

The Correlation between Knowledge Management Strategies and Customer Relationship Management: A Case Study

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Abstract: *The aim of this study is to investigate the correlation between knowledge management strategies and customer relationship management (CRM) in the Parsian chain hotels. The statistical population of the study was 220 managers of which, 140 ones were selected for a survey by the simple random method based on the Krejcie and Morgan table. Spearman correlation coefficient is used to test the research hypotheses. Our findings show that there is a significant positive relationship between knowledge management strategies and customer relationship management in the Parsian chain hotels.*

Keywords: *Knowledge management strategies, Customer relationship management, Parsian chain hotels*

1. Introduction

In recent years, companies have integrated their customer relationship management (CRM) and knowledge management (KM) efforts because they realize that KM plays a key role in CRM success. KM and CRM are both emphasized on the allocation of resources to business supportive activities in order to gain competitive advantages. Today is the era of knowledge-based organizations. In order to access new resources, KM has attended new theories such as knowledge management community with the goal of achieving immense resources of customer knowledge. Today, creating and maintaining relationships with customers, not just to sell products and services, but also to access their information and knowledge, is a new concept discussed in knowledge management systems [1].

The value of knowledge is underscored by the recognition of knowledge as an impacting factor for performance and competitive advantage for organizations [2, 3]. In KM, the focus is on capturing employees' knowledge about customers, competitors, products and services produced in an organization. Therefore, the perspective of KM is usually inside the organization. Thus, KM process is first of all, an organizational learning process [4]. Central problems for supporting all phases of knowledge processing are the productivity of the knowledge workers and the effective usage of special professional techniques. Company staff and employees as knowledge workers require support and guidelines for knowledge sharing and codification processes within the KM framework [5]. KM is one of the powerful approaches to solve these problems [6].

A great amount of organizational efforts have been oriented towards KM, which is one of the main management areas that mostly focus on employers' knowledge about customers, competitors, products, and services of the organization [7]. In the past decade, KM, organizational knowledge, and learning organizations were addressed by many researchers [8]. An increased tendency of research in this field indicates a shift from industry to knowledge age [9]. This is the so-called *knowledge revolution* because knowledge is the main asset for companies, which should take action for the creation, development of search, protection, and management as competition levers [10]. KM is thus an important strategy for improving a company's competitive edge and organizational performance, and appropriate KM in effect makes the organization more creative and intelligent [11]. Although it manifests its benefits at the level of the firm, KM is in fact a deeply social process which must take into account the human and social factors at work in the organization [12].

The most important role that can be attributed to KM is to consider it as a change methodology. KM can be an important changing factor in organization through taking new knowledge into system followed by an

effective management of this knowledge. Because of the proximity to corporate decisions and actions, knowledge can far more improve performance than data and information and consequently can improve the quality of services in organizations in general and public organizations in particular [13].

According to Civi [14] and Gupta et al. [15] the only competitive advantage that organizations will have in the 21st century is what they know and how they use it. Furthermore, the importance of KM is clear to many organizations and the leaders search for the main reasons and factors for being successful in knowledge management system design and implementation through their organizations [16]. Today, for better responding to the costumers' various needs in a complex and competitive environment, organizations need to apply KM and CRM simultaneously as an effective and integration strategy. Customer KM is related to obtaining, sharing, and expanding the knowledge of customers as well as the purpose of common benefiting between customers and organizations. In this research the relation between knowledge management strategies and CRM in the Parsian chain hotels has been studied. According to Paquette [17] the process that a firm employs to manage the identification, acquisition and internal utilization of customer knowledge are collectively referred to as customer knowledge management (CKM). It is within these processes that an organization and its customers collectively work together to combine their existing knowledge to create new knowledge.

The CRM means to establish and retain the personal relationships with efficient customers through the appropriate use of information and communication technologies [18]. It is as a process composed of customer supervision, appropriate data collection, data management and evaluation and ultimately creation of real advantage from extracted data of their interactions [19]. CRM is a process to collect information about customers and its aim is to find and record customers' important features to implement marketing activities base on customers demand and quality. It is the process of attracting, keeping, and growing profitable customers and by focusing on the traits and characteristics that demonstrate the added value to customers, trying to loyal customers [20]. Handen believes that CRM is an implementation of comprehensive solution that by integrating people, process and technology makes a perfect communication among all activities of customers to enhance relationship of organizations and their customers [20]. CRM is rooted in communicative marketing and improves long term profitability by changing marketing way base on exchanging and emphasizing on presence of new customer, to keep customers by effective management of customer relationship. Therefore CRM is a complicated method that extracts customers data from all customers contact points to company. Also effective management of information plays an important role in implementation of CRM [21]. CRM causes customer satisfaction, saving costs and more products and incoming. Hence the deployment of customer-oriented management is one of the important issues in the necessities of organizations survival in today's competitive world, because CRM makes connection between business processes and customer strategy to increase profitability and customers' loyalty gradually [22].

According to the CRM definition, obtaining customer-related knowledge is specified as the means to attain CRM objectives. Unfortunately, many of CRM implementations are faced with up to 80% failure in practice [23, 24]. CRM projects fail because these applications do not serve customers any better and fail to integrate disparate data sources or provide the right kind of information to the right people [24]. In the other words, there is a need for better management of customer knowledge. Thus, clearly this is an area where KM can deliver value to an organization with CRM. Thus, both KM and CRM introduce a new concept known as CKM.

According to above-mentioned cases, the research main question is whether there is a significant relationship between the knowledge management strategy and CRM in the Parsian chain hotels.

2. Research Theoretical Frame

CRM and KM have considerable synergy potential, and both enable companies to build strong, mutually-beneficial relationships with their customers. While KM acts as a service provider for CRM, the interdependencies between and mutual benefits of the two approaches can result in synergies [25, 26].

One of the most important factors for success in CRM is a suitable knowledge management activity. In this research, we identify the relationship of knowledge management strategies consists of knowledge creation, knowledge sharing, knowledge maintenance, and knowledge application.

The theoretical frame of the research is shown in Figure 1. On the basis of this model, the research hypotheses are defined in the following section.

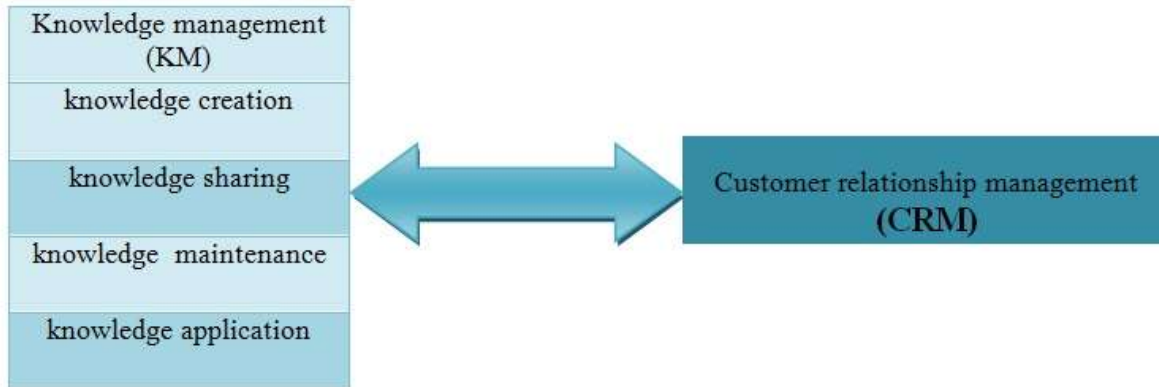


Fig. 1: Theoretical frame of the research.

3. Research Hypotheses

The main hypothesis: There is a significant relationship between KM and CRM in the Parsian chain hotels.

3.1. More Hypotheses:

- There is a significant relationship between knowledge creation and CRM in the Parsian chain hotels
- There is a significant relationship between knowledge sharing and CRM in the Parsian chain hotels
- There is a significant relationship between knowledge utilization and maintenance and CRM in the Parsian chain hotels
- There is a significant relationship between knowledge application and CRM in the Parsian chain hotels

3.2. Research Methodology

In this paper, we collected the data by a survey using a suitable questionnaire with a Cronbach's alpha of 0.94 as the scale of reliability level, and SPSS software was used for data analysis. The statistical population size of the research is 220, which includes all the top- and mid-level managers, and the statistical sample size is 140 according to Krejcie and Morgan's table [27]. The used questionnaire consisted of 43 questions out of which 25 questions were related to knowledge management strategies and 18 questions were for evaluating the CRM. Five-level Likert scale is used to determine the justification of the results [28]. Level one indicated that the respondent did not agree completely with the situation that has been questioned and level five showed that the respondent completely agreed.

The questionnaire reliability was calculated by using Cronbach's alpha method. This method is used for the calculation of measurement tools for internal consistency such as questionnaire or tests, which scale the different features.

4. Results

In order to determine the characteristics of demographics, four questions were propounded in the questionnaire, which were age, gender, administrative service experience, and education level. According to the data extraction of 140 responses in the sample, 84 of the respondents were male and 56 female; 36 were 20-30 years old, 46 between 31 and 40 years old, 44 between 41 and 50, and only 14 of them were more than 50 years old. In all, 49 individuals had less than 10 years of administrative experience, 28 individuals were with

administrative experience for 10-15 years, 30 individuals were with administrative experience for 15-20 years, and 33 individuals had more than 20 years of administrative experience. Regarding the respondents' highest educational degrees, 3 respondents had a high school degree, 26 had college degrees, 80 had bachelor degrees, and 31 had post graduate or higher degrees.

4.1. Inferential Statistics Conclusion

To test the research hypotheses, Spearman's correlation coefficient (non-parametric correlation) method is used.

H1: There is a significant relationship between KM and CRM in the Parsian chain hotels.

H₀: P = 0: There is no significant relationship between KM and CRM in the Parsian chain hotels.

TABLE I: Spearman's correlation coefficient between KM and CRM

Variables	Correlation coefficient	Significant level	Error level	Decision
Correlation coefficient between KM and CRM	0.825	0.000	0.05	Reject H ₀

Since the significant level is less than the error level, H₀ is rejected. That is, with 95% confidence, it could be concluded that there is a significant relationship between KM and CRM. In this relation, correlation coefficient is evaluated as equal to 0.825. The results are shown in Table 1.

TABLE II: Spearman's correlation coefficient between knowledge creation and CRM

Variables	Correlation coefficient	Significant level	Error level	Decision
Correlation coefficient between knowledge creation and CRM	0.819	0.000	0.05	Reject H ₀

H2: There is a significant relationship between knowledge creation and CRM in the Parsian chain hotels.

H₀: P = 0: There is no significant relationship between knowledge creation and CRM in the Parsian chain hotels.

As given in Table 2, the significant level is less than the error level too. Therefore, H₀ is rejected. That is, with 95% confidence, it could be concluded that there is a significant relationship between knowledge creation and CRM in the Parsian chain hotels. Correlation coefficient is evaluated as equal to 0.819.

TABLE III: Spearman's correlation coefficient between knowledge sharing and CRM

Variables	Correlation coefficient	Significant level	Error level	Decision
Correlation coefficient between knowledge sharing and CRM	0.470	0.000	0.05	Reject H ₀

H3: There is a significant relationship between knowledge sharing and CRM in the Parsian chain hotels.

H₀: P = 0: There is no significant relationship between knowledge sharing and CRM in the Parsian chain hotels.

We reject H₀ because the significant level is less than the error level (see Table 3). Therefore, we are 95% confident that there is a significant relationship between knowledge sharing and CRM in the Parsian chain hotels with a correlation coefficient of 0.470.

TABLE IV: Spearman's correlation coefficient between knowledge maintenance and CRM

Variables	Correlation coefficient	Significant level	Error level	Decision
Correlation coefficient between knowledge maintenance and CRM	0.475	0.000	0.05	Reject H ₀

H4: There is a significant relationship between knowledge maintenance and CRM in the Parsian chain hotels.

H₀: P =0: There is no significant relationship between knowledge maintenance and CRM in the Parsian chain hotels.

H₀ is rejected because the significant level is less than the error level (see Table 4). Therefore, we are 95% confident that there is a significant relationship between knowledge maintenance and CRM in the Parsian chain hotels with a correlation coefficient of 0.475.

TABLE V: Spearman's correlation coefficient between knowledge application and CRM

Variables	Correlation coefficient	Significant level	Error level	Decision
Correlation coefficient between knowledge application and CRM	0.572	0.000	0.05	Reject H ₀

H5: There is a significant relationship between knowledge application and CRM in the Parsian chain hotels.

H₀: P =0: There is no significant relationship between knowledge application and CRM in the Parsian chain hotels.

As shown in Table 5, H₀ is rejected because the significant level is less than the error level. Therefore, we are 95% confident that there is a significant relationship between knowledge application and CRM in the Parsian chain hotels with a correlation coefficient of 0.572.

4.2. Friedman Test

For classifying the effective factors of CRM in the Parsian chain hotels, Friedman's test is used. SPSS output results are given in Table 6. According to the results, knowledge creation, knowledge application, knowledge maintenance, and knowledge sharing are in the first, second, third, and fourth desirability degree and importance, respectively.

TABLE VI: Friedman's test

Index	Average rank
knowledge creation	2.70
knowledge application	2.47
knowledge maintenance	2.17
knowledge sharing	1.86

5. Suggestions for Managers Based On the Research Findings

The existence of meaningful relation between knowledge management strategies and CRM points out that a change in each strategy can have a remarkable effect on improving the function of CRM. Consequently, the following suggestions are presented for managers and improving the function of CRM in Parsian chain hotels:

- With regard to the relationship between KM and CRM strategies, by using equipments, suitable tools, and information technology, managers can create an acceptable status in exchanging information with the costumers. Meanwhile, by holding group interviews and temporary questionnaires, managers are recommended to solve service shortcomings and upgrade costumers' satisfaction and loyalty.
- Creating network structures that are designed based on trust, can help the creation, application, maintenance, and sharing of the knowledge. This can be done by a connection between scientific and university centers and the organization.
- One can apply tools like chat rooms, think tanks, and voice of costumers (VOC) to create new knowledge. Making a bank of knowledge in the form of a book, visual, audio or written software, can make the

ground for saving and maintaining knowledge, and in this way, it can help the creation and sharing of applied ideas to make more favorable and more diverse services.

- As generating knowledge has the most influence on CRM, managers are recommended to make appropriate organizational culture and providing necessary equipments to maintain and share the knowledge among the personnel in order to apply that knowledge.

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