Knowledge audit: the Agensi Antidadah Kebangsaan organizational case study

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Abstract

The paper discusses the knowledge audit conducted at Agensi Antidadah Kebangsaan Malaysia to evaluate the knowledge management practices in treatments of drug addicts and to gather insights into the types of knowledge that is important in providing necessary treatments to drug addicts. The audit evaluation was carried out using the components of Knowledge Audit such as Knowledge Need Analysis, Knowledge Inventory Analysis, Knowledge Flow Analysis and Knowledge Mapping based on the KeKMa methodology for knowledge audit. The findings from the evaluation indicates the need for incorporating knowledge management in managing the treatments provided at these centers and the feasibility for the implementation of integrated workflow system that would enhance the operations of these centers to provide effective care and treatment in the near future.

Keywords: Knowledge Management; Knowledge Audit, Knowledge Area, Drug Misuse Treatment

1. Introduction

This paper discusses the evaluation of knowledge management (KM) practices in treatments of drug addicts at Agensi Antidadah Kebangsaan (AADK). AADK is the national agency in Malaysia responsible in managing drug rehabilitation centres throughout the country. The evaluation was carried out by conducting knowledge audit during a focus group session by inviting officers from various government drug rehabilitation centers such as Serenti centers and district offices of AADK. Knowledge audit is a step by step examination and evaluation of organisational knowledge health that examines the following: Organisation's knowledge requirements; Identification of existing knowledge assets and resources; Knowledge flow; Future knowledge

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needs; Knowledge gap analysis; and Employees behaviour in creating and sharing knowledge. The knowledge audit would reveal AADK's knowledge strengths, weakness, opportunities, threats and risks. The audit process also would include an examination of the AADK's strategy, leadership, collaborative, learning culture, and technology infrastructure in its various processes. The findings of this study would help transform the AADK into a learning organisation by providing the current state of knowledge management practices of the organisation and a direction of where and how to improve the knowledge capability.

The remainder of this paper is organized as follows. Section 2 presents the reviews of literature related to KM. Section 3 highlights the study methodology, followed by the discussion on the focus group findings in section 4. Finally, Section 5 concludes the paper by discussing the lessons learned and some recommendations.

2. Knowledge Management

Knowledge management is an evolving trend that spans different domains such as business, organisational studies, management, human resources and computers [1]. The emergence of a knowledge economy (k-economy), business globalisation and the innovative forces of technology have combined to create a revolution that forces organisations to reinvent themselves and this is achievable through effective management of organisational knowledge [2]. In recent years, many large organisations have engaged with KM projects either to improve profits, or to be competitively innovative, or simply to survive [3]. The process of managing knowledge involves the execution of such actions as knowledge discovering and capturing, knowledge structuring, knowledge refining and knowledge sharing [4],[5]. These processes are implemented using a combination of organisational, social and managerial initiatives as well as appropriate deployment of technology [6]. The work reported focuses primarily on the technological implementation issues related to knowledge capturing and sharing and the importance of this is highlighted in [5].

Knowledge capture can be viewed as the processes involved during the retrieval of either explicit or tacit knowledge that resides within people, artefacts or organizational entities. Also, the knowledge captured might stay outside the organizational boundaries as it is in the consultants, competitors, customers, and previous employers of the organisation's new employees. Knowledge can reside within a person's mind, without that person having the ability to recognize it and share it with others. Knowledge may also reside in an explicit form in a manual, but few people may be aware about it. For knowledge management to be effective, it is important for the organization to obtain the tacit knowledge from the individual's minds and the explicit knowledge from manuals, so that the knowledge can be shared with others. The knowledge capture process is strongly related to the two SECI knowledge conversion [3] processes of externalization and socialization that helps capture tacit knowledge and explicit knowledge. In a broader view, knowledge capture may also include capturing knowledge from other sources such as books, technical manuscripts, articles and drawings. Knowledge can exist within people (individuals or groups), artefacts (practices, technologies or repositories), and organizational entities (organizational units, organizations, or organizational networks). Knowledge capture is a demanding process in which knowledge developers collaborate with the expert to convert their expertise into a coded program, essentially the processes of codifying knowledge.

Knowledge sharing is the process in which explicit and tacit knowledge is communicated to others and there are three important ways of looking at this process. First, knowledge sharing means related to effective transfer, so that the person who receives the knowledge can understand it well and could carry out actions based on this knowledge. Second, what is shared is knowledge and not recommendations based on knowledge. Third, knowledge sharing occur across groups, departments, or organisations, as well as between individuals. The term transfer and share are interrelated.

Knowledge transfer is a mechanistic term, which provides knowledge for someone else. The term share is an exchange of knowledge between individuals, between or within teams, or between individuals and knowledge bases, repositories and so forth. Knowledge sharing recognizes the personal nature of people's knowledge

gained from experience. It should be noted that technology alone is not a sure prerequisite for knowledge transfer or knowledge sharing. For knowledge transfer to work, it takes a change in culture, in politics and attitude to make things happen, while for knowledge sharing to work, it takes a change in culture, management, politics, knowledge discovery, attitude as well appropriate technology deployment in supporting sharing activities such as online bulletin board, forums, expert seeking tools, messaging, knowledge based systems and directory of expertise.

3. Methodology

The phases of conducting the evaluation of KM practices in AADK are based on the following components of knowledge audit: (a) Knowledge need analysis – identifying exactly what knowledge AADK, its employees and team possess currently and what knowledge they would require in the future in order to meet their objectives and goals; (b) Knowledge inventory analysis – the process of knowledge inventory checking is to identify and locate knowledge assets and resources throughout the entire AADK Treatment unit. This process involves counting, indexing, and categorizing of corporate tacit and explicit knowledge; (c) Knowledge flow analysis - determine how AADK employees find the knowledge they need, and how do they share the knowledge they have. The analysis focuses on people, processes and systems; and (d) Knowledge mapping – the knowledge map is a navigation aid to explicit (codified information) and tacit knowledge, showing the importance and the relationships between knowledge stores and dynamics. It is the mapping of knowledge assets and resources, and how it moves around AADK from where it is to where it is needed. This research is an exploratory study as there is no information on knowledge management implementation at AADK. The unit of analysis for this study was groups that are working on the drug addicts' treatment unit of AADK.

The scope of this study was on evaluating the KM practices in treatments of drugs addicts by focusing on the following: selected respondents from AADK locations in Malaysia, which are Penang, Perak, Perlis and Kedah, and on proven conventional treatments as well as selected general traditional treatments. This paper only highlights the activities related to identification of knowledge areas, how the knowledge is shared and the means of sharing. The research methodology for this study was based on the adapted KeKma knowledge audit process that consists of five stages (available at: *http://kekma-audit.com*). The research instrument was open ended question related to required types of knowledge and knowledge sharing perspectives, which were used to gather data from the focus group discussion. These questionnaires were translated into Bahasa Malaysia (BM) to be administered amongst the selected AADK staffs as the major communication language here is BM. The qualitative data collected in this study was analysed using the content analysis method.

4   Research Findings and Discussions

A total of 41 respondents participated in answering the open ended questionnaire aimed at gathering the subjective view on the knowledge area, knowledge sharing, knowledge availability and technology used in managing knowledge from an individual perspective (12 questions) and organizational perspective (10 questions). 14 respondents are AADK officers (S41-S48) consisting of 8 male and 6 female respondents having various academic background such as bachelor and masters degree in counselling, law, management, public administration, social sciences and postgraduate diploma in drug misuse. The other 27 respondents are non-officers (S27-S38) consisting of 17 male and 10 female respondents having various academic background such as diploma in counselling, law, management, public administration, human development, and others.

4.1 Individual Perspective

The results show that (23%) respondents believed that counselling is the knowledge area that is needed to succeed in their job. This is followed by law (13%), management (13%), communication (11%), psychology (10%), enforcement (10%), and drug rehabilitation (10%), information technology (6%), finance (2%) and pharmacology (2%). The respondents seek knowledge from various sources such as higher authority (68%), colleagues (26.8%)

and internet (4.9%) when they have a problem, and majority of them (61%) believes that they could obtain the knowledge elsewhere. In getting the knowledge when they need it, 63.4% insist that it needs improvement, while 24.4% believe that they can obtain the knowledge when required compared to 12% who disagree. However, 80.5% respondents admitted that it is difficult to obtain knowledge that would be useful to them but they could not get it today. Colleagues (90.2%) are the important people that respondents share knowledge and collaborate with. The specific people that they often ask for help can be grouped into two – friends (68.3%) and supervisors/higher authority (9.7%), with 78% of the help required are related to 'how to do something (procedure related questions). The type of computer tools/databases used on the regular basis includes: (1) MS Office applications; (2) National Drugs Information System (NADI); (3) Internet; and (4) AADK website. Amongst the questions that are frequently asked by others to the respondents are matters related to decision making (42%), drug addicts (17%), treatment programs (10%), and operating procedure (7%) and others (12%). The barriers to knowledge sharing between the respondents and work colleagues can be grouped as following: time (29%), technology (19%), communications (15%), different type of knowledge (15%), attitude-individualistic (6%), different information level (4%), location (4%) and non-barriers (8%). Nevertheless, majority (70.7%) of the respondents agreed that their knowledge is valued by the organization and almost half of the respondent (56%) routinely document their tacit knowledge for future use either for themselves or for others.

4.2 Organizational Perspective

Respondents believe that the means of tapping into existing and potential knowledge resources are through documenting the knowledge (38%), using information technology means (25%), learn by asking - not documented (19%), training (10%), workshop (4%) and finally some respondents (4%) believe there is no such effort. Many of the respondents (63.4%) also believe that the organization has maps of organizational knowledge, and around 56% of them agree that they know how knowledge flows through the organization. The organizational knowledge are communicated through socialization activities – sharing (38%), documentation (22%), training (12%), information technology (6%), promotion (2%), and on the other hand nothing is done to protect the knowledge (22%). The respondents believe that the ways to minimize the loss of important organizational knowledge when key knowledge holders leave is by documenting the important knowledge (49%), training conducted by the holders (27%), adoption of technology to capture the knowledge (11%) and be apprentice to the holders. Majority of the respondents (78%) disagree that people in the organization are rewarded for sharing the knowledge. However, many of them (70.7%) believe that they really know what knowledge is critical for the organization's success. Furthermore, almost half of them (48%) believe that they are reinventing the wheels (doing duplicating effort) in performing the designated job function. They also agree (68%) that knowledge is extracted as a by-product from existing systems. Moreover, they rank the following as the providers of the organization's most important knowledge: (1) knowledge gained from training; (2) knowledge learned from seminar; (3) knowledge from people (staffs/addicts); (4) knowledge from explicit source (published materials); and (5) internet. Some respondents (15%) believe that there are no providers of knowledge.

4.3 Knowledge Area Profile in Drug Addict Treatment

Several knowledge areas are identified from the brainstorming / workshop sessions, with two groups of respondents consisting of S27 – S38 non-officer group and S41 – S48 officer group, representing field officers and administrators respectively. The respondents are asked to list down eight (8) possible knowledge areas that they believe or require in order to increase the success rate or effective way of treating drug addicts. In the S27 - S38 group, the eight (8) knowledge areas is individually ranked. However, in the S41 – S48 group, respondents are divided into three (3) groups. Each group discussed among themselves to identify the eight (8) knowledge areas. Upon identifying the knowledge areas,, the respondents are then required to indicate the ownership (organization, group, or self) of these knowledge, state the knowledge type (recorded or unrecorded) and its' sources. The knowledge area lists are then tabulated and the total counts for each knowledge areas are

recorded. In addition, the knowledge area are ranked accordingly and the best eight (8) knowledge areas that is potentially important and useful for treating drug addicts are then identified.

Administrator Perspective (S41 – S48)

The analysis of the knowledge areas profile highlighted that all the three (3) groups have conclusively agreed that religious knowledge, mangement, interpersonal skills, and information technology are important and useful in performing their job successfully as shown in Fig. 1. Furthermore, client management, counseling, treatment & rehabilitation, communication, and attitude management are overwhelmingly agreed. In terms of ownerships, (68%) of the respondents believe that these important and useful knowledge belong to AADK as an organization. Majority of the repondents (51%) believe that the knowledge areas are recorded or in explicit form, while 49% believes it is unrecorded or in tacit form. The knowledge areas originate from various sources. These sources are training or talk (25%), book or journal (20%), SOP or manual or general order (11%), intellectual discourse (11%), internet (11%), experience (11%), external entites (6%), and continue formal education (5%). The nature of knowledge source provides some idea pertaining to the type of knowledge i.e tacit and explicit. The source of explicit knowledge areas require a good knowledge base systems so that recorded knowledge areas are well organized for better retrieval when required. On contrary, AADK must find a way to codified the tacit knowledge into manuals to retain the knowledge for future use as officers are usually responsible in writing SOPs and manuals for the field officers so that the knowledge can be retained within AADK in a form that could be shared easily.
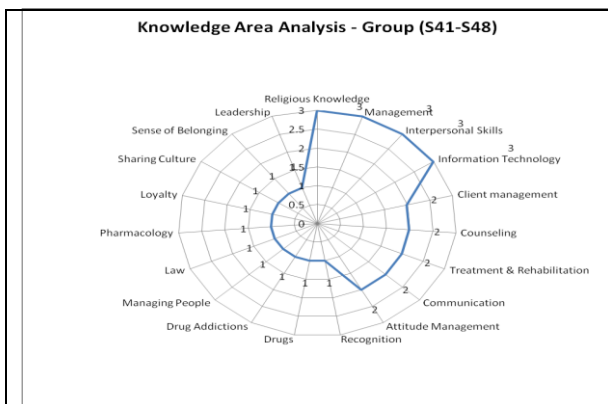

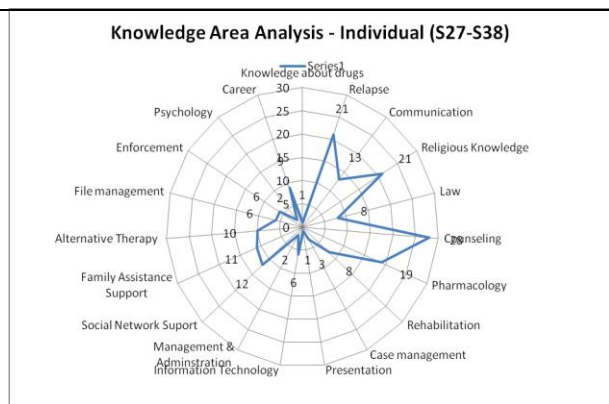Fig. 1. Knowledge Area Analysis – Group (S41-48)

Fig. 2. Knowledge Source – Individuals (S27 – S38)

Field Officers Perspective (S27 – S38)

The analysis of the knowledge areas profile indicated that respondents conclusively agreed that counseling, religious knowledge, and relapse are importance and useful in performing their job successfully as shown in Fig. 2. Furthermore, pharmacology, communication, alternative therapy, family assistance support, and social network support are overwhelmingly agreed. In terms of ownerships, (43%) of the respondents believe that these important and useful knowledge belong to AADK as an organization. Majority of the repondents (65%) of the knowledge areas are recorded or in explicit form, while 35% believes it is unrecorded or in tacit form. The knowledge areas originated from various sources. These sources are training or talk (21%), book or journal (20%), SOP or manual or general order (16%), intellectual discourse (12%), internet (13%), module (6%), experience (4%), external entites (5%), and continous formal education (3%). The nature of knowledge source provides some idea pertaining to the type of knowledge i.e tacit and explicit. The source of explicit knowledge areas require a good knowledge base systems so that recorded knowledge areas are well organized for better

retrieval when required. On contrary, AADK must also find a way to codify the tacit knowledge so that it can be retained within AADK.

As a result of consolidation all finding pertaining to knowledge areas (KA) profile, the eight (8) highest ranked knowledge areas are identified according to it importance and usefulness in supporting successful treatment of drug addicts. These knowledge areas are: (1) knowledge related to providing counselling services; (2) knowledge related to religion; (3) knowledge related to relapse; (4) knowledge related to pharmacology; (5) knowledge related to communication; (6) knowledge related to social network support; (7) knowledge related to family assistance support; and (8) knowledge related to alternative treatments. All these knowledge area must have well defined ownership structure (self/group/organisation), well documented for current and future references, and the source of the knowledge must be known, verified and communicated to all parties involved in providing treatments.

4.4   Discussion

Staff at AADK especially the junior recruits have the tendency to share their knowledge across their department as they are used to the concept of collaboration during their college years. This experience is positively reflected when they perform their job functions at AADK. Furthermore, they believe that knowledge creation within organisation does not have to be initiated or funded by the department. This can be seen in their willingness in buying published materials related to counselling and sharing it across department by establishing reading corner (mini library) in the office.

Counselling activities at AADK are conducted based on well-documented manuals, standard operating manuals, and government general orders. These documents are stored in explicit form and are available at all AADK offices throughout the country and are accessible to all staffs whose job functions grant access these materials. Furthermore, these documents provide the basic and intermediate knowledge required by the staffs in providing counselling to their clients. Therefore, the development of these documents in a web-based system will enable AADK's staffs to easily obtain the precise knowledge required and the department could facilitate the storage and retrieval of these documents.

Having quick access to the explicit knowledge related to counselling and other job functions are important to AADK as currently staff members do have to re-invent the whole wheel all over again when addressing the same or similar problem. Reuse of existing knowledge resources can be achieved manually through sharing of knowledge resources between staffs or electronically by implementing lesson-learned systems, cataloguing best practices, documenting non-routine problem and developing case database. Having a reward system for reusing could improve knowledge sharing activities and encourage staffs to contribute their precious knowledge with others (senior staffs to junior staffs). AADK staffs believe that collaboration across organisation units should take place as this will enable AADK to react swiftly to changes in marketplaces. When staffs collaborate, they share their knowledge resources and share the knowledge learned within the units to other units. This enables AADK to become a learning organisation, where continuous learning would be a competitive advantage for it to met the ever challenging environment (*increase in various new drug types*) in providing treatment for drug addicts.

5   Conclusion

This paper have discussed the results of conducting knowledge audit at AADK and highlighted the types of knowledge that is important in providing effective treatments at drug rehabilitation centres. The importance of managing knowledge is not only important in profit oriented organisations but is also vital in government organisations as effective management of knowledge resources would enhance decision making processes in both types of organisation. The process of discovering the types of knowledge that is crucial to the organisation and providing the technological means in managing it is the way forward as both explicit and tacit knowledge could further be enhanced using the latest tools that support knowledge management activities. The future

work in this study involves the development of a centralised knowledge repository for managing AADK organisational and staffs' knowledge effectively and efficiently.

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