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FROM CRM & KM TO CUSTOMER KNOWLEDGE MANAGEMENT

Abstract: *In today`s business environment where changes are certain while everything else is unpredictable, company must adapt and answer to all challenges. In order to survive and be competitive, company must possess appropriate knowledge. Hence, Customer Relationship Management (CRM) plays very important role, and Knowledge Management (KM) as well. Effective Knowledge Management is crucial for the firm itself, and involves serious organisational changes. Main purpose of this paper is to point importance of integration process of CRM and KM, and its impact on company.*

Keywords: *CRM, KM,CKM, company, customer*

1. INTRODUCTION

New business paradigm is marked as - demands for higher productivity in knowledge and services sector. That means growth of expectations of customers concerning quality of products and services. Therefore, emphasizes the needs of better, faster response to all customer demands.

New business transformation is closely related and characterized by globalization, partnerhip, very dedicated approach to customers and high level of responsibility.

In order to achieve a high degree of flexibility and innovation in R&D of products or services, a lot of firms are establishing strong relationships with customers. In current business environment where the products are almost the same as well as prices, strengthen the relationship with customers is priority of firm that wants to be successful. So the emphasis is on establishing a harmonious relationship with customers, because in this way they are long term motivated to stay loyal.

In the literature review, we will try to

show different definitions given by different authors regarding CRM and KM. Then we will present differences and similarities between these two concepts; at the end the integration process and its positive and negative sides as well.

2. CRM

Customer Relationship Management or CRM include business processes and technologies that focus on managing and improving relationships with customers in areas of sales, marketing, customer support and service. Successful implementation of CRM implies involvement of employees. They analyse customers characteristics, behavior all in order to develop knowledge about customer, his habits, requirements and orders. That knowledge later is used to create adequate strategies, plans how to support customer. There is no ideal way of implementing CRM strategy, because evry organization has its own ways and characteristics as well as needs that are peculiar to it, which directly influence the goals that are set [1]. According to Khalil and Harcar, "cornerstone of CRM is high

quality customer, product and service information” [2]. CRM was defined by

different authors, some are presented in Table1. Adapted to source [1-6]:

Table 1. CRM definitions

Authors	Definitions of CRM
Scot	A set of business processes and overall policies designed to capture, retain and provide service to customers.
Chen and Popovich	A coherent and complete set of processes and technologies for managing relationships with current and potential customers and associates of the company, using the marketing, sales and service departments, regardless of the channel of communication.
Ngai	Notes that the four main areas that are part of the CRM strategy will include: marketing, sales, customer support services, Information Technology and Information Systems.
Buttle	CRM is the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit.
Berndt	CRM is combination of strategies and tools and drives relationship programme, reorienting, the entire organization to concentrate focus on satisfying customers.
Payne and Frow	CRM is a strategic approach that integrates process, people, and technology cross functionally to understand an organisation’s customers, improve stakeholder value, and deliver profitable and long-term relationships with customers.
Bretzke	CRM provides support through a competitive advantage, which is reflected in a deep knowledge of customers and their expectations, and CRM as itself strategy is an important tool in achieving this competitive advantage.
Curry and Kkolou	CRM is not a competitive advantage, but a strategy that has become a requirement or condition of the market.
Peppard (2000)	Highlights the role of CRM in scope and maintain competitive advantage, noting that it was expected to facilitate negotiations between the client and the company.
Kohli et al. (2001)	CRM is Process that enables the seller or supplier of services to manage customer expectations, provide long-term relationships and, in particular, to adapt to the new requirements of all users.
Ibrahim (2011)	CRM is an integrated and comprehensive process that allows organizations to efficiently and effectively manage their relationships with their customers.
Sin et al. (2005)	CRM- as a strategy and process that allows organizations to identify, acquire, develop and retain profitable customers, and build and maintain lasting relationships with them.
Gummesson (2004)	CRM is a concept that values relationships and marketing strategy, emphasizing the relationship with customers and, above all, becomes a practical tool for practical use.
Swift (2001)	CRM is business approach able to understand and influence the behavior of consumers, using communication as a tool for gaining and retaining customer loyalty and profitability of customers. He added that CRM is an interactive process that converts information about users positive relationship with them.
Mohammad (2001)	CRM enables organizations easily to obtain significant information about users, their history, preferences, possible appeals, etc. and better to predict what the future users might want.

Common to all above indicated is the opinion that the goal of CRM is generally getting more value in the process of managing relationships with customers, but in order to achieve this, it is necessary use of all the knowledge and potential of

all possible information about customers. The analyse of CRM, and what CRM consists of is given below in Table 2. where it is presented a few imperatives of Customer Relationship Management, and where the thechology could be helpful.

Table 2. Analysis of CRM adapted to [3]

Imperative of CRM				
Coaxing the right customer	Making recommendations that includes real value	Induction of the best process	Motivation of employees	Learn how to keep customer
You can achieve all above when you				
Identify your most valuable customers. Count part of your products or services in their wallet.	Consider what are the products that are needed to your customer today , and tomorrow. Look products or services that your competitors are giving today and tomorrow. Find out those that you should offer.	Find the best way of delivery (of product or service). Including technology, and service that you should invest, develop or reach.	Know the instruments that your employee need in order to improve CRM. Identify system that you need in order to improve employees` loyalty.	Learn why customer is leaving and how to return him. Analyse what are competitors doing to get our best customers. Your administration controls metrics of customers flowing.
CRM technology can help you when				
You analyse customers income and data costs in order to indentify current and future customer that are valueable. You better direct marketing efforts.	You get relevant data about product or service. You develop new distribution chanal. You develop new models of forming prices. You form community of Interest.	You are performing faster transaction. You give better info to those that directly communicate with customers. You achieve efficient logistics management and SCM. You catalyze cooperation in trade.	You regulate incentives and metrics. You develop system of knowledge control.	You find out level of customer`s flow and way to keep them. You find out levels of services dedicated to customers` satisfaction.

2.1 Types of relationships between customer and seller

There are are different types of relationships between customer and seller. Those relationships are conditioned by factors that determine the value and joint interests of their relationship as well. When the economic interests of the seller and buyer are compatible, then their joint interests are high, and opposite. In practice, the value of their relationships could be various (high and low). Hence, below there is Figure 1. presenting matrix of value and interests between customer and seller. Matrix is showing and pointing subordinated seller to a certain customer.

And as a result of matrix we can say that there are four types of relationships

Partnership – naturally occurs when the value of relationships correlates with joined interests. So the partners are more interdependent, and thay act together as a team. The associated partners are constantly looking for new opportunities to raise the effectiveness of individual or team business. Stability of partnership is provided by proper apportionment of together earned profit.

Friendship - occurs when there is a realistic chance of joining the common interests . This type of relationship leads to easy technology transfer in the whole chain of value creation. All this allows the

seller to reduce margin rates, increase competitiveness and insure position on the market.

Rival - occurs when the value of the mutual relations of exchange is high, but also when there is small possibility of association of their interests. Then naturally emphasizes individual interests of seller and buyer.

Acquaintance - occurs in circumstances where it is low value of exchanges, and there is no need for association of individual interests. Usually it is a routine procedure purchase and sale of standard product or service. For such kind of sale it is logic to have developed distribution channel. Product search costs are small considering standard and pre-date procedures of distribution. This type of relation between partners can last long term and can take place as a routine.

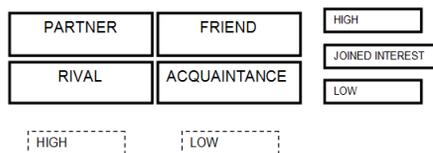


Figure 1. Types of relationships between customer and seller.

Adapted to [4, 5].

3. KM

Knowledge is information with high value and it is considered as one of the most important assets of an organization which helps those to make decisions easily and take action upon them. It is also considered as the source of success in delivery of value to customers.

Company with knowledge can deliver better value to customer, also it can better predict the customers needs, easier adapt to customers requests of products and quality as well.

We can say that Knowledge Management is efficient and adequate useage of

knowledge by professionals and experts in company.

Main key in company is to recognize the relevant knowledge and to possess ability to utilize value out of it. According to Jutla et al. "an effective knowledge management is about real time access processing of data which enables organization to respond to their customers in faster fashion and also leads to more informed and reliable decisions" [6].

Since there is a lot of various definitions given by different authors some of them will be presented in Table 3.

3.1 KM model

The model of KM and all its parts is given as Figure 2.

This model includes Customer Knowledge, Organizational factors and KM infrastructure. All three leads to KM critical factors, and to CRM performance. So we can say that presented model is integrated of knowledge shows its effect

1. *Knowledge for customer* - is sent from the company in order to support customers and make them understand offered products or services.

2. *Knowledge about customer* - is accumulated in order to understand motivation of customer and to address them in a personalized way on CRM.

3.1.1 Customer knowledge

According to Park and Kim, for having a long term relations with customers firms should have a continuous relationship with their customers along with provision of distinguished value for them. There are different definitions and classifications for customer knowledge but according to Gibbert *et al.* there are 3. *Knowledge from customer* - it concerns knowledge of customers about products, suppliers, markets, ect.

Table 3. Definitions of KM

Authors	Definitions of KM
Huysman and de Wit	Knowledge Management is about the support of knowledge sharing.
Davenport et al	Attempt to do something useful with knowledge, to accomplish organizational objectives through the structuring of people, technology and knowledge content.
Wiig	KM is the systematic, explicit and deliberate building, renewal and application of knowledge to maximize an enterprise's knowledge-related effectiveness and returns on its knowledge assets and to renew them constantly
Taylor	Powerful environmental forces are reshaping the world of the manager of the 21st century
Quintas et al.	KM is the process of critically managing knowledge to meet existing needs, to identify and exploit existing and acquired knowledge assets and to develop new opportunities.
Petrash	KM is getting the right knowledge to the right people at the right time so that they can make the best decision
O'Dell	KM applies systematic approaches to find, understand and use knowledge to create value.
Beijerise	KM is achieving organizational goals through the strategy-driven motivation and facilitation of knowledge workers to develop, enhance and use their capability to interpret data and information (by using available sources of information, experience, skills, culture, character, personality, feelings, etc.) through a process of giving meaning to these data and information.
Nonaka	KM is process of capturing collective expertise and intelligence of organization and using them to foster innovation
Bollinger and Smith	Knowledge Management process is not so much about control as it is about sharing, collaboration, and making the best possible use of a strategic resource

3.1.2 Organizational factors

According to Feng and Tian, 80% of CRM implementations failures were because of overestimation of technological factors. All internal factors such as employees, organizational culture, top management leadership has its own effect in this process, and knowledge culture as well.

3.1.3 KM infrastructure

This competency consists of new knowledge, ability to gather process and share of knowledge. Main parts of KM infrastructure:

- people
- process
- echnology

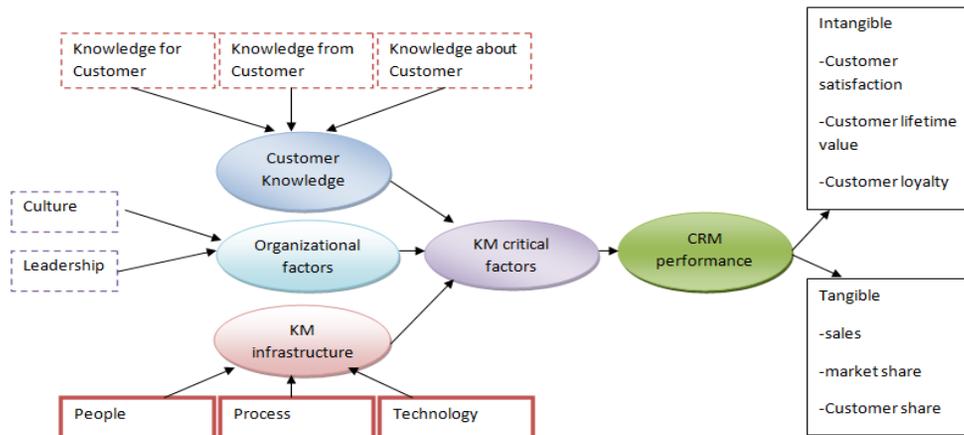


Figure 2. KM model Adapted to [7]

4. INTEGRATION PROCESS

KM is very important to CRM, it can help company to provide better service, increase product quality, reduce costs and very important issue to respond faster to customers. Anyhow, very important challenge of KM is prehension, developing and at the end integrating knowledge and share it among all firms` members. Integration of KM and CRM must be concerned in a few decisive areas.

- Strategic palnning area (KM infrastructure) must include knowledge map that would act as reference in KM developing to support CRM
- KM sub-system must be evaluated and applied to CRM in order to improve CRM
- Supportin process of CRM must be reinforced or improved all with aim to be effective. Since CRM and KM are mainly dependent on human resource,one of main support is having responsible management.
- Company must controlle its performances, and metric processes.

Thus, integration involves strategic changes that are made up of various process execution.

5. CKM PHENOMENON

From the available literature it can be concluded that the Knowledge Management focuses more on the knowledge of employees than to customer as source of knowledge. In order to overcome these limitations it is developed new approach known as Customer Knowledge Management or CKM. CKM is a combination of KM and CRM, A special attention is paid to CKM model because it combines CRM tecnology based on data, with KM approach that is actually focused on people. Thus, over CKM company can collect knowledge which forms the basis for creating product easy to be sold and find its way to end user. Since CKM is a part of management, it uses KM tools to to support processes and knowledge exchange in company, with customers, and then to improve CRM process such as customer service, loyalty, profit. Main perspective of CKM is in customers interface and inside the company, key actors are customers and employees. Key process of CKM is generating, spreading and using knowledge with and between company and its customers. Main aim of CKM is to learn from, about and with customers all in order to support CRM endeavor.

Table 4. Differences between CRM and KM and integration to CKM [8]

	<i>KM</i>	<i>CRM</i>	<i>CKM</i>
Look for knowledge in...	Employee, team, company	Customer database	Customer experience, creativity and (dis)satisfaction with products/services
Axioms	“If we only knew what we know”	“Retention is cheaper than acquisition”	“if only we knew what our customers know”
Explanation	Unlock and integrate employees` knowledge about customers, sales and R&D	Mining knowledge about the customer in company`s database	Gaining knowledge directly from the customer, as well as sharing and expanding this knowledge
Goal	Efficiency gains, cost saving and avoidance of re-inventing the wheel	Customer base nurturing maintaining company`s customer base	Collaboration with customers for joint value creation
Metrics	Performance against budget	Performance in terms of customer satisfaction and loyalty	Performance against competitors in innovation and growth, contribution to customer success
Benefits	Customer satisfaction	Customer retention	Customer success, innovation, organizational learning
Recipient of Incentives	Employee	Customer	Customer
Role of customer	Passive, recipient of product	Captive, tied to product /service by loyalty schemes	Active, partner in value-creation process
Corporate role	Encourage employees to share their knowledge with their colleagues	Build lasting relationships with customers	Emancipate customers from passive recipients of products to active cocreators of value

6. CONCLUSION

According to previously exposed, we can conclude that knowledge based company has to be ready to accept, accumulate knowledge and share it on a proper way. Modern company must be

customer -oriented. Since today`s business environment is very demanding and unpredictable. As the purpose of the company besides achieving profit is satisfying user needs it is necessary to constantly work towards improving the current system.

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