

RELATIONSHIP BETWEEN THE IT AND IT SUPPORT METHODS IN THE
KNOWLEDGE MANAGEMENT PROCESS: AN EMPIRICAL
STUDY IN THE DRUG CONTROL HEADQUARTERS

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Abstract.

Today, organizations need to coordinate their knowledge in order to realize their objectives. The most valuable capital in every organization is its knowledge. In the developed organizations, guiding the valuable thoughts, hidden for the personnel, is done by the propagation of the organizational culture to reach the joint objectives. On the other hand, the information technology (IT) in today's world overshadows all the domains and our lifestyle. The life of the organizational knowledge depends on the partnership of all staff members and the optimal use of the technology is of high importance to possess this valuable source. As the investment in the sector of the communication and information technology is one of the conditions for possessing this organizational knowledge, functional studies should be conducted in this arena. Therefore, the present research aims at "examining the relationship between the information technology and methods of supporting it in the process of management of science" in the Drug Control Headquarters (DCHQ) of the Presidency and the research is conducted in the second semester of 2012. In this research, a statistical analysis was carried out based on the data collected from a sample made up of some 550 persons of the directors, deputies and heads of different sections of the DCHQ, selected according to a random sampling system. Questionnaires were prepared and distributed among experts through the automated system of the organization and most questionnaires were

Key words:

Knowledge Management (KM), KM Process, Information Technology (IT), IT Tools, Role Of IT In KM Support, Strengthening The Knowledge Management, Drug Control Headquarters (DCHQ) Of The Presidency.

1. Introduction

The most important variable of the comprehensive development of organizations and economic institutions in the current period is the knowledge. Organizations are after making appropriate and timely use of their knowledge sources and the surrounding environment. Such an approach has brought about a new concept which is the management of knowledge. The management of knowledge is a concerted approach in the identification, acquisition, extraction, recycling, evaluation, distribution and creation of all sources of the organizational knowledge so that it would help an organization in reaching its organizational goals. The aim of the management of knowledge is to establish the relationship between experts and the experienced individuals of the organization and the people who need specialized knowledge. The creation of such a link is facilitated by the instrumentality of processes and MK tools. The success in management of knowledge needs the creation of a new workplace in which the knowledge and experience is shared easily among individuals. The knowledge management focuses on the promotion of the organizational capacity. Figure 1 shows the curve of learning and task performance in knowledge management. The management of knowledge causes a decrease in the time of learning in the organization and leads to increase in profitability.

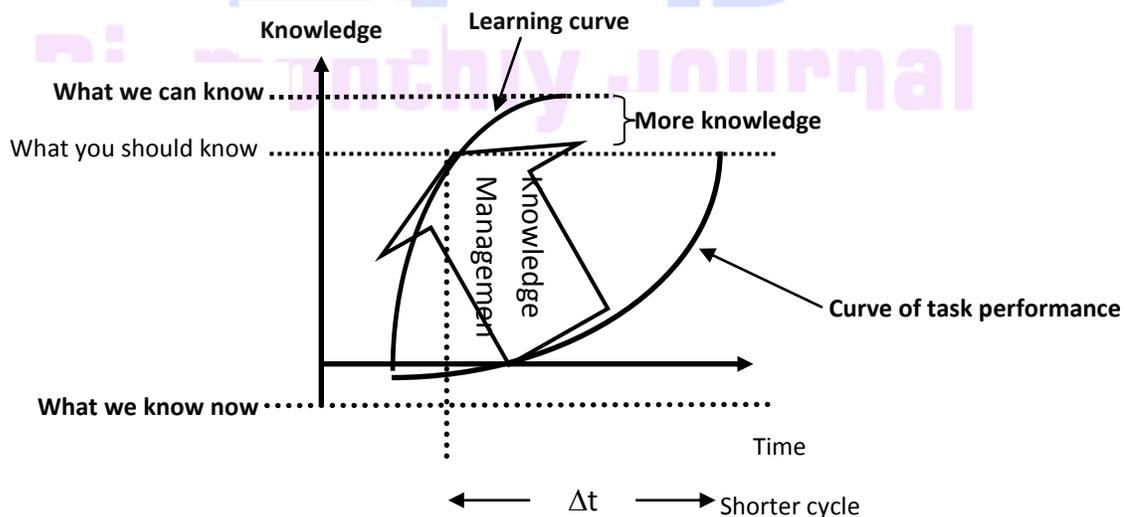


Figure 1: knowledge Management-Learning curve- Curve of task performance
(<http://www.moshaveran.net>)

The internal and internet networks, information dissemination centers and bases of the capabilities of the employees have a leading role in the successfulness of the programs of the management of knowledge. The provision of these possibilities (the communications and information technology) facilitates the implementation of the knowledge management programs and sharing of experience. Hence, it is considered one of the infrastructural factors (Hassanzadeh. M 2006), which examine factors of knowledge management's infrastructures in the public firms of Iran.

Modern technologies and information systems such as Decision Support Systems, Knowledge Sharing Systems, Expert Systems, Enterprise Resource Planning and such elements provide organizations with means to create, to acquire, to store, to disseminate and to use the knowledge. Even though most of the systems are found in organizations, there are much doubt on the efficacy and profitability of the systems in the area of the management of knowledge. Among all factors influencing the knowledge management, the communication and information technology is of higher importance among all the factors influencing knowledge management, information and communications technology, special attention is required. On the one hand, information technology and communication platform for all the organization's activities, including knowledge management, providing, on the other hand, each of the knowledge management activities (production, acquisition, storage, dissemination and application of knowledge) , play roles. Experts believe that the main role of ICT contribute to the dissemination of knowledge, but other studies show that ICT, as all five of the above activities will help (RezaZadeh Mehrizi.M.H 2005), the role of the communication and information technology in the knowledge management, a master's degree thesis, Sharif University of Technology.

1.1. Definition of knowledge management and its process

The aim of the knowledge management (KM) is that the knowledge be transferred to the competent staff members in a proper and timely manner so that the knowledge helps the members to act properly and contribute to the appropriate circulation of knowledge in an organization (O'Dell and Grayson 1998).

Drucker (1993), says that the KM differs from the general activities because it focuses on the perspective of knowledge; and finally its aim is to use this knowledge in a systematic and organized manner in order to produce further knowledge.

The Arthur Anderson consulting company (1991), writes that the KM promotes the quantity and quality of the known things and the creative knowledge in an organization (Tsang Ho 2009). As a whole, all activities that contribute to the improvement become a valuable element in the body of assets and become part of knowledge. One can conclude from the previous works that the KM is a kind of dynamic and sustainable circulation process. It is a behavioral model for the registration of knowledge in an efficient way, dissemination and sharing it and separately from it. Its ultimate objective is that this knowledge be used for the purpose of acceleration of the organizational competition. Therefore, in the examination of the KM, the center of the attention should be converged on the management of knowledge process. According to the APQC and Arthur Anderson Consulting Company (1996), there are seven processes: production, identification, collection, adaptation, organization, application and sharing. The Figure (2), the external part comprises 4 KM Enablers.

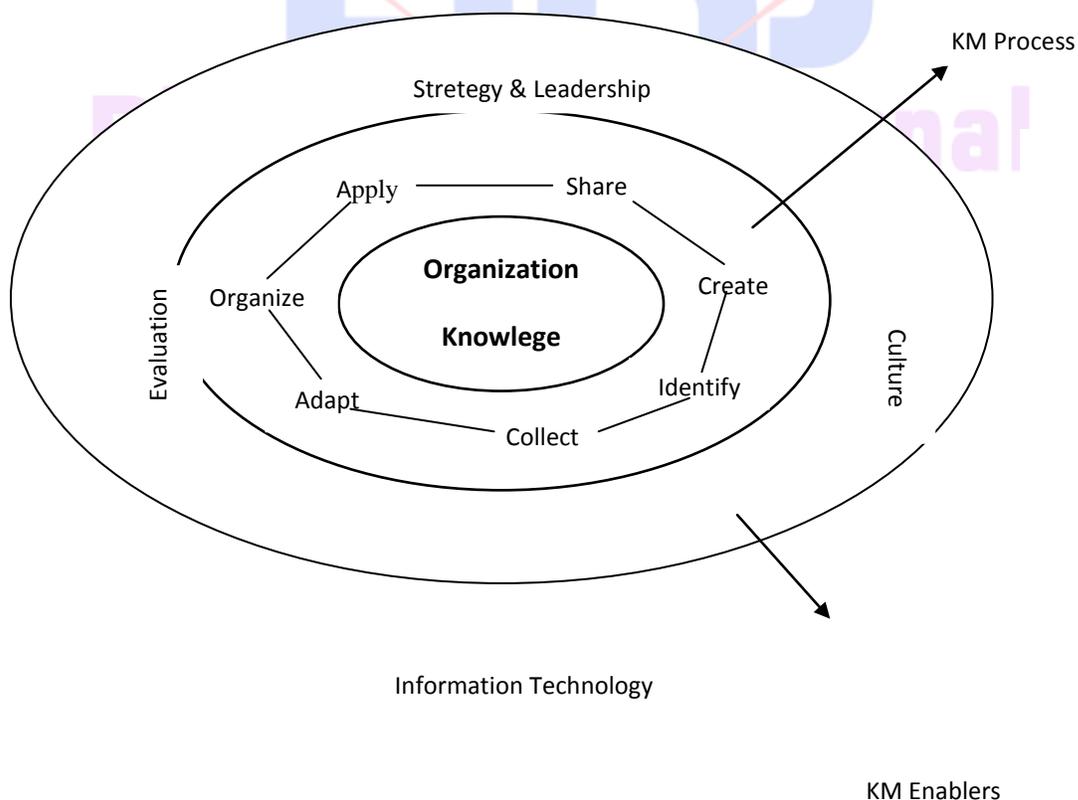


Figure (2): KM Enablers (Tsang Ho 2009)

These components are not independent from each other and in contrary there is a close relationship amongst them. These components create a kind of synergistic effect that causes the improvement of the KM performance.

Gold et al (2001), point to the fact that we should evaluate the capabilities of the organizational management in virtue of their efficacy in an organization.

In view of the issue in question, we provide the framework of the relationship between the KM capabilities and organizational efficacy and divide it into two parts: infrastructure and capacity for the management of the process. This capacity for the management of the process is made up of the following parts: acquisition of knowledge, change in the knowledge, application of knowledge and protection of knowledge.

Of the studies conducted in the US, Gold et al (2001), concluded that the managerial capabilities of the knowledge infrastructure and knowledge process have close relationship with the organizational efficacy. Lee et al (2005), define a logistic for the circulation of knowledge, made up of five components. These five components are as follows (Tsang Ho 2009):

1. Production of knowledge
2. Accumulation of knowledge
3. Sharing knowledge
4. Exploitation of knowledge
5. Digestion of knowledge

Lee et al (2005), referring to the previous effects on the important indicators of performance which are identified from the circulation of the KM process, and deal with the importance of the critical KMPIs in the process of circulation. These findings show that the indicators of performance of the KM process have a positive relationship with the financial performance and it means that the proposed KM process can reveal the management of the performance of an organization. As a result, in this research, in order to create a process performance index and in order to conduct further examinations on the environments in which the active companies produce KM, use has been made of the knowledge processes introduced by

(Lee et al 2005). In another words, our goal is to examine the issue whether the KM enablers influence the importance of the knowledge process performance index. Previous effects on the KM enablement is summarized as follows (Tsang Ho 2009).

1.2. Components of knowledge management technology

Knowledge inputs:

the first starting point in the interaction between the information technology and knowledge management is the means of collecting knowledge. The entries of knowledge include scanner, microphones, hard disc, search tool and etc.

Database:

the existing database in organizations include a large amount of essential information such as information on the sellers, information on products, sale figures, information on clients and information on the manpower and resources market. It includes also the larger part of the information in the process of business and internal system of organization in order to provide access to users.

Information retrieval motor:

this tool is used as a mediator to find access to the knowledge basis and plays a key role in the knowledge management systems. A search engine has the power to classify information according to the association and include the questioning language that causes speed and high accuracy in retrieving information.

Electronic Document Management System (EDMS):

much of the important information and the knowledge of the organization is stored and protected in this system.

Tools group:

this is a tool that enables researchers to get in touch at the same time or in occasions. The utilization of this technology is a common way to share knowledge.

Agency technology:

this is a tool that shows automatically the source of knowledge, increase or change in knowledge to the user.

Electronic publications:

internet and extranet are among the most important electronic publication means. In addition to that, the web searcher and web server have also essential roles in the dissemination of knowledge. The digital laboratories, CD room and etc... present information in the concerted or accessible schedule.

The electronic knowledge map:

the knowledge map indicates the correlation between the different types of knowledge with each other (Kang 2005). The knowledge map is often hierarchical and starts from a macro level and reaches to the small processes and duties at the low level. One of the main pillars of knowledge map is the knowledge base. The software for extracting data, Web model communication system and the work circulation system are among the instruments to prepare the knowledge map which encodes the existing knowledge in the process of business and is used in the different stages of KM process.

Push technology:

this type of technology provides the information needed by the users, directly and automatically. By using this technology, the users can receive the last information on their work without interrupting their work to search it (Radings 2004).

Knowledge database:

a database includes different types of data and information in a classified manner. In view of the specialties and different uses by the users, one can design different kinds of databases and indicate the relations between its different parts.

Electronic notices board:

all the employees can introduce their messages in it. This is one of the most important tools for conversion of the implicit knowledge to the explicit knowledge (Radings, 2004).

1.3. The KM enablement

A workplace that has the information technology or a culture that support the activities related to the knowledge of the staff is called an organizational infrastructure. The enablers which focus on the construction of the infrastructures which support the KM are called the KM enablers. In order to ensure the success of knowledge management, the control of the key enablers in the initial planning stage is of utmost importance. Hence, one can exploit the limited resources at the disposal of the organization in an effective way and save the time as well as human and material resources and finally find access to the KM. If one organization wishes to avoid the arbitrary or disorderly production of knowledge, it should create enablers that would lead that organization to a concerted and organized production process. The enablers create a mechanism that push the members toward the production of knowledge, remove the barriers in the way of the production of knowledge and encourage the members to share their knowledge and specialty with others. The Arthur Anderson consulting Company (1999), indicate that the KM should include simultaneously the working activities and the human resources.

In the area of the human resources, the leadership and the organizational culture are the most important enablers. The clear descriptions of the job qualifications, important knowledge, the staff ethics, sustainable learning and re-sampling can be defined as a clear schedule with the organizational leadership and culture. The domain of the business, the information technology and the performance evaluation are the important enablers of it. As we know the information technology facilitates the professional communications, effective data collection, re-exploitation (Tsang ho 2009).

The KM enablers are divided into four groups:

1. Strategy and leadership
2. Organizational culture
3. Reward system of the organization
4. Information technology

In the continuation of the fourth component, the KM enablers have been deeply examined as it is the core issue of this research.

Information technology:

Bakman (1999), reminds us that the KM enablers constitute infrastructures for the information technology which support the KM activities, knowledge database, knowledge platforms, performance evaluation management systems and performance integration systems.

Alavi and Lidner (2001) and Fayroz and Colleagues (2008), agree that the information technology plays a key role in the organizational knowledge process. The information technology has a close relationship with the KM because it contributes to the distribution of the structural knowledge, vertically and horizontally, and makes it easier to search or exploit it. As a result, all commercial organizations and companies try to bring the KM and IT together.

The communication and information technology have direct and indirect impacts on the motivation of people for the sharing of KM and this is due to four operations: Disposing of the barriers, provision of channels for the acquisition of knowledge, improvement of processes and identification of the place of the knowledge holder and its searcher (Tsang Ho 2009).

1.4. The role of the information technology in the knowledge management

In recent years, great breakthroughs have been achieved in the area of the information technology and it has provided new means for the knowledge management process. For example, the advanced computer mediating tools, the databanks with high capacity, Decisions supporting systems (DSS), Electronic performance supporting system (EPSS) have largely contributed to the management of knowledge (Groger 2000). In a workplace, when the knowledge creating organization faces unprecedented problems, the information technology can be used as a KM enabler in the best possible way and create a creative cycle between the data, information and knowledge (Bahat 2001).

The information technology influences the KM in different ways and one can refer to the following domains:

1. The information technology facilitates the process of collection, storage and conversion of knowledge with high speed.

2. The advanced information technology merges the broken cycles of knowledge. This merger removes the barriers in the establishment of links between the different parts of the organization.
3. The information technology improves and develops the different kinds of knowledge production (social reintegration, internalization, externalization and composition) and is not limited to the transfer of knowledge (Alee and Choi 2003).

In addition to the enabling role, the information technology has been known as one of the important infrastructures in the realization of the knowledge management process.

Most researchers believe that the most important factor behind the successfulness of the KM in our age is the capacities created by the information technology.

Some writers believe that the information technology is part of the knowledge management and has not the ability to increase the organizational knowledge (Downport and Prosak 1998).

Some say that the information technology concerns just the codifying aspect of the explicit knowledge and ignores the implicit knowledge. Another research indicates that the information technology creates a good ground for the improvement of all activities, in the role of an infrastructure and provides the KM process (Jimi 2003).

It should be noted that the information technology would not turn the organization into a knowledge creating organization. The KM is a technical-social system and the development of the information technology, strategy, structure and leadership (KM enablers) should be heeded by the organization.

Gilbert (1999), believes that the information technology in the knowledge management is successful if it has simultaneously the capacities:

- To link all the members of the organization with the external environment.
- And it has a profile of the accessible memory for all the members of the organization (Gilbert 1999).

1.5. The impacts of the communication and information technology on the knowledge management

The information technology is a collection of tools, techniques and methods for storing, processing, disseminating and producing the information. What is important in the information

technology is “informative thinking” or the thought that is made up of a collection of fruitful and reliable information. On the other hand, what produces information is the thought of the wise man not the tool. The information technology has the largest share in the knowledge management so that it is behind all of the KM activities. But the technology is not the only component of the knowledge management but other components such as the evolution of organizational structure and the decision-making process are considered other parts of the knowledge management (Farhadi 2004).

1.6. Support given by the technology to the knowledge management are divided into two categories:

First, the systems of sharing and dispatching which is related to the database and include cases such as the reservoir of documents, attention to the skills, documents exchange, and sight infrastructure. Secondly, supporting the information analysis that comprises the systems for conversion of data into knowledge, supporting and decision-making, determination of the communication and information patterns by the advanced statistical tools and automated analysis of data in the Real-Time¹ (Gambel 2004). The technology is one of the main pillars of leading and organizing the knowledge which has a close and direct relationship with the standardization. The transfer of information by means of various information technologies requires that in all storing and retrieving stages, definite standards be followed. Standardization improves the quality of the information services and diminishes the technical hurdles to the circulation of information. Hence, it contributes to the creation of a concerted management for the development of the organizational knowledge.

In fact, the knowledge management is a strategic management and it requires that the high management exploits to the full the opportunities provided by the information technology for the professional purposes. The utilization of the information technology just as a supportive tool for the processes and working activities is a weak strategy. The new opportunities provided

¹ Real-Time is an operation in which the machine activities are in accordance with the human comprehension of the time or activities that are done as per the computer operations with the same speed of the external or physical process (descriptive dic., 515)

by the information technology require the broad exploitation of it and it is up to the knowledge management that can bring about strategic outcomes.

1.7. The relationship between the knowledge management and the information technology

In order to determine the relationship between the knowledge management and the information technology, one can act in two ways of It capacities and the KM processes. Janarkar and Brown (1997), emphasized the role of the information technology in the KM as a facilitating mechanism and transfer of knowledge. Gari (1998), emphasized the distinction between the information technology and the knowledge management and Khalifeh Velio (2003), stressed the IT could play as a catalyst in the KM process. On the other hand, as it was said earlier, Nanoka and Takochi (1995), referred to the four cases of socialization, internalization, externalization and composition by presenting the cycle of KM life.

From one viewpoint, one can create a link among these four stages of the knowledge management cycle and IT. From the viewpoint of socialization, the IT can contribute to establishing the relationship between the individuals with each other and creation of societies and knowledge groups. Dialogue chambers, E-mail and etc. can lead to the socialization. The externalization or creation of the explicit knowledge can be done by the agency of the various communications means, for example, it can encourage E-mail messages or scientific discussions, specialized relations and sharing the explicit knowledge in the organization. Internalization which depends upon the ability of the individual for the extraction of data can be done through searching the information, pictorial representation tools and the geographic information system, and finally, the composition is a stage which includes most of the IT users (Okunoye 2001).

In another context created by APQC, the IT is introduced as a catalysor of the KM. Based on the Loiet Model (1965), the technology including the IT is introduced as one of the factors influencing the KM. The principal presumption in this mode is that in the KM, the individuals and knowledge processes the only valuable factors and the technology and structure are also other important factors. Figure 3 indicates this model (APQC 1996).

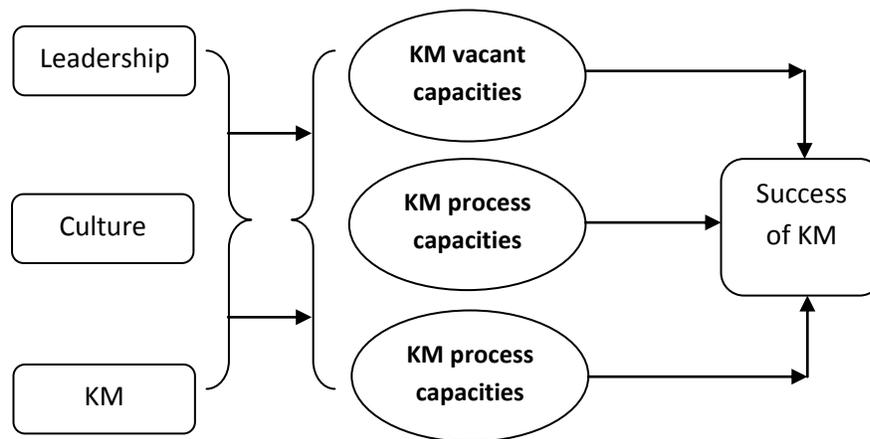


Figure 3: Role of IT in the KM (Khalife & liu, 2003)

1.8. Expression of the issue

Employing the advanced IT enables the organizations to make optimal use of their intellectual dispositions (Amanati, 2002). It is believed that the KM is a system that requires a special expertise and this expertise is not found in most organizations and the technology is not able to create it on its own. The KM technology cannot be considered as a unique plan that can work for every organization. The reason is that the complementary technologies for supporting the KM are rarely accessible in a unique plan and most companies are so dependent on the special sections of the KM structure that even if a comprehensive plan replaces them, they remain inseparable. Unfortunately, it has led to a situation in which most companies consider the KM through tools and technologies as superfluous. Furthermore, most companies and the staff members have done large investments in the technology which have resulted in complexities in the objectives and roles of the knowledge management. The technology used for supporting the KM should meet new requirements (Murphy 2008).

The Drug Control Headquarters (DCHQ) as one of the most important and principal center of the production of knowledge and decision making in the domain of the fight against the illicit drug trafficking and abuse can adopt more effective decisions through IT modern tools and the determination of their impacts on the general KM process in order to adopt drug control,

prevention, legal, treatment and harm reduction approaches and use the implicit and explicit knowledge of the experts in this domain.

2. Research Questions

Research questions are as follows:

-The main question

1. What is the relationship between the IT and way of supporting it in the KM process in the DCHQ?

- The Sub-questions

2. What is the relationship between the IT tools (national information terminal, Internet and information search engines, DCHQ portal, Automation and Email management terminal) and the components of the knowledge production in the DCHQ?
3. What is the relationship between the IT tools (national information terminal, Internet and information search engines, DCHQ portal, Automation and Email management terminal) and the components of the preserving and safeguarding in the DCHQ?
4. What is the relationship between the IT tools (national information terminal, Internet and information search engines, DCHQ portal, Automation and Email management terminal) and the components of conversion and transmission in the DCHQ?
5. What is the relationship between the IT tools (national information terminal, Internet and information search engines, DCHQ portal, Automation and Email management terminal) and the components of the using knowledge in the DCHQ?

3. Conceptual model of the research

The conceptual model of the research is made up of two parts. The first part of the model includes the KM process (Ahmadi 2009; Dadashi 2010). The second part of the model is IT tools that result in the development of the KM (Tourban 2007).

Figure 4 shows the conceptual model of this study.

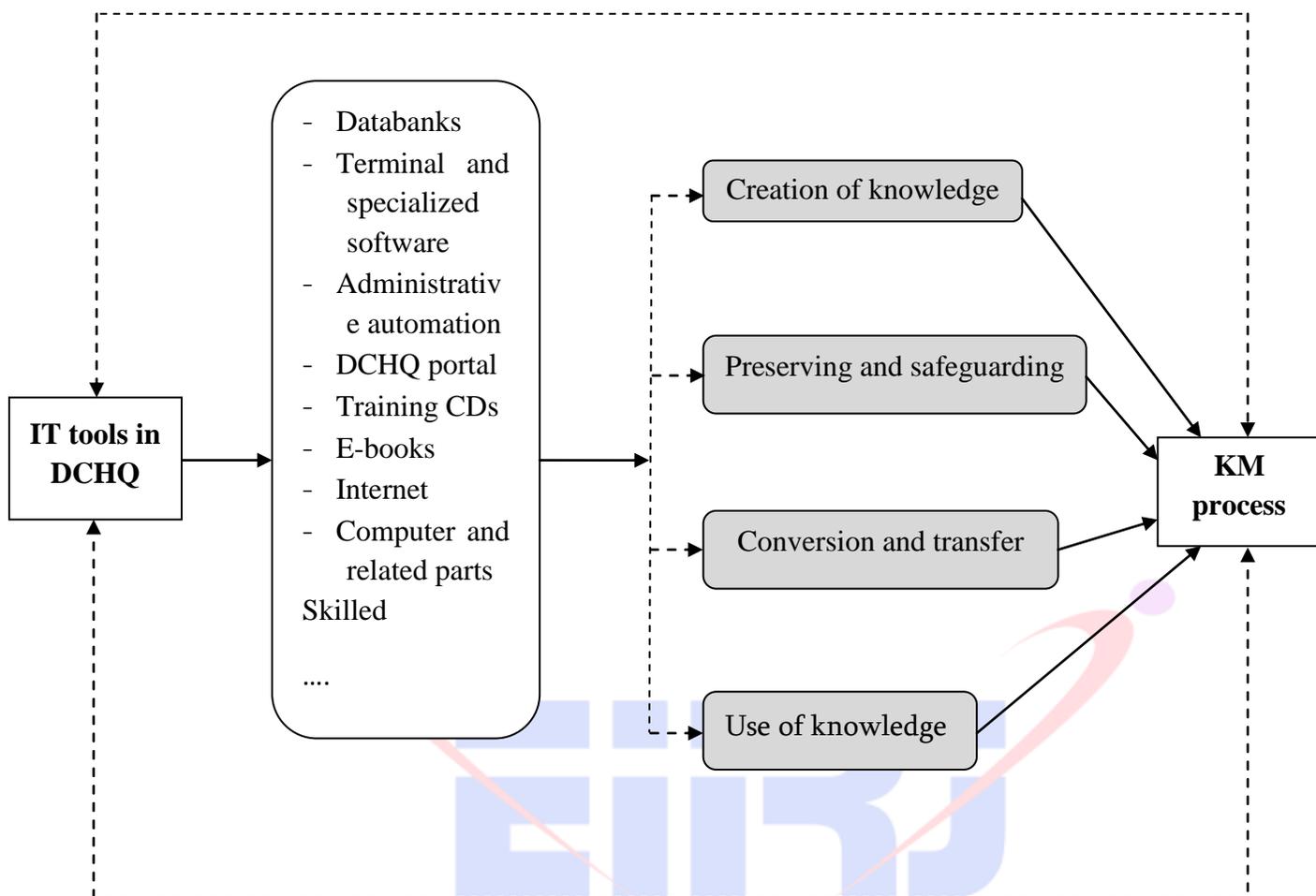


Figure (4): conceptual model of research

(Examination of ways of supporting the IT in the KM process)

4. Research methodology

4.1. Sampling

The statistical sample in this research includes all the directors and deputies and officers-in-charge and staff of the DCHQ. They are 550 persons. To determine the amount of the sample the Friedman Schedule has been used.

The sample chosen for this research includes 226 persons (according to the Morgan Schedule) In view of the subject-matter of this issue which is “examination of the relationship between the IT and way of supporting it in the KM process in the DCHQ of Presidency”, the

researcher used a descriptive research method. Also for the analysis of data, different methods of the inclusive statistics are used and the software's of SPSS and LISREL have been used for the analysis of data or refusal or acceptance of the theories.

4.2. Measuring tool

In this research, by utilizing questionnaire tool and examination of the documents and papers, a series of questions were prepared and the data was collected. The questionnaires were into two main groups: questionnaires on the IT and the questionnaires on the KM process.

In order to determine the content of the measurement tool, the views of key directors and experts were collected. The validity of the questionnaire by using the Alfa Kronbackh method was estimated at 97 and this shows the high credibility of the measurement tool.

4.3. Statistical samples

The statistical sample in this research includes all the directors and deputies and officers-in-charge and staff of the DCHQ. They are 550 persons. To determine the amount of the sample the Friedman Schedule has been used. The sample chosen for this research includes 226 persons (according to the Morgan Schedule)

5. Findings of the Research

In view of the results of the Table (1), out of 211 respondents in the study, some 31 persons (14.7 %) were female, 180 persons (85.3 %) were male. Out of 211 respondents in the study, 2 person (09%) had completed secondary education, 11 persons (5.2 %) had diploma, 27 persons (12.8%) had associate's degree, 117 persons (55.5%) held bachelor's degree and 54 persons (25.6%) had higher university degrees. Also, from 211 respondents in the study, 23 persons (10.9%) were unmarried, 188 persons (89.1%) were married. Also, from 211 respondents in the study, 9 persons (4.3%) were simple employees, 18 persons (8.5%) assistant experts, 173 persons (82%) experts, 3 persons (1.4%) directors. Also, from 211 respondents in the study, 120 persons (56.9%) worked in the DCHQ and 90 persons (42.7%) worked in the DCHQ provincial councils).

Table (1): descriptive results of research (researcher's conclusion)

Factors examined		Results	
		No.	Percent
Gender	Male	31	14.7
	female	180	85.3
Education	secondary education	2	9
	Diploma	11	5.2
	Associate's degree	27	12.8
	Bachelor's degree	117	55.5
	Higher than bachelor's degree	54	25.6
Marital status	Unmarried	10.9	23
	Married	10.9	188
job	Simple employee	9	4.3
	Expert	173	82
	Director	3	1.4
workplace	council	90	42.7
	DCHQ	120	56.9

5.1. Examination of structural model

In view of the output of the LISREL software and Figure (5), the results are as follows:

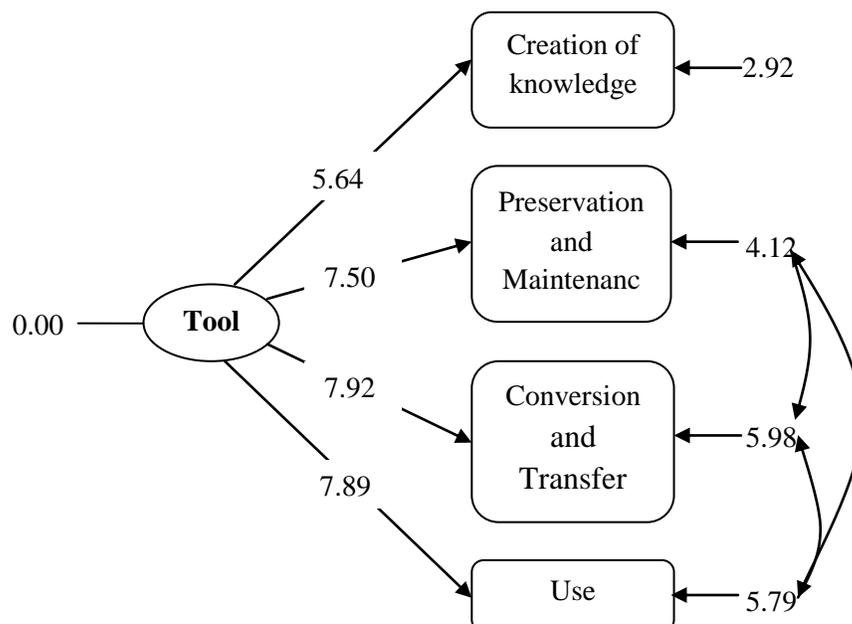


Figure (5): statistics of the test for different models coefficients (Output of the LISREL software)

1. There is a relationship among the IT tools and the knowledge creation components in the DCHQ. The proportion of this relationship equals 0.75 and this shows that the two variables have close relationship with each other.
2. The presumption of research is confirmed between the IT tools and the preservation and safeguarding components in the DCHQ and in view of the fact that the statistics of the test are more than 1.96. This means that there is a correlation between these two variables. The proportion of this relationship equals 0.76 and this shows that the two variables have close relationship with each other.
3. There is a relationship between the IT tools and the conversion and transfer components in the DCHQ. The proportion of this relationship equals 1.96 and the presumption of research is then confirmed). The proportion of this relationship equals 0.63 and this shows that the two variables have close relationship with each other.
4. There is a relationship between the IT tools and the knowledge use components in the DCHQ. (The proportion of this relationship equals 1.96 and the presumption of research is then confirmed). The proportion of this relationship equals 0.63 and this shows that the two variables have close relationship with each other.

For test of assumptions and determination of the relation, the Pierson Coordination method has been used. The results of this test have been presented in the Table (2). According to this schedule, the results of the assumptions are as follows:

Table (2): Correlation test on research variables (Researcher's conclusions)

		Dimensions	No.	Proportion of relationship	Significance No.
IT tools	→	Creation of knowledge	211	0.56	0.000
		Preservation of knowledge	211	0.64	0.000
		Conversion of knowledge	211	0.47	0.000

	Use of knowledge	211	0.53	0.000
	KM	211	0.61	0.000

5.2. Results of the correlation test

Correlation test results

According to the Spearman correlation test results, the IT tools have relationship with the KM and in view of the correlation coefficient, this relationship is considered positive.

Also, the results of the questions of the research are explained in Table 3.

Table (3): results of the questions of the research (Researcher's conclusions)

	Questions	Solidarity level	Result
Main question	1. What is the relationship between the IT and ways of supporting the KM in the DCHQ?	0.56	Confirmation of assumption of research
Secondary questions	2. What is the relationship between the IT and knowledge creation components in the DCHQ?	0.64	Confirmation of H1
	3. What is the relationship between the IT and preservation components in the DCHQ?	0.47	Confirmation of H1
	4. What is the relationship between the IT and conversion and transfer components in the DCHQ?	0.53	Confirmation of H1
	5. What is the relationship between the IT and knowledge use components in the DCHQ?	0.61	Confirmation of H1

5.3. Comparison of results of the two analyses

The results of the test in the SPSS software and the LISREL test confirm each other. This adds to the power of work. Additionally, in the examination of the level of this relationship, the

results of the two analyses confirm each other. As it was said earlier, the lowest level of the relationship in the evaluation of the LISREL standard concerns the conversion of knowledge with the 63% and this result has been approved in the solidarity test results. The level of the relationship of the knowledge conversion component was 0.47 which is lower than other components.

6. Discussion and Conclusion

In view of the fact that the article under the present article has not been worked out, one cannot examine the results of the present research in a comparative manner. Therefore, the present article the generalities of the research were expressed. Tee Seng (2008), has examined the IT impact on the KM system. In this research, the role of the IT on the KM system has been examined in the five-fold manner. In fact, the kind of research noticed in this article envisages the acquired knowledge and the KM and the acquired knowledge and the implementation of the KM which is to some extent different from the present research. Liao (2003), examined the KM technologies and their application from 1995 to 2003 by publishing 234 articles. These researches were similar to the present research and the IT technologies were examined as one of the categories of the Communication and IT and KM technologies. In this part, identical results from both researches were obtained. Jacobite. Nur, Kouchakzadeh. R (2009), dealt with the ways and means of support given by the IT to the KM. In this research, 9 IT components were used for supporting the KM which equal six cases in comparison with the components used in this research. The research of RezaZadeh Mehrizi, M.H (2005), focused on the “the role of the IT in the KM”. In comparison with this research, one can say that the processes of knowledge in both researches were based on one logic.

In view of the results of the research, the following proposals were presented:

1. Bringing about changes in views and attitudes of directors and officials of the DCHQ and its affiliated councils in provinces regarding the importance and standing, creation of opportunities and development of the professional skills, providing freedom and independence in the professional activities and adoption of encouraging policies and tools for the brilliant experts;

2. Building confidence in the DCHQ and its provincial councils so that the staff don't feel endangered when presenting information;
3. Formation of the knowledge working groups in order to develop and determine the structure and processes for preservation and safeguarding data and information in the DCHQ.
4. The knowledge activities examined from the viewpoints of objectives, content, kind of activity, staff enablement, type of organization and level of access to the IT in the DCHQ and its provincial drug control coordination councils.
5. Necessity for giving more attention to the IT as KM facilitator in two approaches of development and personalization;
6. Need for designing Decision Support Systems (DSS) in the area of Drug Control and illicit drug abuse.
7. Need for designing and application of the SharePoint specialized software in the DCHQ.
8. Need for giving more attention to the human resources management for the purpose of promoting the management of the KM in the DCHQ and its provincial councils;
9. Need for strengthening the NGOs in order to exploit the KM process in NGOs.
10. Need for identification of the knowledge domains of DCHQ and its principal councils in order to realize the KM roadmap.

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References

- Moshaveran Tosee Ayande Co. (2011), "What is Knowledge Management?" web:
<http://www.moshaveran.net>
- Hassanzadeh, M., (2006), Study of KM infrastructure in the Islamic Republic of Iran, PhD thesis,
University of Ferdowsi University of Mashhad
- RezaZadeh Mehrizi, M.H. (2005), the role of ICT in knowledge management, M.Sc. Thesis,
Sharif University of Technology

- O'Dell, C. and Grayson, J. (1998), "If only we knew what we know: identification and transfer of internal best practices", *California Management Review*, Vol. 40 No. 3, pp. 154-65.
- Drucker, P.F. (1993), *Post-Capitalist Society*, Butterworth-Heinemann, Oxford
- Ho, C. T. (2009). The relationship between knowledge management enablers and performance. *Industrial Management & Data Systems*, 109(1), 98-117.
- Anderson, K. (2005), from information technology to knowledge technology, *Journal of Knowledge Management*, vol. 2, no. 2.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: an organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214.
- Lee, H. (2003). "Design and Evaluation of Knowledge Management System", *Software Journal*, vol. 19, no. 3, pp. 56-95.
- Kang, Deana, (2005). "Knowledge Management- not Rocket Science", *Journal of Knowledge Management*, vol. 9, no. 3.
- Radyng, Ellen, (2004), "Knowledge management: success in information-based global economy", translated by Mohammad Hossein Latifi, printing, publishing samt of Tehran.
- Beckman, T. J. (1999). *The Current State of Knowledge Management*. In Liebowitz, J. *Knowledge Management Handbook*. New York: CRC Press.
- Alavi, M. and Leidner, D.E. (2001), "Review: knowledge management and knowledge management research", *Journal of Management Information Systems*, 18(1), 185-214.
- Fairuz, A. R. M., Chong, S. C., & Chew, K. W. (2008). Learning organisation disciplines and internet usage, an empirical study from Malaysia. *International Journal of Management and Enterprise Development*, 5(4), 462-483.
- Groger, Varan and Thomas Davenport, (2000). "general perspectives on knowledge management: fostering a research Agenda", *Journal of Management Awareness in Public Relations*, vol. 9, no. 30.
- Bhatt, G. (2001). "Knowledge Management in Organization: Examining the Interaction Between Technologies, Techniques, and people", *Journal of Knowledge Management*, vol. 5, pp. 68-75.

- Allee, V. (1997), "Twelve principles of knowledge management ," Training&Development, Vol. 51 No. 11, pp. 71-4
- Davenport, T.H., Harris, J.G. and Kohli, A.K. (2001) How do they know their customers so well? MIT
- Thomas H. Davenport - Prvsak, Lawrence, KM, H. Rehman, character translation, publication Sapco, First Edition, (2000)
- Gimmy, g. ng, (2003). "Implications of ICT for Knowledge Management in Globalization" journal of information management and computer security, vol. 11, no4.
- Gilrbert. Probst, Steffen Raup, Romhartd (1999). "Managing Knowledge: Building Block Success", newyork, wiley.
- Farhadi, R. (2004), information technology delivery roles, importance of knowledge management, Journal Book, Volume 15
- Gambel, Paul r. (2004), knowledge management: a state of the art guide, London, Kogan page
- Khalifa M. & Liu V. (2003). Determinants of successful knowledge management programs. Electronic Journal on Knowledge Management. 1, 2, 103-112.
- Nonaka. I, Konno, N, (1995). "The Concept of (Ba): Building a Foundation for Knowledge Creation", journal of California management Review, vol.40.13, no.3
- Amanati, F (2002), "Knowledge Management in Information Technology," Communications Messaging, No. 25.
- Okkunoye A. (2001), information technology infrastructure and knowledge management in sub, university of Jyvaskyla, department of computer science and information system, MSc thesis
- APQC, (1997) Using information technology to support knowledge management. Consortium benchmarking study: Final report. 1997. Available in <http://www.store.apqc.org/reports/Summary/know-mng.pdf>
- Murphy, jim (2008). Why km initiatives could benefit from outside help.km review . vol.11.issue5. retrieved from www.emerald. com. Date:2008/11/05.
- Ahmadi, R (2011) presented a method for modeling and business process improvement based on customer knowledge management (eg automotive), MS Thesis, University of Science and Technology

Dadashi, Habib (2010), using models of organizational decision-making model to support knowledge management in Mazandaran Water and Wastewater Company, Master Thesis

Turban.E, Mclean.E (2002) ,”Information technology for management” ,3 rd ed ,John wiley & Sons.Inc.

Jacobite. Nur, Kouchakzadeh. R (2009), presented a paper entitled IT support of knowledge management, Journal of Industrial Mdbrrbt, No 9

