

Knowledge Management Implementation in Information Society: A Study of IIUM Library

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ABSTRACT

Most organizations implementing knowledge management are thrilled by the numerous opportunities it offers and the International Islamic University Malaysia (IIUM) library is not left behind in the innovative shift. Even though knowledge management practice is demanded in information society, it does not exist as a full-fledged solution in most organizations yet. The reality in IIUM library is that it already employs certain elements of knowledge management through the use of IT to support various activities from administrative jobs to user education. Among the IT support system used include: the staff intranet and email to share and exchange information, library database to capture and store data and the digital library facilities to serve the diverse interest of its numerous customers. The following questions therefore arise: do these elements of knowledge management available in IIUM library suffice and provide the opportunities it affords? Do the staff and users of IIUM library see it in the light of the benefits that accrue from it? Therefore the purpose of this study lies in its concern for whether the elements of knowledge management involved in the administration of IIUM library is achieving the goals of knowledge management and whether the staff and customers of IIUM library are maximizing the benefits of knowledge management in information societies.

Keywords: Knowledge Management, Information Society, IIUM Library, Knowledge creation, Management practices.

I INTRODUCTION

Knowledge management even though is recently advocated by most organization has been in existence since inception of man. There exists no man on earth that has not in one way or another managed information or knowledge available with them no matter how meager. The first man on earth Adam managed the information he had about the universe and shared it with his wife Eve and they were able to live on earth resourcefully. In fact, Qur'an and perhaps other scriptures of the

world would not have been documented till date if knowledge management never existed; it would have passed away with those that memorized it if it was not shared, documented on leaves, printed on papers and eventually digitized.

The invention of printed materials especially papers and subsequently transition from one type of computers to another would not have come to pass if the notion of managing knowledge has never existed; the difference however, is in the practice not the concept. An African adage goes thus; "when an old man dies; a resourceful library is burnt." Ageing and dearth of information with the demise of resourceful people are some of the problems the new knowledge management seeks to address; this makes the concept universal and pertinent to all organizations that thrive on information. Knowledge management is defined by O'Dell and Grayson, (1997) as a conscious strategy for moving the right knowledge to the right people at the right time to assist sharing and enabling the information to be translated into action to improve the organizational performance. This explains the fact that knowledge management is a deliberate effort to bridge the gap between knowledge and practice and between people and people to promote efficiency within and outside the organization.

Seemann et al, (2002) gives three crucial elements to managing knowledge when he defines knowledge management as the deliberate design of processes, tools, structures, etc. with the intent to increase, renew, share, or improve the use of knowledge represented in any of the three elements [Structural, Human and Social] of intellectual capital. The structure is the organization, the human is the personnel involved in the running of the organization and the social refers to the network and interaction that exist within the organization that enables sharing and managing information.

The definition given by the US Army report, (1999) is tailored towards understanding that information has to be carefully selected for the knowledge repository. It is not meant to be a junk box where both resourceful and unresourceful material can be disposed. The report defines knowledge management as an integrated,

systematic approach to identifying, managing, and sharing all of an enterprise's information assets, including databases, documents, policies, and procedures, as well as previously unarticulated expertise and experience held by individual workers. It is also imperative from this definition that organizations should ensure that tacit knowledge and expertise be made explicit and sharable.

Having understood the concept of knowledge management, it is equally important to understand why most organizations crave to develop it. Rosenberg, (2001) describes the benefit of knowledge management as including; integration of organization skills, knowledge, people and process, creates new insight and ideas, offers access to performance and support tools among others. Some other opportunities guaranteed by knowledge management are; improving access to information, translating knowledge into policy and action, sharing and reapplying experiential knowledge, integrating new employees, avoiding redundant work, reducing training cost, optimizing communication and collaboration, leveraging world-wide competence and fostering enabling environment.

However one stop area in the issue of knowledge management is that there is no converging point as to what knowledge management actually is. Haggie and Kingston, (2003) describes that IT applications that are termed "knowledge management applications" range from the development of highly codified help desk systems to the provision of video conferencing to facilitate the exchange of ideas between people. This suggests that different situation and nature of organization requires different knowledge management strategy. As such several knowledge management strategies have been published to suit different organizations and their peculiar situation.

For the purpose of this study and with regards to the nature of the case study, the strategy formulated by Karl (1997) is examined. He identified six emerging KM strategies which reflect the different natures and strengths of the organisations involved. They are:

- *Knowledge Strategy as Business Strategy:* A comprehensive, enterprise-wide approach to KM, where frequently knowledge is seen as the product.
- *Intellectual Asset Management Strategy:* Focuses on assets already within the

company that can be exploited more fully or enhanced.

- *Personal Knowledge Asset Responsibility Strategy:* Encourage and support individual employees to develop their skills and knowledge as well as to share their knowledge with each other.
- *Knowledge Creation Strategy:* Emphasises the innovation and creation of new knowledge through R&D. Adopted by market leaders who shape the future direction of their sector.
- *Knowledge Transfer Strategy:* Transfer of knowledge and best practices in order to improve operational quality and efficiency.
- *Customer-Focused Knowledge Strategy:* Aims to understand customers and their needs and so provide them with exactly what they want.

In order to set up an appropriate strategy, it is imperative for an organization to carry out a complete analysis of the current situation which will identify the gap between what is available and what is required. Thereafter comes the identification of problems and needs of the organization regarding knowledge creation and sharing. Recognizing what the knowledge asset of the organisation is will enable it to know how to create and transfer knowledge. Identifying all these will help in the selection of the appropriate tools, application and strategy for the knowledge management implementation.

II THE STUDY AT A GLANCE

This case study research employs the use of qualitative research method through the use of open-ended, in-depth interview and content analysis. Series of interview were conducted with the assistant librarian, head of digital library unit, head of customer service, and the library information technology (IT) staff. The choice of these people stems from the fact that they are in the best position to answer managerial and technical questions on the knowledge management issue in the library. Also to determine whether staff and student derive benefit from the library KM, one library staff, two students and one academic staff were also interviewed. Triangulation was achieved with analysis of useful and supportive documents made available by the library. Having scheduled an appointment with the interviewees, the interview sessions were conducted and

audiotaped all ranging between 50 and 20 minutes.

A. Credibility of the Research

The strength of this study lies in its use of data triangulation to ensure credibility and validity of the results. Confirmation of findings was obtained through convergence of different perspectives (librarians, library IT staff, customer service HOD, library staff, lecturers and students) on knowledge management in IIUM library. Also to ensure triangulation, multiple sources of data collection (interview and content analysis) were employed. Yin, (2003) and Denzin and Lincoln, (2008) identify multiple sources of data collection and convergence of different perspectives as ways of enhancing credibility of a study. Other ways of enhancing validity of a finding include extensive quotations from transcript of interview and audio or video recordings or respondents' check to seek further meaning or clarification on ones interpretation of the data (Kvale,1996). Thus, extensive use of the respondents' words in analyzing the themes that emerged from these findings was ensured. Similarly to guarantee accuracy of their statements, further clarification from one of the lecturers interviewed and the library IT staff on the staff intranet tracking data was sought.

B. Data Analysis

The themes identified in this study are: classification, communicative pattern, awareness, problems, opportunities and suggestions.

C. Classification

This theme addresses the element, goal, knowledge asset, and strategy of the IIUM library knowledge management.

D. Elements

The core challenge about knowledge management is that it is relatively new and remains a blur to many and even to individuals within organizations that have implemented it. All the respondents from the library and the students interviewed in this study still are not clear about one thing or the other in the implementation of knowledge management in the IIUM library. Brother H, the head of customer service division, IIUM library describes it thus; "*You know this knowledge management thing is new and broad so much that we don't even know the borderline between KM and other technologies we have in place before like the online database, the portal etc.*"

Dr M, the dean, admission and records and a lecturer in the institute of education, IIUM categorizes the following as part of KM;

The IIUM library portal is a good start. Users need to login to access to their personal data, online catalog and so forth. The digital library can be considered as fundamental core for KM in Library. Users can assess to IIUM theses, exam databases, e-books and so forth. The video on demand section of the library is also a great KM element, though the access to it could be improved further. I noticed the IIUM library has also created the IIUM library communities, such as PERPUN, IFLA and PPM.

The librarian sister S, explains about the library KM;

We are translating tacit knowledge into procedures but not all can be documented, establishing procedures through ISO so that all activities are recorded but not much on tacit knowledge. We are trying to insert the KM element into the library routine for example in the library homepage – the 'ask us' part, answers to questions there are stored in the database. Also, we have the library intranet although it is not really maximized. Database –tools for indexing content, digital library system, some parts are already integrated e.g. digital thesis, video on demand, ebook, e-exam.

Pfeffer & Sutton (2000) reported that firms were investing in knowledge repositories such as intranets and data warehouses, building networks to identify internal resources and implementing technologies to facilitate collaboration. They however complained that this practice reflects a limited view of the possibilities of KM, it only shows preference for codified information such as statistics, written reports, presentations, etc. This is true of the situation in IIUM library KM. The library respondents enumerate the knowledge assets available in the library. Sister S itemized them; "*Our knowledge assets include; statistics, work procedure, thesis, we approach several departments e.g. Centre for Professional Development (CPD), (MSD), research centre to give us resources for us to index and publish through the digital library*". Brother H lists them thus; "*creation by the university in form of publications and research, commercialized materials, staff work process, policies and others*". According to sister F, the Head of the digital library unit, the library knowledge assets

are among others – staff skills, document and facilities.

There is no implementation without its challenges and roadblocks, the library respondents describe the challenges confronting the library KM in their own words. Sister S states; “*Some of the challenges include how to choose the right platform suitable for it, how to get budget from the management, how to source for resources, getting cooperation from staff, kulliyah (faculty) and departments to share their resources*”. Brother H succinctly describes; “*Change is the greatest challenge, it is tough to accept because it involves lifelong learning, you have to learn many things and very fast, sometimes you can't cope or deal with the situation especially getting people to share their knowledge*”.

The success of any implementation is attached to how aligned the strategy plan is to its goals and the goals of the organization. Brother H explains how its goal aligns with the library's goal. “*its goal is to offer information resources to users, to give latest and comprehensive information and to ease staff performance.*” Sister S said; “*the goal of the library KM is to enhance teaching and learning, provide resources and resource sharing.*” Sister F states that; “*Knowledge sharing (which is the goal of KM) aims at increasing productivity and efficiency, it is a tool of decision making, sharing knowledge and expertise.*”

III STRATEGIES AND FRAMEWORK

Once a clear goal has been set, then the framework should be chosen appropriately. A successful KM strategy needs an effective change strategy which involves motivating staff and users, assessing their level of willingness, competency skills, and removing any such imposition that will make the experience painful to them. Dr M describes gracefully the IIUM KM implementation;

IIUM has finally made the right move towards KM by introducing many initiatives towards germinating KM. A good example would be the MYIIUM portal for students and staff. IIUM blog for staff is a good move, though I would expect the same could be made available to students. Having the campus going wireless is also a good move in making sharing knowledge among staff and students easier. BUT IIUM needs a more concerted effort before she can reap the benefits from the KM. A proper KM committee should be

established with clear guidelines of its roles and responsibilities with a given time-frame when KM will be fully implemented in full force. It should be a dedicated committee with sufficient time and resources allocated to them to push ahead the KM efforts in IIUM.

Sister S expresses that the strategy chosen;

inculcates willingness to share, gradual attitude change in individuals and the organization as a whole, “we approach several departments e.g. Centre for Professional Development (CPD), (MSD), research centre to give us resources for us to index and publish through the digital library, we get students' thesis from postgraduate office, exam papers from kulliyah [faculty]. On explicit knowledge we establish procedures through ISO so that all activities are recorded but not much on tacit knowledge has been achieved and we make it accessible to the public so that they do not contradict the copyright.

Brother H states; “*we adopt new advancement in IT e.g. network, web-based process, digitization, library automation multimedia to improve service and efficiency and cater for both staff and users.*”

Sister S attributes the choice of the KM strategy devised by IIUM library as being driven by; “*Need of the users, current trend and top management decision. However, most of these things are already laid down in the Malaysian plan, so it has been planned ahead before implementation*”. Brother H on the other hand linked it to budget, innovation, increasing user and increasing information.

From the analysis of the elements, goals and strategy above, it can be summarized that the IIUM library KM employs a customer-focused knowledge strategy and a part of intellectual asset management strategy according to (Wiig, 1997; Manasco, 1996)'s classification of KM strategy. Not much of personal knowledge asset responsibility strategy that deals with developing and sharing staff's skills and knowledge is invested in. This could be further confirmed in sister Z's statement;

“most of the KM resources we have are mostly for users like the portal, the online database... most of them for users and they use it very well you can see it from the statistics of the digital library services I give you [the researcher] see,

very high rate in six months [220,137], but only intranet for staff and they don't use very well you see this one [staff intranet tracking] some last visit in 2007, some never visit...the intranet is not for communication among staff it is still in the developing stage so it is only used for dumping data, reports, statistics and some things, just like a repository ”

IV COMMUNICATIVE PATTERN

KPMG's KM report 2000 (Barth, 2000) found that the benefits of KM did not live up to expectation because of lack of updates, failure to integrate KM into normal working practice, complicated systems, lack of training and the fact that users did not perceive personal benefits. This was attributed to the nature of communication that exists within the organization and the culture created. Schwen, Kalman, Hara, & Kisling, (1998) address that there are two perspectives to KM: (1) content that can be captured and transferred (2) social process that brings people to fruitful conversation across borders and boundaries. The first perspective is reflected in the IIUM library KM but devoid of the second perspective which is an important factor in most success stories of KM. This is what sister F depicts in her statement about the communication structure of the IIUM library KM;

It is a top-down, formal way of passing information especially through meeting. We should make it informal through email, chatting etc. this way they (staff) tend to share more knowledge. Also lack of two way communication tool - a system or mechanism where staff can communicate freely, there should be two-way communication between the management and the library staff.

The library IT staff, sister Z explains that even though the intranet should be used also as a communication tool but it is maintained as a repository at the moment. She says; “...the intranet is not for communication among staff it is still in the developing stage so it is only used for dumping data, reports, statistics and some things, just like a repository”.

Sister S describes the culture created in the library thus; “it is through directive but it should be voluntary and be made part of the policy no enforcement, also there is less collaboration among units & departments this does not help knowledge sharing”. Brother H surmises that;

“It is authoritative but there is flexibility, we go by directive so there is no reluctance”. Sister S depicts the situation as; “The library culture is enforcement, instruct them, make things official otherwise they will not use, for example we instruct them to put monthly statistic on the intranet so that all can access, so that we don't have to keep many files”.

However sister Z's view, on the enforcement differs from sister S's view above. She expresses that even though staff were enforced to visit the intranet for information like statistics, reports etc., many of them still do not visit it. Analysis of the staff intranet visit tracking provided by the technologist also confirmed a non-frequent log in and in fact 10 out of 48 registered staff have never visited.

V AWARENESS AND MOTIVATION

Research indicates that an effective way of increasing system acceptance is user involvement during systems development (Tait & Vessey 1988). One of the most important factors for success is motivating users/staff to use the system. Steve Foreman in his write-up “Who owns Knowledge Management” explains that many organisations have little understanding about motivation, values and culture. They tend to push all problems to technology solutions but are unmindful of the human performance problem solution. Rossett (2002) also warns that if organizations fail to encourage sharing, knowledge basis and community will languish, no matter the investment in technology.

Sister F's statement confirmed all these when she says;

Awareness is the first step towards successful implementation of KM in the library later is enforcement, provision of necessary tools, gather knowledge to enhance productivity and efficiency, then motivation to boost service excellence. But in our case not all staff are involved or aware, no awareness on the benefit to derive from it and lack of expertise or know-how to use and handle it.

Dr M opined on motivation and awareness about knowledge sharing;

No, these functions are not yet available at the IIUM KM site, even the library themselves do not have avenues to share the experts' knowledge on the site. I believe it is still at the awareness stage, the library is still working with documentation and information creation. Though information is

being shared but management of it is yet to reach the level of distributing the expert stories. It is still far from the enterprise intelligence level.

Sister R a PHD student of institute of Education expresses thus; “*Oh! No such thing as motivation they don’t border.*” But she says this about awareness, “*we were briefed about the resources in the library during the ta’aruf week [orientation for new students] - the thesis online.... We even had a special course (me and my friend), we had appointment with the library staff to teach us how to use the library resources.*”

Brother H says about staff motivation to share, “*one we educate them, we brief them so that they know what is this knowledge management, they know the benefit, from there automatically they can share and contribute when we talk about knowledge management*”. He also has this to say about user motivation; “*Like I said we give faster service, easy retrieval, good marketing and promotion, good interaction between customer and staff, user education and discussion, we create several platform for addressing user complaint information desk, suggestion box, email, phone*”. However sister S proffers a different solution in lieu of motivation; “*train staff then practice established procedures*”.

VI PROBLEMS

No matter how flawless and beneficial a system is, it will in one way or the other encounter some problems but its gravity will depend on how well it is curtailed and managed. One of the problems mostly envisaged and commonly encountered in the implementation of KM is the reluctance of people to share their knowledge, expertise and resources. Hubert Saint Onge describes that, “*Sharing knowledge is an unnatural act. You can’t just stand up & say, ‘Thou shall share knowledge, it won’t work.*”

However, Dr M is one of few others that is willing to share, he divulges, “*I would support the initiative by the library to share information, though some lecturers are reluctant to share their expertise and examination questions for example at the IIUM library site*”. Sister S admits that, ‘*sharing is not easy, we have to make them willing to share but still their willingness is low.*” Brother H also supports the view above by saying; “*Change is the greatest challenge, it is tough to accept because it involves lifelong learning, you have to learn many things and very fast, sometimes you can’t cope or deal with the*

situation especially getting people to share their knowledge”.

Dr M further states on other problems faced with the library KM,

I am not sure whether I really have problem with Library current KM site. The only problem that I can think of some of the databases and e-publication are put there on trial basis. There may be the time when you return to the KM site and found out the databases and e-publication are no longer there. Nevertheless, the problem is minimal compared to what you can get from the library KM site and I noticed they keep adding up new things to the site from time to time.

Sister R complains about accessibility off campus which she attributed to technical problem, she describes her experience; “*when I use it in IIUM, it is accessible but at home I cannot access when it comes to download I cannot download and they said I should configure to IIUM and I did but still cannot download*”.

On how the library combats this problem, brother H explains “*we educate them, conduct briefing so that they know the benefit of sharing and other features of the KM so that they can contribute and cooperate*”. Sister S asserts, “*we inculcate in them to share by explaining the rationale behind it to them*”. Sister Z responds to the issue of accessibility and the technical problem;

There may be something they have not properly configured or maybe they use an incorrect username or password but if they still have the problem they can come and ask how to do it but there is one thing you have to remember when you access off campus, you will come inside the campus through our proxy, it will be a little bit slow because you are going to our server and then they will authenticate it and it will be as if you are on campus.

Brother H also responds to the issue of customer complaint;

... we create several platform for addressing user complaint, information desk, suggestion box, email, phone, people come to our office to recommend, but we have to understand various types of complains, some complain easy to handle and rectified, some complain expensive to handle, need money, need time, need technical know so those have that requirement take time and skill to rectify, or sometime unable to

provide sometime depend on skill, software or hardware which not easy it depends on how deep they ask ,those easy, no problem but those deep, take time.

VII OPPORTUNITIES

One of the ways of enhancing an enabling environment for KM is ensuring easy access. Sister Z asserts that users can access information site by logging in with their username and password.

Brother H explains the level of accessibility available to members differ, according to him, “*there is public domain data that one for majority of the members, they can access, but there are certain people can access the confidential data and again some data are readable and there are some read and write, that’s another category majority of the members can read and access only, key person can alter*”.

Dr M states,

There are lots of opportunities once you become a member of the IIUM communities, for example by going to open access collection you can go to Australian digital theses program to learn on what areas of research that is being conducted by various Australian universities. Similarly, if I go to academic conferences international-ejournal, I can go the various e-journal and read as well as download relevant articles published in these journals. In other words the opportunities and benefits are abundance, all you need is the time to go through the resources and use them in your work.

He further enumerated some of the KM resources that he makes use of, “*I use the video on demand quite a lot, especially the collections related to teaching and learning and some skills enhancement video. E-books on some occasion I do access it but yet to be comfortable with it.*

Sister A, another PHD student of institute of Education is elated when she expresses thus on the opportunities that come along with the library KM,

you can access so many resources from anywhere and anytime, I use everyday, every hour, like 8 hours a day, getting journals mostly, it is important for our thesis, getting exams, I can access anytime either at home, at night 1 o'clock, I can access many journal most of the journal which is from webscophost can access but may be some not by the university cannot access.

Brother H describes the opportunities and benefits that come along with KM as; *currentness, timeliness and comprehensiveness means we can store a lot of info, by currentness I mean we can update faster, timeliness – you can retrieve information in a short time. We give faster service, faster updatation, faster response to customers’ complaint, faster feedback, easy retrieval.*

Sister Z describes the intranet thus; “*it makes sharing easy because we have our statistics, report, training materials and other resources in there so everybody can take, everybody can access instead of going through the files.”*

VIII SUGGESTIONS

Dr M suggests that,

The library could introduce the incentives for staff to share knowledge.(not necessarily has to be monetary rewards, may be in the form of library privileges, better access and others). Knowledge should also be tagged for better management of it. Some structuring is needed to facilitate access and efficient searching for relevant information.

Sister A suggests that, “*The University can make joint venture with other universities (local & international) to create more resources and to reduce cost*”.

IX CONCLUSION

From the above analysis, it is explicit that the KM strategy chosen by IIUM library is more of a customer-focused knowledge strategy and a part of intellectual asset management strategy according to Wiig’s classification of KM strategy. Not much of personal knowledge asset responsibility strategy that deals with developing and sharing staff’s skills and knowledge is invested in. Likewise Pfeffer & Sutton (2000) reported that firms were investing in knowledge repositories such as intranets and data warehouses, building networks to identify internal resources and implementing technologies to facilitate collaboration. They however complained that this practice reflects a limited view of the possibilities of KM, it only shows preference for codified information such as statistics, written reports, presentations. This succinctly describes the nature of IIUM library KM especially with regards to staff.

To address the concerns raise in this study, it was found that customers i.e. library users see it in the

light of the benefits that accrue from it but it is a different story with the staff. It was also found that most of the elements of knowledge management available in IIUM library suffice and provide the opportunities it affords for users but the intranet which is the only KM element developed for staff's use is not fully developed

and well maximized. Therefore it can be concluded that the knowledge management elements involved in the administration of IIUM library is achieving its goals of knowledge management implementation which is primarily to cater for users and secondarily to facilitate staff's work.

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