Mark*, 38(3/4):33854.
- [20] Rigby, D.K., Reichheld, F.F., & Schefter, P. (2002). Avoid the four perils of CRM. *Harvard Bus, Rev*, 80 (2), 101–110.
- [21] Ryals, L., & Knox, S. (2001). Cross-functional issues in the implementation of relationship marketing through customer relationship management. *European Management Journal*, 19(5), 534–542.
- [22] Skaates, M. A., & Seppanen, V. (2002). Managing relationship-driven competence dynamics in professional service organizations. *European Management Journal*, 20(4), 430–437.
- [23] Swift, R.S. (2001). Accelerating customer relationships using CRM and relationship technologies. *Upper Saddle River, NJ: Prentice-Hall PTR*.