Knowledge management function in E-commerce

Nasim Sadeghi, Corresponding Author-
MSc Student, Information Technology Engineering, Department of Information Technology, Islamic Azad University Sepidan Branch, Iran
nasimsadeghi93@yahoo.com

Erfaneh Noroozi
Assistant Professor, Department of Computer and Information Technology, Sepidan Unit, Islamic Azad University, Sepidan, Iran
noroozierfane@gmail.com

Abstract
In the framework of knowledge management, they use secondary methods by online shopping and E-commerce as a km was introduced as an idea of a few basic questions where available we presented. A theory of clam movements in the first stage, we discussed the E-business method and the increasing importance of customer loyalty in today's rental environment. Then related ideas about knowledge management, customer relationship management and km were presented to readers with a clearer perception of a dearer picture of km. Finally, design a model that provided E-commerce and the online shopping process so we propose a comprehensive method for customer and knowledge management in electronic trading. Knowledge management is a practice that enables an in station assets of choice, value and usefulness for a person or company. In addition, collecting knowledge or skills from dividend contribution in their employees' activities can affect the organization's strategic goals. Knowledge management includes sharing of topics, the conclusion of activities, statements and information expressed in each project which leads to an increase in innovation and prevents from relaunching any phase of project. Just having a product cannot provide the conflagrations for knowledge management, but to achieve this, you need to have an organization that supports sharing, matching activities and use technology or science applications to share knowledge of industry or industry.

Keywords:
Knowledge Management Performance - The Framework and E-Commerce Strategy
. Introduction

In the mid 20th century the invention of computer and rising need for information led to the emergence of information technology. This trend changes the amount and ways of accessing to the information and caused the formation of the information societies. The wider communication bands allowed: 1) more information to be communicated in the same amount of time (or the same amount in less time) 2) decrease the costs of this communication dramatically. In 1986, Malone, Yate and Benjamin, issued the Electronic Market Thesis for the first time that is still one of the main discussions in market and electronic commerce. [26] By the appearance of World Wide Web (WWW) the application of e-commerce emerged in the beginning of 90s. [32]. Online shopping is developing rapidly today and e-commerce initiatives have been found to increase the value of the firm. Researchers, however, agree that in fact the amount of money involved remains very low [24]. Newell suggests that the real value of the firm relies on the value it creates for the customers and also the value that customers bring back to the firm. Hence, it should be point out that the value depends on information and more advanced technologies do not necessarily create value in this area. By the way, customer relationship management, if being conducted properly, is a toll for increasing the profit. If companies convert data from customers to knowledge and then, use this knowledge to build relationship with customers, it can lead to loyalty, which entails profitability.

Knowledge management is good for achieving an organization's strategic goals include capturing the experience of some of the staffs total assets. It does not include only information (paper, computer data, transactions, microfilm, etc.) on the rookie (what happens to our heads) The use of Knowledge management does not encourage appropriate methods to be developed through the use of technology as a shared pro and knowledge can be achieved through a single product, but cannot be shared through an organizational culture.

The new branch of knowledge management workforce, processes and management has achieved successful business outcomes through the synergy of technology. Change of focus, management of uncertainty and complexity. It has evolved from the need to move beyond the failed paradigm of information technology management to 70%-80% of system failures. Because "IT" allows the increasingly complex 'capacity' of a product, it requires a focus on strategy implementation(1).

When we look at the transition from the age of lack of information to the knowledge of information, the focus is on the need options and protests in the decision-making process of human senses. In this new paradigm, an increasingly uncertain and complex business environment, the dynamic key drivers of performance results, the smart mind to develop the use of smart technology to take advantage of strategic opportunities and challenges. The below Figure 1 clearly explain the knowledge management and its endow with the other sectors.

For the last two hundred years, neoclassical economics has recognized two factors of production Labor and Capital. This is now changing. Information and knowledge are replacing capital and energy as the primary wealth-creating assets, just as the latter two replaced land and labor 200 years ago. In addition, the technological advances of the 20th century have changed the work of building a more physically "knowledge based". Technology and knowledge is a flag or key factor in production. Technology and knowledge are now the key factors of production. With increased mobility of information and the global work force, knowledge and expertise can be transported instantaneously around the world, and any advantage gained by one company can be eliminated by competitive improvements overnight(2).
The only comparative advantage will be the process knowledge value information to solve the continuous flow of the enterprise, the innovative market, the ability to achieve technical knowledge and the creative talent competitiveness of knowledge workers. We are now an information society in the knowledge economy where knowledge management is essential.

**Knowledge Management Potentialities & Basic Facilities and Capital Equipment for E-Commerce**

This article shows the new information society, knowledge-based economy and knowledge speed of Internet resources associated with the management of the region. Leading organizations for knowledge management capabilities and infrastructure for E-commerce executives are increasingly thinking of achieving that and maintaining a competitive advantage or organizational knowledge integration and management of enterprising E-commerce systems(3).

It is required to have the ability to manage knowledge, define paper, describe the various technical elements required for knowledge management, and has been used Role Of Knowledge Management In E-Commerce to provide a technical framework for E-commerce and knowledge management capabilities and infrastructure for organizations that have complex business needs Do not do innovative knowledge management solutions that meet your needs.

**Role of Knowledge Management in E-Commerce**

E-Commerce knowledge is an important part of organizational puzzle. There is a lot of information contained in each business transaction. However, this information can be used to judge future trends or new potential markets when purchasing such questions, when purchasing, sometimes people who are able to buy more organizations are more important than the amount of money each client has to decide on a particular item.

There is the answer is more than understanding the information that went into keeping up within the physical transaction; someone can find out that we have purchased the item. Feedback from sales representatives, customer service representatives, and service technicians must be provided to their information devices(8). Imagine that you have all the knowledge of product and people before the development of marketing departments (sales, customer service, maintenance and customers themselves) and add expertise in product planning. How will you sell in the future? As you can see the organizational and strategic planning knowledge serves as the basis for many pieces to make sure everything is about the mission concept(9).

The support of the management team to put that pole organization and equipment in place (such as facilitating the communication of E-commerce) in the corporate culture is clearly documented in the company providing the framework for the error (knowledge of the staff member) Their experience breaks on the use of technology to share knowledge with the top of the building. Others said that knowledge management is only information management. It hold the knowledge data but the information seems to be a subset of the knowledge in the form of a citation, some of the information in the form of citation seems to be the concept of all my life in the robbery, This is not a user of the knowledge collection(10).
To conceive of knowledge as a collection of information seems to rob the concept of all its life...Knowledge resides in the user and not in the collection. It is how the user reacts to a collection of information that matters." said by famous Churchmen in 1971. We have to remember what Churchman is saying when discussing knowledge management.

In Thomas Stewart's book, “intellectual Capital", he tells of the story of Nike being a knowledge company and not a manufacturer. At first, this may sound strange, since many think of Nike as a manufacturer of footwear. But is Nike really a manufacturer? Stewart points out that they are a research and marketing company since they don't own any factories (11). They use the knowledge within their company to design great sneakers and they use their tremendous marketing talent to sell produces made by other companies to their specifications. Other than their corporate offices and real estate, they don't own physical assets such as factories to make the products they sell. The real value of their company is their knowledge and expertise to design and market products, not manufacture them. Their physical assets are a much smaller part of their total worth(11). They use my knowledge of the company in designing large companies and adding to their company's office and using powerful marketing talents to sell products designed to their specifications from other companies in their own real estate, there is no need for such assets. The actual value of his company is his own knowledge and experience, not the product of designing and producing and selling. A very small fraction of the total value of the property(12).

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**Figure 1:** Role of Knowledge Management in E-Commerce.
2. Knowledge Management (KM)
Distinguishing data, information and knowledge is not easy. In general, data are considered as raw facts, information is regarded as an organized set of data, and knowledge is perceived as meaningful information. Data and information are distinguished based on the “interpretation” [20].
In another definition, knowledge is divided into two categories: explicit and tacit knowledge [27]. The value creation process begins with sharing tacit knowledge by socializing with others or receiving in the form of digital or analogue. Then others will internalize knowledge and this process will create new knowledge and again sharing and the above process is going to repeat. This process could be expressed as “innovation” [25]. Rowley (2002) defined KM as follows: “knowledge management is concerned with the exploitation and development of the knowledge assets of an organization with a view to furthering the organization’s objectives. The knowledge to be managed includes both explicit, documented knowledge and tacit, subjective knowledge” [31]. Almost every definition of KM includes the storage of knowledge. KM is about acquisition and storage of employees’ knowledge and making information available to other employees within the organization.

3. Customer Relationship Management (CRM)
CRM could be tracked in relational marketing. Shani and Chalasani (1992) define relational marketing as “an integrated effort to indentify, maintain, and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualized and value-added contacts over a long period of time” [33]. In general, CRM is defined as an interactive process which leads to a balance between firm’s investments and satisfying customer’s needs in order to maximize the profit.
E-CRM is the internet related CRM. E-CRM is defined as a web-centric approach to synchronizing customer relationship across communication channels, business functions and audiences. It enables online ordering, e-mail, a knowledge base that can be used to generate customer profiles, personalized service, the generation of automatic response to e-mail, and automatic help [31]. By the help of E-CRM, customer information could be available at every touch points in the company. The firm’s intention to build a one to one, permanent relationship with customers has been referred to as customer relationship management. Since collecting, storing and distributing relevant knowledge for those CRM processes make the deployment of KM techniques necessary, it is evident that an organization’s KM capabilities play a key role in CRM success [21].

4. Customer Knowledge Management (CKM)

4.1. Customer Knowledge (CK)
The most important part of managing human interaction-based knowledge is using CK to do something differently. Making customer data widely available to customers and internally is good idea but the proper course of action depends on too many unpredictable factors because of the changing behavior of customers. Sometimes customers become confused regarding their wants. As a
Consequence, managers must decide when to take a particular item of CK seriously and when to discount it or look for more confirmation [22].

Researchers identified three flows of information in customer knowledge management:

- Knowledge ‘for’ customers: satisfies customers’ requirements for knowledge about products, the market, and other relevant items.
- Knowledge ‘about’ customers: captures customers’ background, motivation, expectation, and preference for products or services.
- Knowledge ‘from’ customers: understands customers’ needs pattern and/or consumption experience of products and/or services [34].

An important aspect of customer knowledge is that is not knowledge owned by the firm, but by others who may or may not be willing to share such knowledge. Furthermore, the ability to design and improve new products is also impacted by the level of customer knowledge flows [28].

### 4.2. Customer Knowledge Management

In order to maintain a good relationship with customers, it is crucial that a company communicates and interacts with its customers in a satisfactory manner, and provides market offerings that continuously meet customers’ changing needs. This requires the deliberate management of ‘customer knowledge’ [22]. At first glance, ckm may look like another name for customer relationship management, or knowledge management. But customer knowledge managers need a different approach [23] Gibbert et al. (2002) identified some key variables and on the basis of those variables they have developed the followings table of comparison.

<table>
<thead>
<tr>
<th>Knowledge sought in</th>
<th>KM</th>
<th>CRM</th>
<th>CKM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employee, team, company, network of companies</td>
<td>Customer database, Customer experience, creativity, and (dis)satisfaction with products/services</td>
<td>Customer experience, creativity, and (dis)satisfaction with products/services</td>
</tr>
<tr>
<td>Axioms</td>
<td>If only we knew what we know</td>
<td>Retention is cheaper than acquisition</td>
<td>If only we knew what our customers know</td>
</tr>
<tr>
<td>Rationale</td>
<td>Unlock and integrate employees knowledge about customers, sales processes, and R&amp;D.</td>
<td>Miming knowledge about the customer in company's databases</td>
<td>Gaining knowledge directly from the customer, as well as sharing and expanding this knowledge.</td>
</tr>
<tr>
<td>objectives</td>
<td>Efficiency gains, cost saving and avoidance of re-inventing the wheel.</td>
<td>Customer base nurturing maintaining company's customer base</td>
<td>Collaboration with customers for joint value creation.</td>
</tr>
</tbody>
</table>
5. E-Customer Knowledge Management Framework

Buying, selling, transferring or exchanging products, services or information through computer networks like internet is called electronic commerce. E-commerce has become more and more popular and online purchasing is becoming more widespread. It has affected the business world substantially and provided attractive and new convenient tools for customers and firms.

Web-based customer data become an important source for KM. The volume of qualitative data available via corporate web sites is growing and firms are looking forward to extracting and understanding user’s thought processes, wants, needs and purchase intentions [11] through these data.

An E-ckm model is proposed by Su et al. (2006). The expectation from this endeavor is to more articulately delineate knowledge ‘for’, ‘from’ and ‘about’ customers so that more beneficial products can be delivered to the right group of customers, to prevent product failure and to ensure commercial success[18]. In this model the ckm process includes four stages:

At the first stage, the company identifies perspective product benefits in terms of a customer’s perceived value, in the form of feature, functions, and other attributes which can be communicated to the customers. At this stage the company delivers product knowledge for customers. At the second stage, the company acquires knowledge about customers by understanding the customer’s background, needs, and preference pattern toward product features [15]. Through communication by a web-based survey, a company is able to make use of knowledge ‘for’ customers and knowledge ‘about’ customers, and perform the appropriate market segmentation mission. After the segments are found through data mining techniques, each segment’s pattern of needs toward product attributes is defined and the different characteristics of each segment can be recognized and analyzed. Finally, once the segmentation task is completed, the characteristic of customers’ needs in each segment are studied in order to extract the needs patterns in each segment. Therefore, the knowledge from customers enables the company to aim the right target market segments and make appropriate strategic business decisions in product variant development plan and marketing activities [15].

The above mentioned E-ckm model is combined with the consumer online transaction process, in which an online consumer goes through three steps to do an online purchase. Consumer-retailer exchange relationships typically involve several activities. The first step often involves basic data exchange from the retailer to the consumer, such as browsing, gathering information, and making product and price comparisons. The next step usually involves the consumer providing some personal information by registering an e mail address, describing product automatic information exchange that is intentionally or involuntarily captured through cookies, log-data, and data-mining tools. The final step involves provision of private and monetary information, such as credit card information, actual purchase preferences, and payment and address information, in order to complete the purchase of a product or service [10].
Table 2. Proposed CKM model in E-commerce

<table>
<thead>
<tr>
<th>Categories of CK</th>
<th>Knowledge for customers</th>
<th>Knowledge about customers</th>
<th>Tacit knowledge conversion</th>
<th>Knowledge from customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Knowledge management process</td>
<td>Product features/benefits/identification</td>
<td>Customers needs categorization</td>
<td>Market segmentation implementation</td>
<td>Segment needs pattern extraction</td>
</tr>
<tr>
<td>CKM process in e-commerce</td>
<td>Providing effective Information about product and services using tools such as: e-catalogue and intelligent agents and shopbot.</td>
<td>Gathering basic Information about customers and their needs through cookies forms web bugs transaction log spywares and clickstream</td>
<td>Manipulate customer data sources applying data mining techniques in order to extract useful knowledge about customers segments potential market and needs in each segment</td>
<td>Applying extracted knowledge from market to design product and services and revising market strategies.</td>
</tr>
</tbody>
</table>

Based on the above mentioned processes, we introduce a comprehensive process to manage customer knowledge in E-commerce. We also propose useful tools in each stage that facilitate the CKM process. In the first stage, customer contacts with company through its website. In this stage company should provide information for the customers using tools available in the E-commerce process like: search engine, e-catalogue, and intelligent agents and shopbot. By these means customer become familiar with the products and services of the company. In the second stage CKM helps the company to achieve initial information from the consumer through his/her first contact through the website. This information could be used in next stages for further analysis of appropriate information about potential consumers’ needs, wants and expectations. Some of well-known digital tools available for this stage are: cookies, forms, web bugs, transaction log, spywares and clickstream. At the third stage data extracted from previous stages would be categorized and form databases. With the help of data mining techniques and applications, customer data could be analyzed in order to provide information for improving business performance. Finally, after market segmentation and choosing the right target market, knowledge extracted from previous stages would be applied in offering right products and services to the right customers. It is in this stage that purchase happens and knowledge from target market is gained through E-commerce payment tools like credit cards, smart cards and e-check.
6. Conclusion:

As you can see, there are many pieces needed to grow to become knowledge organizations. In the era of Nike or Microsoft's creation, such as other companies that rely on industrial age knowledge and the production of brain physical plant, he will lead the charge. There is no such thing as an absolute knowledge management project because knowledge management prevents practice and knowledge from proceeding. Continue to add new knowledge and experience and refine and do not complete the final destination because external forces can bring change in corporate strategy. But now we will be in the company to lay the foundations for sharing much knowledge as a future leader. Today, the Internet can generate a quantity of useful data that enables a new data collection strategy, but there are some organizational advantages. E-management of customer relationships in social relationships that build knowledge in commerce is rapidly becoming an important field. It requires a high level of interaction of knowledge transfer to be able to put the information provided in the user's context. Knowledge is only useful when it is spread to people who use it. Every time you access the E-commerce system, you need to apply the knowledge gained from the client. The level of interaction within a website uses the knowledge gained in that there is an increase in the web site or system.

With success in the same developing country, E-commerce systems need to be able to communicate whether knowledge can arise in the system or in the external environment. For some reason, increased competition for today's E-commerce systems, the exponential growth of the Internet and the delivery of target knowledge market size and distribution are very important. Knowledge management is actually much more than document management.

In this study we provided a generic framework for customer knowledge management in E-commerce process to provide basic information for potential customer, achieve information from customer and analyze gathered data to provide better services. The web has created a major opportunity to deliver more quantitative and qualitative information to decision makers. This could lead to increased customer satisfaction, reduced marketing costs and more effective marketing and lower costs for customer acquisition and retention. We considered the general process for customer purchase including the following steps: need recognition, search for alternatives, and evaluation of alternatives and purchase of selected goods. So our suggested framework could help both customer and company to facilitate data gathering. Proposed framework could help information processing in following manner: It improves both reach and richness of the information provided for the customers at the same time. It also decreases information asymmetry in a way that customer do not need to contact directly with the company in order to realize the exact specifications of the products and services available. At the second step, the outcomes of data mining can enhance market segmentation by dividing a heterogeneous market into smaller, more homogeneous subgroups where marketing efforts can be more specifically targeted and effective. And finally, firms could analyze customer data to focus on profitability levels, numbers, types, or usage of multiple products, product pricing, and total revenue anticipated likelihood of acquiring a new product.
7. References:

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[11] Malpani MG. Accounting is the information system business activity, processes the data into reports, and communicates the results into the decision makers, which could be.


