

Research Article

THE IMPACT OF STAFF'S BUSINESS INTELLIGENCE ON CUSTOMER RELATIONSHIP MANAGEMENT IN IRAN KHODRO COMPANY

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ABSTRACT

The aim of this paper is to study the impact of staff business intelligence on customer relation management in Iran Khodro Company and in line with this, the standard model of Dien and Douglas (2010) has been used. The instrument used in the present research is standard questionnaire and for data collection 625 of the experts (240 of the staff and 385 of the customers) related to customer and customers of Iran Khodro Company have been selected with the use of stratified random sampling and have responded to the research questionnaire and in the end the obtained data has been analyzed with the use of two-variable linear regression. The findings indicate that staff business intelligence have a significant impact ($p < 0.01$) on customer relation management in Iran Khodro Company.

Key Words: *Business Intelligence, Customer Relation Management, Iran Khodro Company*

INTRODUCTION

21st century is the century of pattern change; it is a century in which all the efforts should be applied for understanding the future. Organizations in 21st century are facing changes non-stop. In order to empower organizations for effective competition in fully competitive markets (Babaei Zakiki, 2004), the key point is for them to learn to use their set of mental abilities and this is the very usage of organization business intelligence (Albrecht, 2003).

On one hand, today companies and organizations are working in customer-oriented economy period in which the customer is the real ruler of the market and this approach is the result of overcapacity. Therefore; companies should learn how to move from focus on product to focus from customer ownership. They should consider customers as a financial asset that like any other asset requires management and to deliver the highest rate of return (Payne, 2004).

Companies in addition to establishing strategies from attracting new customers and doing business with them have tried to keep their current customers and create a permanent relationship with them. They have found that losing one customer is more than losing a product and it means losing all the purchases flows that the customer would have made throughout his whole life or during the period purchasing the company product (Parvatiyar and Sheth, 2001; Parvatiyar & Sheth, 2004).

Advanced organizations in today world, with understanding mutual interactions of an organization, quality, quality human resource, effective management see the key to their success in applying modern management and quality approaches with getting advantage of the knowledgeable people and believe that it is quality staff who creates valuable asset for them (Eghbal *et al.*, 2008). Human resource is one of the most important and valuable asset of an organization which play a key and important role in achieving organization goals. Business intelligence is a combination of all the required and used skills by an organization such as technical, human and cognitive skills. People, who have these skills help changes to happen, become rapid in action and reaction, are flexible and are able to use their imagination. Using the mentioned skills requires proper structure and organization performance, effective management and use of human resource, emotional factors, technology, knowledge and learning and organization ability (Sheng, 2008). Organizational intelligence in today complicated organizations is the result and combination of both active human intelligence and artificial machine intelligence that without any doubt the organizations managers will not have any other way but to use these two intelligent flows for dynamism and increasing their efficiency of their organizations (Gonyea and Kuh, 2009).

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On the other hand, it should be acknowledged that in the dynamic and changing environment of today customers desire to use the products and services of high quality and low price on one hand and improvement of customer relation on the other hand, have made manufacturing organizations to re-engineering their business processes with emphasis on increasing knowledge and awareness-oriented customer relation and customer needs. Most of the previous studies on customer relation management are based on past information (Gebert *et al.*, 2002) and hence the ability to use system's output based on past-oriented information is so much low, which is due to lack of consistency between the acquired information and different needs of customers. Also in so many of organizations, customer relation management traditionally has become famous as a tool for relating customers to company by different loyalty programs. This is while, the existing knowledge in staff, which may be biggest source of value, have been set aside by them (Salomann *et al.*, 2005).

Therefore, this shortcoming can be overcome with the use of staff intelligence tool in studies of customer relation management, in terms of process pattern of knowledge-customer management. This pattern is a kind of customer relation management which uses knowledge management tools (Gholamian and Khawjeh Afzali, 2006) and since the important dimensions of business intelligence namely, strategic vision, shared fate, a desire for change, spirit, harmony and homogeneity, using knowledge and performance pressure and each of these dimensions can be considered as an effective factor in customer relation of any organization. But, so far no research has been conducted regarding business intelligence and customer relation management in automotive industry and in this regard, we are facing a theoretical poverty. Also, since in Iran Khodro Company, awareness of expectations and needs of customers is important, the success of performance in obtaining satisfaction and loyalty of customer is important and this can be only done through correct management of customer relation, hence in this research we are seeking to answer this principle issue that "what kind of impact has staff business intelligence on customer relation in Iran Khodro Company?" and for this purpose and for more clarification of the topic we will discuss some of the empirical studies conducted in this field below and then research methodology, findings and conclusion will be discussed.

Research Background

Dien and Douglas (2010), in a study with the title of "customer relation management and business intelligence systems in online retail shops" have found that business intelligence-based business leads to evolution of customer relationship management and can have a key role in acquiring and maintaining competitive advantage.

Olszak and Ziemba (2009), in a research with the title of "an approach to creation and implementation of business intelligence system in 2007", have explained the processes which are used in creating business intelligence systems. They have recommended a special methodology for creation and application of business intelligence systems in organization. These studies are focused on goals and functional levels of business levels in organizations.

Elbashir, Collier and Davern (2008), in a research entitled "measurement of the impacts of business intelligence systems: the relationship between business process function and organizational performance", have developed a measurement method with emphasis on understanding the characteristics of business intelligence systems. This measurement method evaluates the relationship between business process function and organizational performance.

Bab Ul-Havaejei *et al.*, (2010), in a study entitled "measurement of business intelligence of the staff of the libraries of the Universities of Ferdousi of Mashhad and Astan Ghods Razawi" have concluded that the staff sprite in both of the libraries doesn't have any significant difference and that the mean of the union and agreement of the staff in libraries of Ferdousi of Mashhad and Astan Ghods Razawi confirms this similarity. Also the behavior of the managers in regards with the performance of the staff is similar in both of the libraries.

In another study, Khodadai *et al.*, (2010) studied the relationship between business intelligence with productivity of the managers of the offices of Physical Education in East Azerbaijan province. They

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concluded that there is a positive and significant relationship between all the dimensions of business intelligence and productivity and among the dimensions of business intelligence, desire to change, spirit and application of knowledge have the ability to predict the productivity variable.

Habibi (2009), in another research, entitled “measurement of the impact of knowledge management criteria on customer relation management in Iran Khodro Company” concluded that knowledge management factors have a significant and positive effect on the performance of customer relation management.

MATERIALS AND METHODS

Methodology

The present paper is an applied research from the point of view of aim; is descriptive from the point of view of method and is a survey paper from the point of view of conduct.

Research Population and Sample

The population of the present research includes all the expert staff related to customer and customers of Iran Khodro Company and the research sample has been selected from this population with the use of stratified random sampling method, which has been calculated to be 625 individuals with the use of the above formula (240 staff and 385 customers).

Data Collection Instrument

Questionnaire is one of the common research instruments and a direct method for acquiring research data. Questionnaire is a set of questions that the respondent with considering them will provide the required response and these responses consist the researcher’s required data. With the use of questions of the questionnaire the knowledge ability, interest and intellectual attitude of the individual can be studied (Bazargan et al., 2007).

In this research, for the purpose of data collection of the theoretical part of the study, bibliographical methods such as books, articles, theses and online sites and to study the research sample individuals the standard model questionnaire of Dien and Douglas (2010) have been used. The used questionnaires in this research are staff business intelligence questionnaire and customer relation management questionnaire. The content validity of these questionnaires was confirmed by experts and specialists and the reliability of them was obtained to be equal to 0.85 and 0.84 by using Cronbach’s alpha test, which indicates to a proper reliability of these questionnaires.

RESULTS AND DISCUSSION

Research Findings

In this research, to study the impacts of staff business intelligence dimensions on customer relation management in Iran Khodro Company, two-variable linear regression test was used and in this section, its analytical results have been presented in a table and then the results of each question were reported separately.

Table 1: Results related to the impact of business intelligence on customer relation management

Variable	R ² adj.	Beta	F	P
Price discrimination	0.031	0.188	8.717	.00
Transmission cost	0.080	0.290	21.920	.00
Implications for business intelligence	0.435	0.567	92.869	.00

The results also indicated that business intelligence dimensions under study in this research including price discrimination, transmission cost and implications for business intelligence, have significant effect ($p < 0.01$) on customer relation management.

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Conclusion

The aim of customer relation management is empowerment of the company to provide better services to customers through introduction of automated processes of reliable services, collection and process of personal information and self-service and also it tries to integrate multiple processes of services to customer inside the company and automate them (Leyton-Brown *et al.*, 2002).

Although customer relation management is a new concept, its principle has existed from long time ago. Marketers have always promoted close relations with customers. Customer profitability also has been receiving attention considerably for many years. The reason is that many of organizations have been organized based on product or lines of communication channel which is the opposite of customer. Similarly, the concept of mass collaboration has been raised in the literature for about a decade. All the above mentioned matters have essentially remained limited to theoretical concepts in the form of wishes and not a business reality. However; today due to advances occurred in information technology and communications, promise of communications from individual to individual, customer value analysis and mass production order have been made possible (Geib, 2005).

Improvement of organization ability in responding to the growing needs and environmental variable and their increased capability in effective use of all the existing and available intellectual capital are among the key goals of managers and leaders in the third millennium. In human world and in the turbulent human life those humans are successful and efficient who have high degree of IQ and intelligence. Without any doubt these humans can overcome their life issues and problems with the use of their gifted intelligence. Definitely, in organizational world also the situation is the same, especially since in the current age as time goes further and due to advancement of different science and technology and emergence of new needs and challenges, organizations also have become more complicated and their management becomes more difficult. Since business intelligence is one of the new concepts in management and organization domain and has been received attention recently (Akgun, 2007).

Due to the increasing speed of changes in environment, organization members should be aware of their organizational capacities and abilities for surviving and gaining necessary capacity for competition with competitors. Business intelligence is one of the organizational capacities that giving attention to it from different dimensions and giving attention to factors influencing the organizational intelligence level can influence the success of the organization strongly (Schel, 2005) and in this paper we seek to study these variables among the staff of Iran Khodro Company.

The necessity to place in issue in Iran Khodro Company is that the most appropriate and useful strategy for Iran Khodro Company is customer-oriented strategy. In fact, this phrase can be expressed stronger that the base and foundation of automotive industry is customer. Companies active in automotive industry with the use of customer relation management can shorten the sales cycle, make their customer loyalty closer to creating relations and increase the income. Customer relation management can help to keep the current customers and attract new ones. Among the most important expectations of people from automotive companies quality, reasonable price and following international standards according to their needs and wishes can be named and the time necessity of this research in Iran Khodro Company is that the changing environment of the today world makes it necessary for organization to search for new tools for their growth and survive. One of the tools that can help organizations in providing these goals is business intelligence.

Hence, considering the importance of the above mentioned, the aim of the present research is to study the impact of staff business intelligence on customer relation management in Iran Khodro Company and the results obtained from statistical analysis indicate that business intelligence dimensions under study in this research including price discrimination, transmission cost and business intelligence implications have a significant effect ($P < 0.01$) on customer relation management.

Implications for business intelligence, in fact, are a general business strategy that gives ability to companies to effectively manage their customer relations. Customer relation management portrays a general image of the customers of each organization for the member of that organization. Based on the

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concepts of customer relation management, each a person in organization should focus on customers and the information related to them and hence; customer information of an organization or a firm should be made available in a complete and consistent manner to all the departments related to customer. In line with this, marketing department in each company should work to collect and organize the customer information inside the organization through organized efforts. Sales department use these information for contacting customers and provision of products and services to them. The department which provides services and responds to their needs also with the use of this very information meets the needs of users and customers. Support and design sectors of manufacturing also use the very same information for meeting the demands and needs of the customers and regulates their activities based on this information and eventually top management of the organization with the use of information analysis techniques such as business intelligence and various market and sale analysis techniques will determine the exact strategy for their organization. Devising a customer contact system in such a way that it covers the individuals and commercial institutions needs and helps them to create more effective relations with customers. This system should be able to provide a simple and effective solution for creating appropriate business decisions, increasing more sales share of the market and eventually obtaining higher customer satisfaction.

REFERENCES

- Akgun E (2007)**. Organizational intelligence: A structuration view.
- Albrecht K (2003)**. Organizational Intelligence Survey Preliminary Assessment Australian Managers.
- Bab Ul-Havayeji F, Ghazi Mir Saeed SJ and Al-hayan A (2010)**. Measuring organizational intelligence of the staff of the libraries of Ferdousi University of Mashhad and Astan Ghods Razawi. *Journal of Library and Information Science* **1**.
- Babaei Zakliki MA (2004)**. International marketing. 1st edition, Tehran: SAMT publications.
- Bazargan A, Sarmad Z and Hejazi E (2007)**. Research methods in behavioral sciences. Tehran: Agah Publications.
- Dien DP and Douglas RV (2010)**. A model of customer relationship management and business intelligence systems for catalogue and online retailers. *Information & Management* **47** 69–77.
- Du Plessis M and Boon AJ (2004)**. Knowledge management in eBusiness and customer relationship management: South African case study findings. *International Journal of Information Management* **24** 73-86.
- Eghbal et al., (1387)**. Evaluation of human resource management performance of Isfahan medical sciences university based on an excellent model of European Foundation for Quality Management based on two approaches of questionnaire and Performa. *Journal of Health Management* **34**.
- Elbashir M, Collier P and Davern M (2008)**. Measuring the Effects of Business Intelligence Systems: The relationship between business process and organizational performance. *International Journal of Accounting Information Systems* **9**(3) 135-153.
- Gebert H, Geib Malte K and Lutz R (2002)**. Towards customer knowledge management: Integrating customer relationship management and knowledge management concepts. *The Second International Conference of E-business Tiapet* 31-44.
- Geib M et al., (2005)**. Architecture for Customer Relationship Management Approaches in Financial Services, IEEE. *Proceedings of the 38th Hawaii International Conference on System Sciences*.
- Gholamian M and Khawjeh Afzali M (2006)**. Knowledge management related to customer. *Journal of Tadbir (policy)* 178.
- Gonyea RM and Kuh GD (2009)**. NSSE Organizational Intelligence, and the Institutional Researcher. New Direct. *Institute of Research* 141.
- Habibi Sh (2009)**. Measuring the impact of knowledge management criteria on customer relation management in Iran Khodro Company. Master's thesis, Tarbiat Modarres University.

Research Article

Khodadadi MR, Kashef MM, Salehzadeh K, Shir Mohammadzadeh M and Khoshnevis F (2010). The relationship between organizational intelligence with productivity of the managers of physical education offices of Eastern-Azerbaijan province. *Journal of Sport Management* **1**(4).

Leyton-Brown K, Nudelman E and Shoham Y (2002). Learning the empirical hardness of optimization problems: The case of combinatorial auctions. In CP, 2002.

Olszak CM and Ziemba E (2009). The information society development strategy on a regional level. *Issues in Informing Science and Information Technology* **6** 213-225.

Parvatiyar A and Sheth JN (2001). Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic and Social Research* **3**(2) 1-34.

Payne AJ (2004). What is the Quaternary phase-space topology according to cryosphere dynamics? In: edited by Schellnhuber HJ, Crutzen PJ, Clark WC and Claussen M, Earth System Analysis for Sustainability, Dahlem Workshop Report 91, MIT Press 171-188.

Salomann H, Dous M, Kolbe L and Brenner W (2005). Rejuvenating Customer Management: How to make knowledge for, from and about customers work. *European Management Journal* **23**(4) 392-403.

Shen J (2005). International training and management development: Theory and reality. *Journal of Management Development* **24**(7) 656 – 666.