The Impact of Knowledge Processes and Customer Relationship Management (CRM) on Services Quality along Supply Chain

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***Abstract*- This study summarizes a sample of the managers of the Iraqi cellular communications company with 84 employees. The company is a service organization responsible for providing integrated telecommunications services. As a management system that uses human, technical, material and financial resources, its size and value increase in line with technical progress. The demand for telecommunication services is increasing for several factors, the most important being the only means available to the majority and to the increase in population. The aim of this study is to develop and test a empirical model to link knowledge management processes and customer relationship management to the quality of services along supply chain. The problem of the study was formed through many mental and practical inquiries represented in the negotiation of the customer's knowledge and behavior, the importance of the horizon of customer relationship management, the level of its importance and its impact on the quality of services, the concept of quality of service, the level of its importance, the types of knowledge processes and their importance in the studied companies and their impact on Quality of services along supply chain. These questions were investigated later. The new study aimed at determining the relationship between the changes in the study in the company that was examined and the ability to apply it in all its parts and its ability to develop and use it to serve the customers in the examined organization. The study used the survey as a tool to collect the information that was diverted to be transferred because of statistical tools that were examined for results. The results and recommendations highlighted the reality and facts of the variables that the study addressed from the mental point of view and applied in the company's exams.**

Keywords: *Quality of service, supply chain, cognitive processes, Customer Relationship Management (CRM).*

1. Introduction

Since the 1980s, under the third millennium shade, business organizations have not only endeavor for profit, maximize profit, and value only, by reducing costs and increasing benefits and excellence but, the concept of relationship marketing has become a key element of the overall strategy of the organization as the client is a partner in the organization and its assets not only a buyer, and that the relationship is not an end in itself and customers are no longer easy targets to reach, but a means to gain and increase customer loyalty, retention, and profitability resulting from that important relationship, where customer interest and work began to know and understand his needs and desires, and provide value to him to achieve his satisfaction as a partner in the process of value creation and became a voice resonance in the corridors of the organization by working to meet his needs and desires. Today's economy is based on business information. Information has many advantages in diagnosing and connecting networks at high speed to a precise marketing designed to build strong customer relationships. Customer relationship management (suppliers, competitors, shareholders, groups and internal staff) (Learning, editing, retrieval, storage) and creation of knowledge (experiences, training, seminars, conferences and collective act). Customer relationship management helps to enable the company to provide real service through the effective use of individual account information, classification of marketing offers, services, programs and advertising means. The information needs to be built, maintained, and owned to the client from all channels and customer points of contact. Good impact on customers is important to reduce the cost of customer service for the net value of the future profits of successful purchases and continuous interaction and better knowledge of their needs by formulating offers to communicate in different ways and personal and website and work to increase the value of the customer base; and to improve customer lifecycle (partners) and improve the potential growth of each customer to participate in sales and increase with new offers and good marketing opportunities, avoid customer loss and treat the valuable customer in a special way (privileges).

Relationship marketing is based on building long-term relationships and developing them to become deep and friendly with individuals and organizations, directly or

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indirectly by emphasizing quality, service, innovation and constant innovation to achieve sustainable value that benefits the parties so, the customer gets good treatment and meets his needs at the right time and place and satisfaction with his expectations, and for the seller, to retain the customer for a long time as well as to achieve profits.

2. Methodology of research

Study Questions:
What is the level of importance of knowledge processes in the organizations examined?
What is the level of importance of customer relationship management in the institutions examined?
What is the level of importance of the quality of services along supply chain provided to the client in the organizations examined?

2.1. The importance of research

Contributing to the study in determining the strengths and weaknesses in the quality of services provided to customers, how to benefit from knowledge processes, and CRM to support these services along supply chain.

2.2. The objectives of the research

The implementation of knowledge (knowledge defines strategy and policy, the return of stocks to determine the knowledge required, knowledge sharing, application of knowledge and assessment of cognitive performance) in the company and re-research and identification and the relationship between the variables studied in the company.

Study the quality of services provided in knowledge processes and the dimensions of customer relationship management (customer knowledge and interaction with customer, customer value, customer satisfaction, customer culture). Application of knowledge and relationship with the customer and the level of service delivery.
Evaluation of the three variables of knowledge, CRM and quality of services in the light of the research sample responsive to decision paragraphs, which reflect the reality of the variables in the three telecommunication companies in Iraq.

2.3. Model of research concepts and hypotheses

Figure 1 provides an overview of the hypotheses of research and the correlations between variables and the studied effect.

Research hypotheses:
H1. The exchange of information is positively related to the quality of services along supply chain.
H2. Customer engagement is positively related to service quality along supply chain.
H3. The long-term partnership is positively related to the quality of services along supply chain.
H4. Shared problem solving is positively related to the quality of services along supply chain.
H5. Knowledge acquisition is positively related to the quality of services along supply chain.
H6. Knowledge shop is positively related to the quality of services along supply chain.
H7. Knowledge sharing is positively related to the quality of services along supply chain.
H8. The application of knowledge is positively related to the quality of services along supply chain [21], [22].

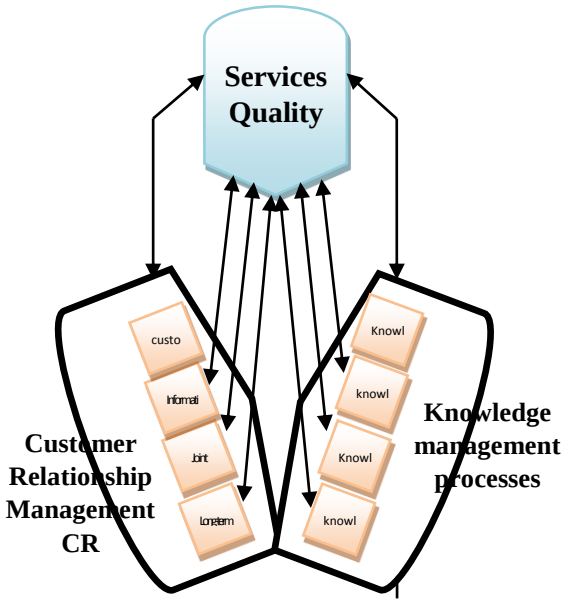

Figure (1) search model

3. Theoretical framework

3.1. Knowledge management processes

Knowledge management is a system or framework that integrates people, processes and technology to achieve sustainable results through increased performance through learning. Knowledge management helps plan, organize, motivate, and control people, processes, and systems in an organization to ensure that assets associated with knowledge are constantly improved and used effectively. Different views emerged about the dimensionality of the term in the literature of knowledge management. For example, knowledge management describes knowledge, acquisition, generation, verification, capture, dissemination, embodiment, realization and use of knowledge. Zack (1999) considers knowledge management to include knowledge acquisition, revision, storage, retrieval, distribution, and presentation. Knowledge management as a process that involves capturing knowledge, storing, publishing and using defined knowledge management as a set of work policies and actions taken to encourage the creation and transfer of knowledge to all members of the company and its subsequent application, with the aim of achieving distinctive competencies that can give the company a long time. Knowledge acquisition refers to the search for, identification, selection, lecture, organization, and mapping of information / knowledge. The creation of knowledge is the process of making available and expanding the knowledge created by individuals as well as crystallizing them and linking them to the institution's knowledge system. It results from interaction among individuals within institutions and organizations, from which successive transfers of implicit knowledge emerge from clear knowledge [1].

Processes that allow knowledge to be used as a key factor in value addition and generation. Testing the properties of knowledge processes allows us to aggregate them into the three broad dimensions of knowledge acquisition, transmission and use. Knowledge is an important resource of organizations, helping to build a competitive advantage, so effective knowledge management and application of knowledge is essential for organizations. Since the organization consists of different types of staff who differ in their knowledge needs and use them to achieve their objectives, strategies in knowledge management and knowledge application must take into account these differences and develop knowledge management strategies consistent with business strategies [2] However, the knowledge management process can be divided into four different aspects, as follows:

1. Acquisition of knowledge

Knowledge acquisition is the first knowledge management process that emphasizes the particular importance of individual knowledge capabilities in organizations. These experts are keen to acquire knowledge. Since the acquisition of knowledge will benefit organizations, the acquisition of knowledge must be useful and appropriate to the needs of institutions by identifying them in vision, strategies and guiding the necessary knowledge in the so-called definition of knowledge [3]. Knowledge acquisition and compilation can be obtained from internal knowledge resources, ie, knowledge about work practices, reports and documentation on different knowledge and external knowledge resources, such as environmental data, customer data, competitor data and other resources, including benchmarking. Knowledge acquisition can be defined as the process through which the company acquires knowledge, from either outside the company or internally generated. The goal is to get new and better knowledge that helps the enterprise to improve its competitiveness. Thus, the generation of knowledge is not only to generate new content, but also about the replacement, validation and updating of the current knowledge of the company.

2. Creating knowledge

Creating Knowledge As previously described, knowledge acquisition is a process that shares access to, and the collection and application of knowledge gained. Since the creation of knowledge is creative, the creation of new knowledge is thus linked to the motivation, intuition, experience and insight that arise in the individual [4]. Through activities that promote the exchange of knowledge and lead to the creation of knowledge of any practices, experiences, training, seminars, conferences and teamwork. In addition, the organizational resource factor - adequate and effective information technology, flexible organizational structure, good policy, good incentive system, organizational culture conducive to teamwork and cooperation - is positively linked to the creation of knowledge exchange activities.

3. Knowledge storage

Knowledge that has been created and categorized must be systematically stored so that it can be easily and easily retrieved to become a "knowledge retrieval" [5] and will make the presentation of knowledge to members of the organization based on their understanding and understanding of the database and knowledge of organizations. A sufficient number of databases and appropriate data and information stored in the database will need good structural and appropriate designs to be retrieved through adequate and effective information technology in terms of both tools and system in the efficiency of information storage and retrieval. Organizational culture that emphasizes the importance of knowledge and knowledge acquisition, including acceptance and application of knowledge in work practices, will make knowledge storage more efficient. The organizational structure will influence the incentive system that promotes the systematic storage of knowledge to be ready for application in labor practices to store effective knowledge [6].

4. Knowledge transfer and participation

The transfer of knowledge refers to the process in which a knowledge organization is involved between its units and members, thereby enhancing the new understanding [7]. It is necessary for the company to develop an appropriate design for information interaction networks

that allow individuals of different disciplines, cultures and geographical locations not only to access the same information but also to meet through the network to implement a specific project. Furthermore, in order to transfer implicit knowledge - which requires more interaction between individuals - the company must develop mechanisms that encourage dialogue and interaction. [8]. Although, the boundaries between knowledge sharing and knowledge transfer are unclear, and both terms are often used interchangeably [12], one may consider that the former is more closely associated with implicit knowledge, while the latter is more closely linked to clear knowledge. [9] In other words:

- Knowledge sharing is the process of sharing implicit knowledge, through social and cooperative processes [10].
- Transfer of knowledge transfers with the transfer of clear knowledge from source / agent (individual, team / management, and / or organization) [11] to another.

Taking this into account, the transfer of knowledge indicates the creation of new knowledge through the exchange of information. We also need to consider that only the person who obtains the information can decide whether the transmission of information leads to knowledge transfer. Defines the transfer of knowledge as a multi-level phenomenon that can be achieved at the individual or organizational level within the organization or between organizations [13]. Knowledge transfer can take place between individuals, from individuals to explicit sources, from individuals to groups, between groups, across groups, and from group to organization [14].

Definition of the transfer of organizational knowledge as "a process through which organizational actors - a team, units or organizations - exchange, receive, and be influenced by the experience and knowledge of others" [15]. Note that the most effective way to transfer organizational knowledge is to "hire intelligent people and allow them to talk to each other", [16] describe seven cultural factors or "frictions" that hinder knowledge transfer:

1. Lack of confidence
2. Different cultures, vocabulary, or reference frames.
3. Lack of time and meetings or the idea of narrow productive work;
4. Knowledge holders receive status and rewards;
5. Lack of absorptive capacity of beneficiaries;
6. The belief that knowledge is a privilege for certain groups, or not to be invented here;
7. Zero tolerance for mistakes or need for help.

3.2. Application of knowledge

Application of knowledge is the ultimate process of knowledge management is the application of knowledge, so that they can be valuable to organizations: organizations can make effective knowledge management. This also means the transfer of knowledge and the use of knowledge [17]. The application of knowledge is an extremely important process in the effective management of knowledge. Existing knowledge must be taken, recorded, displayed, and placed in stores in an orderly fashion, so that they can be reused later [18]. Some authors suggest that the effective use of knowledge is one of the most difficult aspects of knowledge management through application to products and services that can transform stored knowledge into dynamic capacity. [19] The application of effective knowledge will lead to the development of product innovation. The process of work and the factors that will lead to efficient transfer of knowledge and application of knowledge is the ability of organizational information technology. In addition, knowledge application is widely used in the expert community. Best practices will affect the application of knowledge by increasing the value of business practices.

3.3. Customer Relationship Management (CRM)

CRM refers to the use of intensive strategies and engineering to find, acquire, and grow successful clients, thereby maintaining long-term partnerships. [20] CRM is an activity practiced by manufacturers to understand customer demands and improve customer satisfaction. A customer-centric approach is a critical success factor for businesses [19] and guides organizations to focus on their customers. Researchers also classify different CRM mechanisms into internal and external programs. Internal programs focus on organizational structure, culture, and knowledge management, while external programs include interaction with customers (for example, information sharing and customer participation). This study focuses on outbound CRM programs and includes the four most common CRM activities: information sharing, customer engagement, long-term partnership, and problem solving:

3.3.1. Information sharing

Refers to the exchange and exchange of basic and exclusive information through interactive activities between manufacturers and their customers. Popular information commonly includes market demand, customer preferences, sales promotion, and the introduction of a new product.

3.3.2. Client participation

It is associated with customer participation in new product development activities (NPD), technical meetings, annual supply chain conferences, and market assessment conferences. Usually customers provide direction / market direction and technical support in the process, leading to a better understanding of future demands.

3.3.3. Long-term partnership

It is a business relationship with trust and commitment between the two companies. Both companies must share similar objectives and make mutual profits on a reliable and reliable basis. Several studies have shown that long-term partnership requires high levels of commitment and mutual trust in which both parties are willing to provide resources, in a fair and reliable manner, in order to maintain and reach the goals of both parties.

3.3.4. Common problem solving

Refers to cooperation between manufacturers and customers in solving problems together and sharing responsibilities when faced with difficult or unexpected situations.

8. Quality of service along supply chain

The QoS is defined as the difference between the expected service and the perceived service. Perceived quality of service is the judgment of the consumer on the excellence or overall excellence of the service. The fact that this construction involves cognition means that the previous judgment of the consumer may differ between individuals who suffer from the same situation. The way in which the individual sees the event, including the service encounter, depends on the experiences and cultural framework that the person brings to the event. Therefore, perceptions of quality of service across cultures are expected to vary. Quality of service is defined as "the result of an assessment process where the consumer compares his expectations with the service he has received." Since then, a large number of research has been conducted on the subject, mainly due to its role as an input to customer satisfaction [18] and an indicator of organizational performance [20], quality of service is more difficult for consumers to assess product quality; Associated with the service. Much research has focused on how to measure Quality of Service perception.

Most of the research stems from the work of 1985 [17] when they applied gap analysis to the service field and came up with the idea of "cognitive gaps" and the gaps between the expectations of the quality of service and the quality of service as the customer sees. From this gap model, which had its roots in the uncertainty model, the well-known SERVQUAL model measurement appeared. This multidimensional measure includes the five dimensions of physical features (physical facilities and employee appearance), reliability (ability to perform the service promised reliably and accurately), responsiveness (desire to help customers and quick service), and ensuring (employee knowledge) the rule that motivates customer confidence Trust) and empathy (care and individual attention provided to customers by service providers). SERVQUAL has been successfully applied in many industries, such as banking.

9. Sampling

This research focuses on the telecommunications companies operating in Iraq as one of the most prevalent companies in Iraq, the two companies are (Zain, and Asiacell). The reason to choose the telecommunications companies being in constant contact with customers and have high technology and knowledge.

79 was chosen managers, assistant Managers, supervisor, and head of the companies researched

		Services Quality along Supply Chain			
		r	**r**		
Customer Relationship Management CRM	customer Interactive CI	**.150**	**.140**	Knowledge acquisition KAc	**Knowledge management processes KMP**
	Information sharing IS	**.120**	**.110**	knowledge storage KS	
	Long-term partnership LP	**0.12**	**0.13**	Knowledge transfer KT	
	Joint problem solving JS	**.21*0**	**.19*0**	knowledge application KAp	

Table (1) the correlation matrix of the services quality and knowledge management processes constructs

10. Results

Table (1) refers to the emergence of non-correlation between the quality of services and Knowledge acquisition was the correlation coefficient (0.150) did not happen is a correlation between the quality of services and knowledge storage was the correlation coefficient (0.110), this means that the Zain Telecom did not bother storing knowledge.

The thing did not happen is a correlation between the quality of services and Knowledge transfer between the total correlation coefficient (0.130). This means that Zain Telecom were not interested in the process of knowledge transfer.

Correlation occurs between the quality of services and application of knowledge, the correlation coefficient was (0.19 *). Never a positive correlation between service quality and customer Interactive reached between the correlation coefficient (0.150). Never a positive correlation between quality of service and Information sharing between the total correlation coefficient (0.120). Never a positive correlation between quality of service and the Long-term partnership was the correlation coefficient (0.12). Event correlation between

the quality of services and the Joint solving problem was the correlation coefficient (0.21 *).

11. Recommendations

Telecommunications companies should take care of the customer on an Long-termin order to get satisfaction, pay attention to customer participation in the development of strategic plans for the company, and that involve the customer in most of the decisions, in order to be close to the ideas of the customer and take care of him and give him the value. Should also involve the customer in the information about the company and make him a partner on the long term of time, the customer shares in the information, ideas and decisions in order to be significant relationship between the company and the customer. Telecommunications companies must be concerned with the knowledge management through Knowledge acquisition of good sources, storage, transfer, sharing and application, in order to provide high quality service to the customer.

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