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Managing knowledge in a saudi vocational training organization

This paper addresses in the first concept Knowledge Management (OKM) and its theoretical foundations as an alternative to the aging paradigm of Information Management. Then it proposes a practical case dealing with a unique experience of a young training institution where Knowledge Management is reshaping most of the traditional areas of management, not to say life on the campus at Madina College of Tourism & Hotels (MCTH).

Some initiatives have been successfully put underway based mainly on ICT solutions. They range from college's web-site to an adequate E-Learning environment.

The case is therefore put forward where a good blend of technical tools, a high human dedication/ persuasion as well as appropriate management could yield far-reaching overall performances as far as Knowledge Management is concerned.

The above-mentioned initiatives would not have been materialized without a strong technical will by the General Organization for Technical Education and Vocational Training (GOTEVT) as well as a very ambitious program by the young leadership of the college totally acquainted with and devoted to Knowledge Management concept.

Key words :

Knowledge Management, Training, vocational training, information

Résumé

La gestion des savoirs dans une organisation de la formation professionnelle saoudite

Ce document aborde en premier lieu la notion d'organisation de la gestion des savoirs (OKM) et de ses fondements théoriques comme une alternative au paradigme du vieillissement de la gestion de l'information. Ensuite, elle propose un cas pratique portant sur une expérience unique d'une jeune institution de formation où la gestion du savoir transforme la plupart des domaines traditionnels de la gestion, pour ne pas dire la vie sur le campus, à Madina College of Tourism & Hotels (MCTH).

Certaines initiatives ont déjà été mises en cours repose principalement sur des solutions TIC. Ils vont d'un bon collège du site web d'un bon environnement d'apprentissage électronique.

L'affaire est donc mise en avant, où une bonne combinaison d'outils techniques, un grand dévouement de l'homme / la persuasion ainsi que de gestion appropriées pourrait donner une grande portée globale des performances en ce qui concerne la gestion des connaissances.

Les initiatives mentionnées ci-dessus n'aurait pas été concrétisées sans une forte volonté par la technique de l'Organisation générale pour l'enseignement technique et la formation professionnelle (GOTEVT) ainsi que d'un très ambitieux programme de la jeune direction du collège totalement connaissance et consacré à la Gestion des Connaissances Concept.

Mots clés :

Gestion des savoirs, formation, la formation professionnelle, l'information

ملخص

إدارة المعرفة في مؤسسات التكوين والتدريب المهني السعودية

تعتبر الدراسة إطارا مرجعيا حول إدارة المعرفة التنظيمية(Organizational Knowledge Management) كمفهوم متطور مختلف نوعيا عن المفهوم القديم لإدارة المعلومات (Organizational Information Management)، وباعتبار رأس المال الفكري Intellectual Capital أهم موجودات أي منظمة ويفوق في أهميته الأصول المادية، وأن المعرفة ستكون سمة المرحلة القادمة من الحضارة الإنسانية، وأن من يمتلك ناصية المعرفة سيتمكن من التحكم من خلالها بمصادر القوة الأخرى. وتناقش الدراسة مفهوم إدارة المعرفة التنظيمية، وعناصرها واستراتيجياتها، ودور ومهام مدير إدارة المعرفة التنظيمية، وصولا للخاتمة.

تحاول هذه الدراسة إسقاط مفهوم إدارة المعرفة في الكلية التقنية بالمدينة المنورة وإمكانية تطبيق تكنولوجيا المعلومات كحلول للمشاكل الإدارية.

الكلمات المفتاحية :

إدارة المعرفة، التكوين، التكوين المهني، المعلومات، الاتصالات

JEL CLASSIFICATION : M15

INTRODUCTION

Organizational Knowledge Management (O.K.M.) is a new management paradigm which is quickly developing into a substantial body of literature. This is due mainly to the ever-increasing interest from businesses in particular and organizations at large in knowledge management. The latter can help in gearing management to better performances and hence to a comfortable competitive advantage position.

O.K.M. is nowadays the most valuable asset of the organization leaving behind physical ownership. Innovation which is at the hart of knowledge fuels growth, wealth and strength for organizations. There is no doubt that people, organizations, and societies endeavor to gather strength which is seen as the finality of any human activity. Strength is based on three components, that is muscles, money and the intellect, i.e. knowledge. Yet, looking for mankind future, it seems that knowledge is the most important element since there is no boundaries or limit to its capacity of development and innovation.

Knowledge strength is first characterized by its unlimited capacity to grow without any superficial constraints as it is the case in other forms such as physical force or financial mighty. It is increasingly evolving, gathering momentum, being sustainable and above all can do many things at once.

The second characteristic of knowledge has to do with a great sense of justice and equality of opportunities since even the smallest protagonist. That is not the case for the two other forms of strength i.e. muscles and money whereby the strongest always wins the battle.

It seems that in the future, the battle between people, organizations and nations will shift from the grounds of wealth to those of knowledge ownership and usage. The intellectual capital as it is sometimes coined is difficult to imitate or duplicate unlike machinery and other forms of hardware. Hence, it becomes a very valuable strategic asset and indeed a competitive advantage for people, organizations and nations alike.

Developed countries bilaterally and trough multilateral agencies especially WTO are very jealous about technologies and knowledge, thus making it

very difficult for developing nations to use this common human heritage without substantial financial and political sacrifices.

On another scale the interest for OKM, goes beyond the micro-level (organizations) to the macro-level (national economies). It is by now well established that OKM can be approached as a national asset-based intellectual capital like any other material component of the national wealth. Some researchers even developed ways of measuring this new kind of capital in order to monitor its development and strength.

In the last decade some attempts have been made by some analysts who try to apply the OKM paradigm to the situations of educational and vocational organizations. Despite the fact that organizations such as colleges and universities are themselves providing some forms of knowledge as a main stream activity, there was not a real interest into how knowledge can be better organized and indeed managed in order to deliver the good.

In this paper we will try first to define what is OKM, to see what are the components and objectives of knowledge ? How it can be produced ? Organized and above all managed ? Second, we will try to see what are the possible applications of OKM for academic and vocational institutions. Third, we will present a practical case in which an attempt will be made to practically measure up the incidences and eventual changes related to a sound and sustained effort to develop knowledge management in a Saudi vocational organization.

1 - RESEARCH PROBLEM & OBJECTIVES

The research tries to present the OKM theory as an alternative to the Information Management IM paradigm which seems to be less adapted to an uncertain environment. Furthermore the IM theory tends to under look some parts of knowledge itself especially personal experiences, guesses, explanations, and the context.

We try also to see what are the possible effects of OKM on educational and vocational institutions and eventually expose a practical case of the latter.

1.1 - Research questions

1- What is OKM ?

2- Is there a difference between OKM and IM and what are they ?

3- What are OKM Strategies ?

4- Are the academia and vocational institutions ready to apply OKM principles ?

5- What should be done to enhance OKM in our case ?

1.2 - Methodology

The first part of the research uses an analytical framework whereas the last one is mainly based on a descriptive approach as well as an attempt to modeling.

1.3 - Research Limitations

This is a qualitative exercise in order to investigate and eventually propose a framework for OKM in a vocational training institution. Therefore, it must be outlined from the beginning that neither quantitative analysis, nor any generalization should be expected from this research. It is rather an attempt to lay down foundation for a sound potential scientific research aimed at shifting resources and attention to the effort being now made by Educational/Vocational/ Training entities in order to fully benefit from the OKM Paradigm which has rather been focusing, up-to now, on Business Organizations.

2 - KNOWLEDGE MANAGEMENT

Despite the importance of Knowledge it is not easy to define. [Turner & Jackson-Cox 2002] Many people do not make the difference between Data, Information and Knowledge.

Data represent raw objective facts generally in the form of figures and statistics which are linked to the organization and market activities. Data needs to be processed in order to become Information which can then be used in decision-making in the form of reports, charts, or organigrams.

Information represent the visible foundation of Knowledge, but the latter contain also the skills, personal experiences, explanations, analyses, comment…etc. Individuals and groups use often their personal perception, grasp and the context to provide significance and sense to information, thus transforming it into Knowledge.

Some prefer to speak of "Knowledge Sharing" instead of Knowledge Management. The term sharing conveys some kind of interactivity which involves many partners though not very precise about whether knowledge precedes sharing or vise-versa.

Others emphasize the important role of Learning as part of Knowledge Management since the main challenge in OKM concerns rather information reception. Information sharing in that case provides opportunities for information to be expanded and modified so it can match new developments especially through feedback.

The World Bank adopted the strategy of Information Sharing not only for its staff but also for all its partners over the World [Denning 2003].

2.1 - OKM definition

We share with the University of Texas a good definition of OKM which states that : "OKM is an organized operation of information research, its selection, organizing, and sorting so it increases the level of comprehension by employees. It means also the information storage in a way which allows for the followings :

• Ameliorates the level of intelligence in the organization.

• Provides the necessary flexibility at work.

• Preserves intellectual assets from lost.

• Facilitates its use in order to solve work problems.

• Helps in Learning from experiences.

• Helps in strategic planning.

• Helps in Decision-making». [Denning 2003].

This definition tends to establish a correlation between Information and Knowledge since information precedes Knowledge formation and is a means to learn it [Blumeritt & Johnston 1999]. On the other hand, Knowledge contains an extra element; that is "thinking of information" [McDermott 1999].

The relationship between Information sources and thinking gives Information management a key role in inciting people to share in activities which need extra jobs and are characterized by some risks of loosing influence as a consequence of errors.

One can sum up what have preceded as follows :

OKM is not a motto, nor is it a nameplate for a formal theme in management, but rather an indicator. The latter aims at providing an organic and comprehensive vision which tries to necessarily :

• Understand and exploit the role of knowledge in work management.

• Provide guidance either to organizations and people in order to accommodate easily with a more complicated economic environment.

OKM is made of many components which are necessary to any organization's management. These components ought to be gathered, adapted to the organization's needs, and organized in order to be implemented. They then may be diffused so that concerned people can benefit from them and which eventually guarantees knowledge production accordingly (new needs).

In order to insure knowledge reliability, we need an efficient leadership as well as building up an organizational culture which emphasizes the importance of knowledge and its continuous production. We also need to provide appropriate technology to produce, diffuse and apply knowledge.

Finally, we need permanently to evaluate and monitor knowledge in order to avoid obsoleteness and to determine exactly what the knowledge contribution toward the organization objectives fulfillment is.

In figure 1, a model of Organizational Knowledge Management is proposed

Figure n°1 : An OKM Model
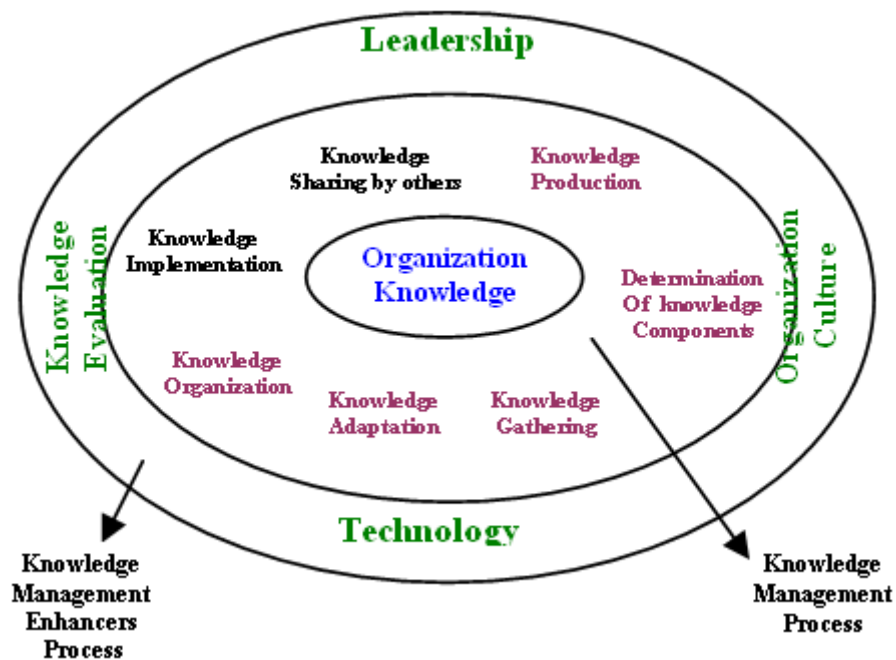
2.2 - Organizational Knowledge elements

Organizational Knowledge is made of two main elements which are Tacit Knowledge and Explicit Knowledge [Nonaka & Takeuchi 1995].

2.2.1 - Tacit / Unstructured Knowledge

This kind of knowledge is made of paradigms, values, attitudes, brain images, thoughts, guesses, perceptions, imagination, analysis… etc. These elements are stored in the human memory but are not documented nor regulated [Nonaka & Takeuchi 1995]. The main characteristic of this knowledge is its nature which can be described as: «Intangible Intellectual Capital" as opposed to other forms of capital in the organization such as buildings, machinery, technology… etc.

Tacit Knowledge materializing as skills and Know-how is difficult to transfer to others (people & structures) in a formal or written manner. This is so for many reasons which can be summarized as follows :

• Some employees, for the sake of competition do not accept to pass on "their knowledge" to others or at least there are reluctant to do so.

• Bureaucracy is preventing cooperation and Knowledge Sharing among structures and people.

• Ignorance of knowledge about other structures or people.

In order to overcome shortcomings of Tacit Knowledge, organizations pursue in general different strategies which can be outlined in the followings. [Nonaka-Kons, Perez-Bustamente, 1999]

i - Socialization

Socialization is a necessary process in order to provide a minimum learning by contact for the majority of employees. It can be done trough :

• Brainstorming

• Quality Circles

• Aided-Learning

• Emulation

ii - Internalizing & Assimilation

Knowledge acquisition would be possible first of all if it is assimilated by people in particular and the organization at large. Then Knowledge will become an integral part of people's behavior to the extent of creating a positive culture of knowledge throughout the organization. Previous experiences coupled with integrated knowledge can be stored internally and can be used when faced with practical problems.

iii. Combination

A database is set up as a reference library for all employees in the case of need. Prior to that available Knowledge is gathered, organized and sorted.
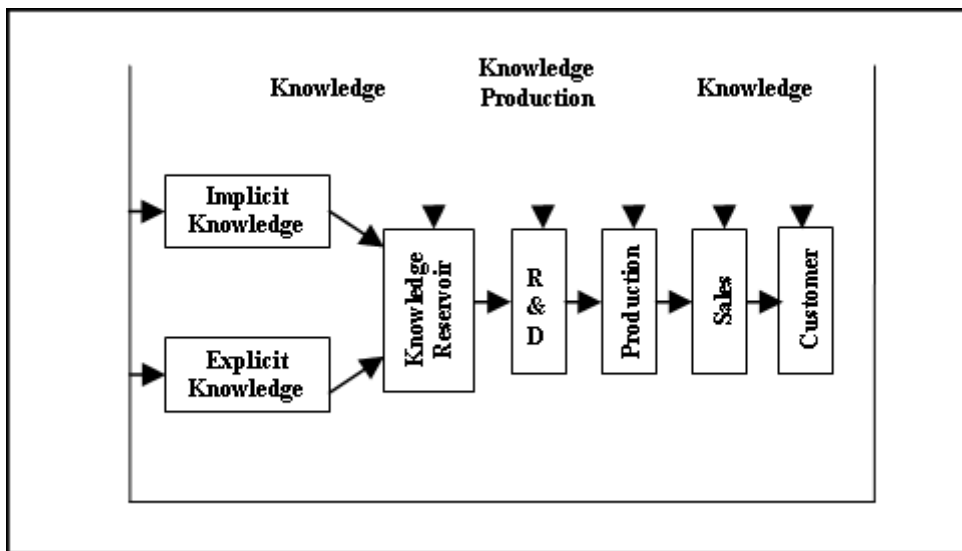
iv. Externalization

At this stage it is necessary to exhibit the acquired knowledge before all in a clear manner, preferably in the form of sayings and actions which are understandable for everyone in the Organization.

2.2.2 - Explicit/Domain/Structured Knowledge

Knowledge here is made of data, information in the form of files, documents, policies, guidelines, procedures, and rules which are documented as booklets and job guides made available to individuals and groups in the Organization. These elements when grouped together represent a reservoir of Knowledge in perpetual development.

The Organization trough its R&D operations or via external consultancy can bring about new forms of Knowledge which are beneficial to the production of goods and services as well as to the marketing of those products and finally to the foremost aim of business organizations i.e. good profitability. [Hacket 2000] Figure 2 illustrates a framework for Knowledge to be produced and then stocked and used as needed.

Figure n°2 : A framework for Knowledge Process

Knowledge Management process includes four major steps which are based on the Organization's internal and external conditions as well as on its development as it is shown in figure 3.

i. Conceptualization

We need at this stage to build up a knowledge reservoir but make sure that Knowledge stocked does contribute effectively to the ultimate fulfillment of the Organization's objectives.

ii. Reflection

We should develop a system whereby the quality of information should be enhanced by means of continuous updating in the wake of the Organization's objectives.

iii. Action

At this point, we need to develop Organizational Knowledge, maintain it, and make it available throughout the Organization according to its objectives.

iv. Retrospection

An attempt at evaluating the results of using information should be performed trough a comparison between the situation prior to the use (action) and afterwards. A SWOT-like analysis is then conducted in order to eventually reinforce benefits and face shortcomings.

IMAGE

2.3 - OKM strategies

Hereafter are some elements of OKM strategies for modern business Organizations:

231. Highlighting the prominent role of Knowledge production as well as its innovative use in developing goods and services : Specialists in OKM do differentiate between two sub-strategies in order to achieve the abovementioned strategy ; these are :

i. Codification

Organizing available knowledge in the Organization's internal network so as to become an easy and friendly reference for employees.

ii. Personalization

For the other form of knowledge i.e. which is impossible to codify, it is possible to convey it to others trough personal communication skills. Here, we will rely strongly on a network of interpersonal relationships and on modern communication means such as mobiles, e-mail, videoconferencing… etc.

iii. Establishing a Learning favorable environment

Learning has a crucial role in reinforcing the learner's capacities to adapt with the environment, the Organization in that case, in order to perform its duties and hence fulfill targeted objectives.

Business Organizations need to offer fair opportunities to employ-yees for experience building trough contact with customers/competitors as well as trough collective work (teamwork), and finally by learning from the errortrial process.

It is very important to link those objectives to the mission/vision of the Organization so all employees can have a fair perception of what needs to be done in order to facilitate the process of learning and its channeling towards enhancing organizational performances. [Prokesh 1997]

This convenient environment reinforces also employees' organizational belonging as well as the importance of their day to day duties. That is why many companies in the Developed World grasped the importance of the existence of such environment on the working place and hence applied it. Arthur Anderson, the U.S. leading financial and auditing consulting firm created since 1994 what becomes to be known as Knowledge Strategy Groups.

In order to provide fair opportunities for all its employees to learn continuously it is very important for the HRM department to device the best strategies which concern the following areas :

• Job Enlargement

• Job Enrichment

• Job Rotation.

It is also very important to change dominant perceptions and behavior trough lectures, sharing and self-learning. It is possible then to shift learning from a "Maintenance Learning" stage to an "Adaptive Learning" stage where the staff is being propelled to the same level as competitors.

The ultimate stage can be termed as "Creative Learning" which brings about leadership and distinction vis-a-vis the competition. To reach this stage means setting up self-development objectives. Determining the gap between reality and ambition and then providing the necessary knowledge and skills by many means. The main two means which can be used are self-studies and collective work.

In order to achieve the competitive advantage trough creative learning and innovation, the Organization should initiate many activities such as :

• Producing new knowledge

• Benefiting from outside resources to gain Knowledge

• Materializing Knowledge into documents, data and programs

• Providing incentives to develop Knowledge

• Transferring new Knowledge to all Organizational units

• Evaluating Knowledge in the Organization's development.

Among indicators which can tell about the Organization capacity to provide a good learning environment and a sound investment in employees capabilities one can cite the following :

• Employees feeling that they are still learning- thirsty

• Employees are applying what they have learned

• Employees are keen on sharing and exchanging what they have learned with their colleagues.

iv. Producing, transferring, diffusing and materializing Knowledge Culture in the Organization

Organizations should permanently endeavor to produce Knowledge from internal and external sources or to develop new/better understanding of the existing Knowledge. Nonaka emphasizes the fact that the social production of Knowledge is the result of interaction between people inside the Organization. It is also the consequence of investing what they own as experiences and Knowledge in order to make it available to all management levels in the Organization. [Nonaka, 1991]

It is also possible to produce collective Knowledge trough specialized Professional bodies in which members can exchange their experiences, interests and communal benefits trough modern communication means. But in all cases taking advantage from Knowledge is subject to the capacity to grasp its strategic importance as an asset for the Organization. [Teece 1998] (missing in the bibliography)

Innovation does not mean only Knowledge production; it means also Knowledge, Information and Data transport and feed-back between different activities and administrations inside the Organization. When needed by Organizations, Knowledge first is mined from internal sources. Should these sources are not enough or not appropriate, the Organization then start developing new programs in order to produce the required Knowledge.

Sometimes, as any research does, this process will take some time depending on the nature and the volume of the Knowledge needed. During this relatively long process of Knowledge research and production, the Organization acquires an applied body and methodology of Knowledge which is very important in dealing with technology systems. In addition, a certain capacity for problem-solving has been acquired during the same process which allows also opportunities for learning and progressive development aimed at enhancing production quantity, quality and costs reducing.

The innovation cycle is not close unless the Organization has developed its proper capacities for Knowledge and information diffusion internally in the same time as developing the culture of change among individuals and groups. This is done mainly trough the participation of different administrations in all activities by means of job rotation, experience sharing and teamwork encouraging.

v. Benchmarking and Best-Practices

This is an activity which allows the Organization to determine, gather, and master Knowledge in order to win over the competition through mainly the following sub-activities :

• Exploiting Knowledge untapped until now

• Facilitating common benefit from new form of Knowledge

• Producing new ways of Customer Care

• Wining customers' fidelity to goods and services produced by the organization.

vi. Reinforcing the Organization's Knowledge Culture

It is important that a real change is operated into the organization which eventually lead to a culture emphasizing the prominent role of Knowledge. The latter should be thus perceived not as a luxury activity, nor a tool for authority and control which alienate many from participating. This "Knowledge Revolution" is in no way an easy going exercise for management, but it should be seen as a necessary step towards the Organization's innovation and Excellency drive. [Hacket, 2000]

Developed Organizations such as AMCO devote a daily specified time of the official employee presence to a Knowledge activity in which and under proper management supervision an exchange of information excrescence is undertaken. Of course this official activity should benefit from the latest

facilities available in the Organization such as Meeting rooms, Seminars, and Conferences. [Elliot 1996, 1997]

vii. Intangible Assets Measurement

Usually, only physical assets in business organization such as buildings, machines, and equipment are measured and monitored whereas intangible assets like Knowledge are left aside either because there was no measurement tools or because of lack of interest in their true value. For example R&D expenditures in the past were included into expenditures and not as assets which was rather misleading in reports and causing the deception of Managers who are trying to develop the intellectual capital.

Fortunately, nowadays a growing body of literature is tacking the issue of measuring the components of value-added non physical assets in business organizations either in management rhetoric or in management practices [Strassmann 1996].

Some studies showed that in spite of very tiny investment in Organizational Knowledge (not more than 4%) in term of capital, it does represent two-third of physical assets at market prices. [Atkeson & Kehoe 2002] However, the process of measuring and counting Knowledge value is facing many challenges that can be summed up in the following elements [Turner & Jackson-Cox 2002].

• Devising best practices to invest in developing employees skills and experiences.

• Developing right indicators to measure ROI into the development of Knowledge –based resources.

• Knowing exactly the nature of the relationship between Knowledge and employees experiences on one hand and the Organization's strategic objectives on the other hand.

• How can Knowledge contribute to the organization's success and benchmarking with competitors ?

The first step towards measuring Knowledge reservoir concerns the understanding of the nature of employees Domain (Explicit(Knowledge which is not easy as one might expect. [Howells 1996]

In the bibliography Howell date is 1996 please correct accordingly Domain Knowledge is not only summing up all individual experiences of people inside the Organization. In fact, these individual experiences when put together are deepening and mixing up through interaction and eventually developing into collective experiences to finally become Organizational experiences. [Nonaka & Takeuchi 1995]

The second step implies the evaluation of Tacit Knowledge in the Organization in order to understand how knowledge is produced and developed first and second to prevent knowledge lost/obsoleteness.

Among various measurement methods, the Balanced Score Card is perhaps the most used. This method tries to balance between financial traditional indicators, the customer's satisfaction, internal operations nature, and the Organization capacity to learn and develop. This method provides indicators catering for the Organization's mission and objectives [Kaplan & Norton ,1992].

The Intangible Assets Monitor was developed in 1978 by the Swedish Konrad group in order to monitor Knowledge as the main foundation for any Organization. The monitor concentrates on tree main organizational pillars which are :

• External structure

• Internal structure

• Individual competencies

Each of these components is measured through three indicators which are growth, renewal, and stability. Do Chemical in the States developed a model for Knowledge Assets Management from a strategic perspective in order to create new forms of knowledge continuously. [Petrash 1996] The Jordanian Royal Foundation for Science is a leader in the Arab World in using the same method]Royal Foundation for Science 2003[.missing in the bibliography

viii. Technology Management

Some people do not make any difference between Technology Management and Knowledge Management given the prominent role devoted to Technology in general and Telecommunications in particular. ICT (Information & Telecommunication Technology) as it is referred to is facilitating the production, the conception, the orientation and sharing of information worldwide in a record time. Making available such a huge quantity of Information for business Organizations will help their competitivity and lead them to more profitability.

The problem is in overstating the role of Technology to the extent that some consider it as the driving force behind any Knowledge growth. It is no wonder to say that without the human contribution and thus cultural considerations, the highest Technologies in the World can only yield negative outcomes as far as investment is concerned.

A good Technology Management trough the provision of necessary infrastructure in synergy with decision-making tools will help the Organization in bringing about flexibility in the workplace, in employees cooperation between them, in alleviating customers problem, and in decision making. All these contributions made possible by an intelligent usage of Technology will eventually help in fulfilling two major Management objectives i.e. cost reduction and profit maximizing.

ix. Human Resources Management

Human Resources (HR) can be considered as the most important factor in Knowledge Management. Indeed, employees brains are sometimes referred to as the biggest and most powerful Databases ever known. It is therefore a must for HR Management to encourage new employees to discuss with old ones all work issues. This process will eventually provide people detaining information and experience with consideration and importance. Of cause moral consideration is not enough but HR Management ought to devise a system of incentives to compensate those who detain competency and experience so they share them with inexperienced colleagues.

HR Management should also provide support, leadership and empowerment to workers as well as developing Management rules so as they become compatible with the change objectives.

As an illustration one can cite the example of Sears from the United States whose interest in HR Management has led the company to establish its proper University. Sears staff is therefore encouraged to profit from the University lectures, seminars and training sessions in all Learning areas and especially in performance measuring and incentive systems. [Martin 2000]

2.4 - Importance of OKM Manager

In order to guarantee the existence of Knowledge Culture, it is very important to establish a structure headed by an OKM Manager having a good position in the organization hierarchy. His main duty consists in trying to transform the existing Organizational Knowledge into valuable Organizational Assets which can be mainly achieved trough highlighting its importance for the Organization. He should in particular concentrate on the followings areas :

1. Providing the necessary Resources to be spend on the Knowledge which can yield high returns

2. Providing appropriate Knowledge, disseminating it, as well as explaining the main organization's activities to all the staff

3. Making existing Knowledge easily accessible, exploiting it efficiently and making sure not to duplicate it

4. Winning the organization's leadership strong support to the OKM and its activities.

OKM Manager in order to achieve the afore-mentioned objectives should plan and execute the following actions :

1. Monitor Knowledge situation in the Organization and in particular answer the questions : [Ulrich 1998]

• Who owns Knowledge inside the Organization ?

• Who produces Knowledge produces Knowledge inside the Organization ?

• How to preserve and ameliorate Knowledge inside the Organization ?

• The nature of the Knowledge structure inside the organization ?

• What are the main Knowledge resources available to the Organization ?

• How to facilitate Employees' access to Knowledge ?

2. Regulate Knowledge influx to the exterior and making sure sensible information is not leaked to competitors.

3. Activating Knowledge production mainly trough the dialogue with employees and the dissemination of Knowledge among them which can greatly achieve the process of learning by/trough wrongdoing.

4. OKM Managers should have scientific backgrounds in Human Resources Management (HRM), Strategic management, and Information Technology since they are also responsible for :

• Gaining over the high management's recognition for the importance of Knowledge as the main arm in the competitive market as well as for the existence of knowledge culture inside the Organization.

• Supervising the HRM's concerning the production, and disseminating of knowledge.

• Providing an infrastructure of telecommunications intra and extra muros such as computers, networks, IP…etc.

• Providing and exploiting opportunities for Knowledge diffusion trough appropriate events such as seminars, visits, lectures…etc.

• Guaranteeing the existence of a clear policy which emphasizes the prominent role of Knowledge as well as the necessity to disseminate it.

• Presiding over the team in charge of providing the technology necessary to have the appropriate Knowledge.

• Trying to include the information about the investment of Intellectual Intangible Capital into the Organization's financial center.

2.5 - OKM in Education and Vocational Training

There is a paradox as stated by J. Daniel, the UNESCO Deputy General-Director since higher education trough Universities, Colleges and Institutes study almost everything except themselves. [John Daniel, UNESCO 2003].

When exploring the management of Education/training worldwide, one can notice the scarcity of studies about themes related to OKM. The bulk of research is devoted to strategic planning, cost reduction and eventually quality management in recent times.

These research though scarce do focuses on some traditional areas such as input/output, performances, education costs, and equipment.

Unfortunately organizational and HR aspects in education/training are left aside. When it comes to OKM this is totally a new subject of interest for Educationalists as well as for researchers in management.

The question that merits to be asked here is "can we apply all what have been said about OKM in education/training ?" On the outskirt, there is no doubt that the world of education/training has many peculiarities as compared to the Business arena. Some specificities of education/training can be summed up in the followings :

• Most education/training institutions are public service oriented, thus not profit seeking primordially.

• In the past education/training institutions did not have a keen interest in Information Management perhaps not measuring its practical utility.

• Even when caring for Information Technology, these institutions are rather impressed by the hardware aspect of these technologies.

• The lack of experience of the leadership (academics) in these institutions as far as Management (new developments) is concerned.

• Most efforts are channeled towards quantitative goals, which is jeopardizing innovation and human development aspects in education/training institutions.

Nevertheless, it must be said that two main factors are recently revolutionizing OKM in Education/training, these are :

• ICT revolution and especially Internet, which were initially brought about and eventually developed by universities and academic research centers.

• Efforts being made by International and Multinational specialized agencies such as UNESCO, OECD, World Bank…etc in encouraging research about the amelioration of management and organization in education/training institutions.

In the Arab World, it is sad to notice that up to now, education/training institutions, which are supposed to deliver Knowledge and different sciences to students/trainees, are incapable to organize knowledge internally in an efficient way. They are also unable to make their staff fully benefit from the ICT revolution not as a décor or entertainment but as a powerful incentive to knowledge production and diffusion. [Arab Human Development Report 2003]

3 - OKM IN MADINA COLLEGE OF TOURISM & HOTELS

Madina College of Tourism & Hotels (MCTH hereafter) is a training unit belonging to the General Organizational for Technical Education and Vocational Training (GOTEVT hereafter) situated in Madina Munawara in the Western Midland region of Saudi Arabia. It has been set up in 1997 as Madina College of Technology to cater for post-secondary students in technical fields such as Electrical, Computer, and Management. Electronics and Tourism/Hotels have been added later on.

At the beginning of 2006, a new college has been set up in Madina to be entirely devoted to Tourism, Hotels and Management : Madina College of Tourism & Hotels is hence born.

The study period is 2 years for courses and one term onsite training leading to a vocational middle Diploma allowing its holder to join directly a job whether in the public or private economic sector.

MCTH evolved steadily in all aspects (quantitative & qualitative), but what matters for us here is the technical aspect in general and Knowledge Management in particular.

3.1 - What has been done till now

Given the Technical vocation of the College as well as the GOTEVT continuous support, MCTH planned and executed a number of initiatives in order to cater for the College Community's needs in term of Knowledge Management. It should be however noticed that most of these initiatives (Except the last one), briefly described hereafter, can be categorized as ICT tools. These are :

3.1.1 - MCTH Web-Site

First of all a successful web site has been designed to deal with most of the traditional requirements i.e., informational, library, contacts, departments, forums…etc (see: http://www.mcth.edu.sa/).

3.1.2 - MCTH Intranet

Second, an intranet using simple tools such as the Office Outlook 2000 Professional has been introduced and been extensively used not only as internal mail but also and above all as a knowledge disseminating tool whether for the informal or the formal data among the college audience.

3.1.3 - MCTH E - Services

Third, an e-service has been incorporated into the web site aiming at procuring an array of services for the college staff ranging from managing the student absence to applying for a special vacation.

This multi-services facility acts as a mini E-government in such away it is providing a lot of e-services not only to the MCTH members, but to the entire community. In fact it will be linked to the official portal of Madina E-Government.

(See : http://www.mcth.edu.sa/EServices/ESLogin.aspx)

3.1.4 - MCTH E - Learning

Fourth, e-learning is encouraged as part of a global vision to knowledge capture. So far computer sciences and especially learning for the ICDL (the International Centre for Distance Learning) has been successfully adopted either by students and the staff.

3.1.5 - MCTH Self - Learning

Fifth, Self-Learning is also made available trough a multimedia center to all College members.

3.1.6 - MCTH Onsite training

Sixth, a strategy for onsite interactive training has been applied by the Department of Development in order to use internal competencies to train young member of faculty staff.

3.2 - What should be done in the future ?

Although, OKM is nowadays defacto a visible reality at MCTH, it is nevertheless primordial to deepen the experience and eventually develop it institutionally and organizationally.

As it was precedently outlined, OKM differs substantially from Information Management as well as from any technological tools albeit the powerful Internet.

OKM is rather an organization, a culture, and above all a participatory human endeavor for all which makes objectives be reached and means optimized trough an appropriate management of all kind of knowledge.

It is therefore no wonder to reshape all aspects of organization to make OKM work efficiently and not only focus on the Technological fix (solutions) as the sole tool which can make things work.

A framework is thus proposed by the authors in order to ameliorate OKM first and then to consolidate it, and eventually emulated by other GOTEVT units.

3.2.1 - Model for OKM

The table below contains two types of Knowledge which can be found at MCTH.

Tableau 1 : Knowledge main Components at MCTH

Explicit Knowledge	Tacit Knowledge
Curricula(studies programme)	Values
Procedures	Guesses
Books	Thoughts
Intranet	Know-How
Internet	Experiences
Training (practical)	Images
E-Learning	Perceptions

Of course, Explicit Knowledge is catered for by many initiatives and actions which are formally conducted as mentioned earlier. But the Tacit knowledge is more difficult to first acquire (Hunt) from their depositaries, then to disseminate it trough MCTH.

Using OKM effectively at MCTH is as vital as it is in the Business sector. If done effectively it can brought about the following advantages : [Jillinda J. Kidwell et al, 2000]

• Better decision-making especially related to strategic planning

• Reduced "product" development cycle time (curricula)

• Improved training and administrative services

• Reduced costs

The main idea is to share all Tacit Knowledge which is by definition incrusted within individuals, or the entire community (institution in that case).

There are many examples, which can illustrate the extraordinary reservoir of Knowledge and Know-How tacitly present within people inside the Organization but not used except by its depository i.e. individuals :

• A college member who has led successful curriculum revision task forces

• A department secretary who knows how to navigate the complex proposal development or procurement processes.

• A researcher who has informal connections to a National Science Foundation (King Abdulaziz City of Sciences and Technology for example in KSA).

• A special assistant to the dean who has uncovered (or generated) useful reports that individual head of departments could use to develop their own strategic plans.

• A seemingly dummy member of faculty who turns to be a good moviemaker or a successful web designer.

The challenge in OKM is to convert information that currently resides in those individuals into institutional Knowledge, which means that any person in the college can have easy access to it.

It has been proved that an institution wide approach to Knowledge Management can lead to exponential improvements in sharing Knowledge (implicit-explicit) which in turn maximize benefits. [Jillinda J. Kidwell et al, 2000]

For MCTH to embrace OKM, it needs to reach a certain level of readiness. A key element resides in MCTH internal culture, beliefs, values, norms and behaviors.

To say it simply it is rather about the unwritten rules or 'How things really get done ?"

For practical purpose we propose the following model :

Figure n°5 : MCTH Knowledge Management Model
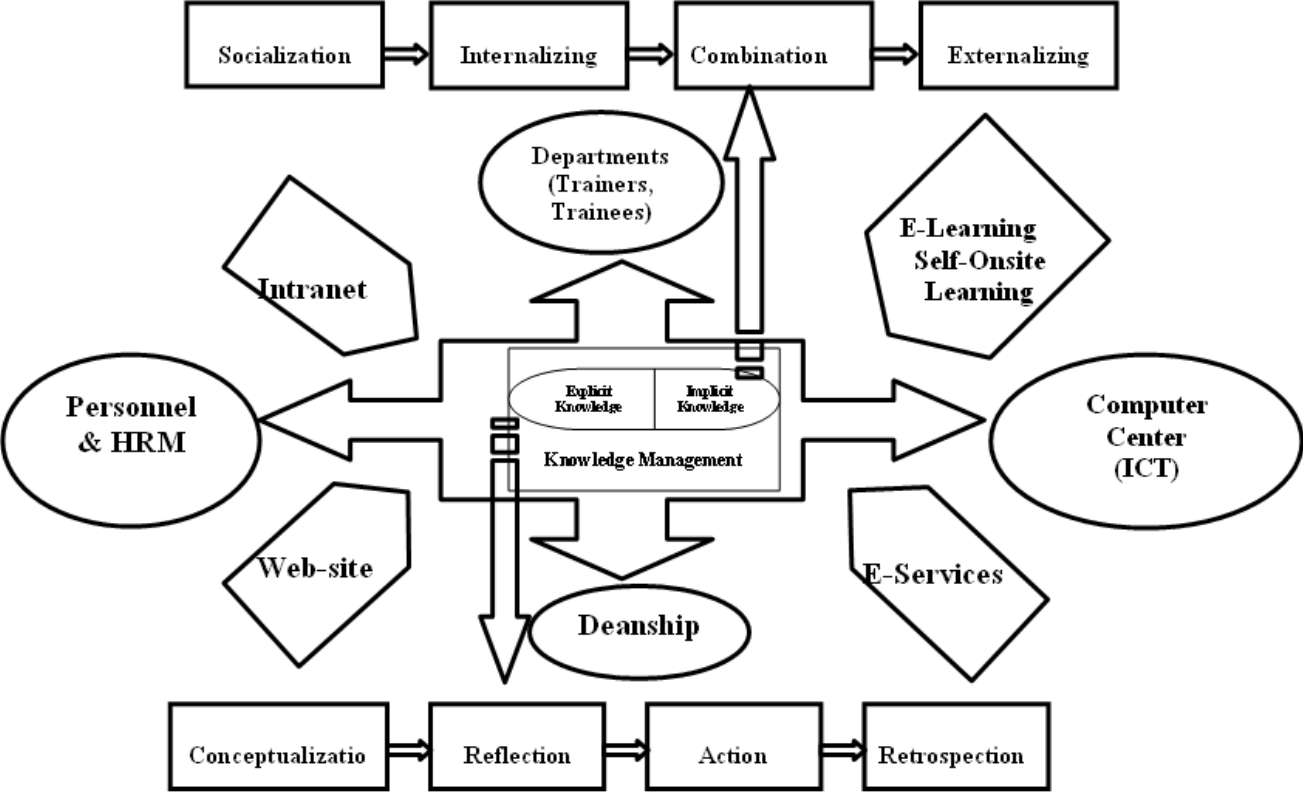
As we can see from figure 5, Knowledge Management is at the heart of the system including its two main components: Explicit Knowledge and Implicit Knowledge.

Explicit Knowledge can be processed trough 4 steps, that is Conceptualization, Reflection, Action, and Retrospection (for details, see page 4). Implicit or Tacit Knowledge needs also 4 processes of development in order to serve OKM at MCTH which are : Socialization, Internalizing, combination, and Externalization (for details, see page 3).

Four main parties, Deanship, Departments, Personnel, and the Computer Center are interacting with OKM at MCTH trough the KMU. As for tools (initiatives) which are enforcing OKM at MCTH, the number is strangely also: the Website, Intranet, E-Learning, and E-services. That is why our model can be called: the Four elements OKM Model for MCTH.

3.2.2 - An OKM Structure and Strategy

OKM efforts need to be structured and organized to deliver the good. We propose that a new functional/organic entity called "Knowledge Management Unit (KMU) be set up and directly attached to the College Deanship.

The KMU will plan, supervise, monitor, and coordinate all activities related to the production, diffusion and usage of Knowledge in the College.

Normally, an OKM manager will be in charge of the KMU and it would be appropriate, should the latter have a good double background either technical and Managerial. A good grasp of Human Resources Management would be a plus.

Since the missions of the KMU Manager have been precedently cited, it is worth while at this stage to precise that his main job is rather a coordination and communication one.

He needs to coordinate at least between four main organic components of the college, which are :

1. Academic structures (Departments)

2. Personnel (HRM)

3. Computer Center (ICT)

4. Deanship (High Management)

It may be opportune to create a Knowledge Management Council within MCTH with all the four precedent structures represented in addition to the

KMU staff in order to coordinate and follow up all Knowledge Management actions and initiatives.

Functionally, he will be heavily involved in strategic planning, human resources development, Organization, decision - making process, Leadership…etc.

Figure n°4 : MCTH Knowledge Management Unit Organigram
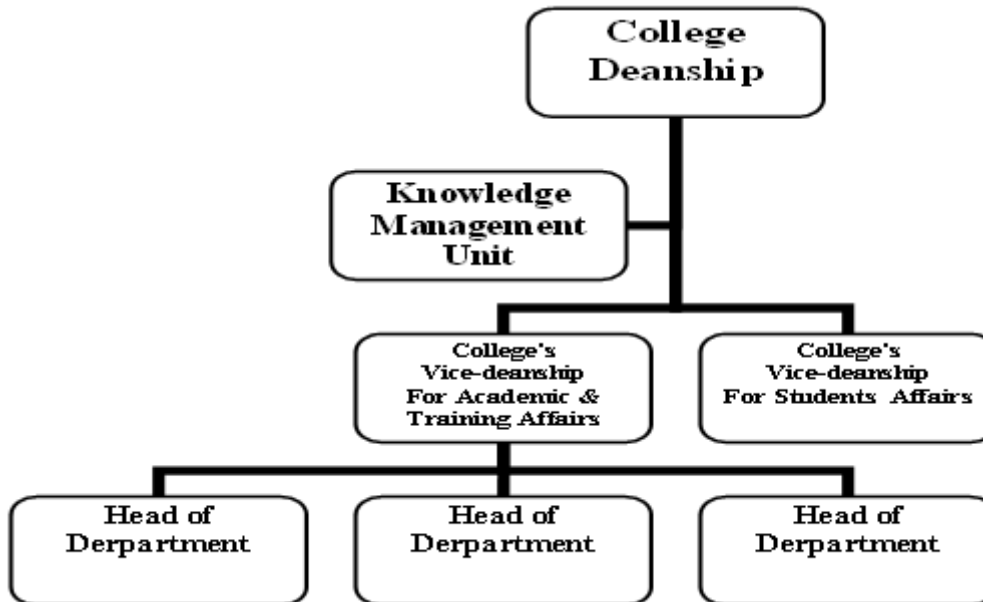
3.3 - Recommendations

In addition to the abovementioned initiatives, which are, rather catering for the explicit form of Knowledge it is very important for MCTH to try to make most of its members benefit from Implicit Knowledge. This can be done trough setting up a system and a structure (KMU) which coordinate and follow up all actions related to OKM in MCTH. Here are some guidelines that can help in institutionalizing a "Culture" of Knowledge intramurals : [Jillinda J. Kidwell et al, 2000]

3.3.1 - Start with a strategy

Prior to any work try to ask your self the question: what needs to be done in the field of OKM ?

3.3.2 - Organize Knowledge Management

Think of the Organizational infrastructure, human resources, financial measurement of success, and ICT needed. However, you should consider the latter (Technology) as an enabler.

3.3.3 - Seek a high-level champion for the initiative

We need someone from the Leadership who is fully convinced by OKM benefits and who can serve for its advocacy. In our case, we think that the

Dean is the best Champion.

3.3.4 - Select a project for OKM

In order to build credibility for Knowledge Management at MCTH, a project with high impact on the College community and low risk will be certainly felt as an enjoyable and rewarding experience.

3.3.5 - Assess the results of the Pilot project experience and refine the action Plan

CONCLUSION

The GOTEVT through its units especially Colleges of Technology is the spearhead of an ambitious and dynamic technical change drive in Saudi Arabia during the last decades.

As the need to cater for an increasing number of national qualified intermediate labour force has never been so immense and urgent, it is no wonder then that the challenge is of paramount scale both qualitative and quantitative.

Many actions and initiatives have marked the short epopee of the young institution, which centralizes all Technical and Vocational education/Training in Saudi Arabia.

Among those achievements, achievements, which relate directly to our theme, i.e. OKM, we can find :

• Curricula Development and Uniformization along National skill National skill standards.

• Technical and Technological Orientation in all aspects.

• Usage and appropriations of ICT tools such as Internet, IP...etc.

• Continuous training and up (grading of training staff.)

• Strong link to the industrial local sector.

• Knowledge Technical dissemination efforts through "Al Thakni" Newsletter and "Al Taaleem Al Fani" Magazine.

• The organization of the Saudi Technical Exhibition and Conference (STCEX) bi-annually.

The project of Knowledge Management at MCTH will certainly boost the GOEVT aforementioned efforts by efficiently manage all kind of technical Knowledge and create a "technical Culture" downstream.

It is the authors' firm conviction that with a minimum of material resources but a strong commitment by the MCTH deanship as well as the GOEVT support most Colleges objectives in term of good technical qualification either for the teaching staff and the trainees will be achieved.

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