
Knowledge Management Framework for Governmental Organization to Improve Public Service Delivery

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Abstract:

Information & Knowledge has become a critical asset in any organization either private or public. For the public service in particular, the need to be more innovative in decision-making and service delivery. Employees in the organizations may leave due to transfers, retirements and death. When someone leaves, their knowledge, skills, competencies, understanding, and experience leaves too. At this point of view Knowledge management (KM) can save losing critical knowledge and provides an opportunity to mitigate the effects of such loses. If there is sufficient process to track lessons learned and best practices followed by employees, then it will allow sharing best practices. There are same for other public sectors such as Provincial offices and other District Secretariats to maintain effective Knowledge Management, then there should be a competitive advantage and business value. Therefore they can provide better service to the public. KM focuses on organizing and makes available important knowledge, wherever and whenever it is needed. The aim of this study is to raise awareness of knowledge management, support governmental organization in achieving their objectives and to prepare suitable knowledge management framework. Data were gathered through questionnaires and distributed to knowledge workers at Batticaloa District Secretariat. Based on the information gathered, a framework has been developed targeting Batticaloa District Secretariat.

Key words: Knowledge Management, Public Sector, Knowledge Management Framework, Information Technology, Governmental Organization

1.0 Introduction

The demand for more efficient and effective delivery of public services has increased recently. Currently ICT (Information and Communication Technology) applications are widely being used to increase the efficiency and the productivity in all sectors. Globalization and technological innovations have caused a move from the industrial to the knowledge age [1, 2].

Public administration can be generally described as the “development, implementation and study of branches of governmental policy” [5]. For effective public administration, it is important to promote the knowledge-supportive culture. Public sectors have major focus on delivering quality work without delay. Quality of public services depends on many factors such as governmental structure, employees’ responsibilities, skills, experience, information, and available knowledge.

Knowledge is not easily measured or audited, so organizations must manage knowledge effectively in order to take full advantage of the skills and experience inherent in their systems. It is not a technology, although technology should be exploited as an enabler. According to Thomas Devenport the definition of Knowledge is “a fluid mix of framed experience, values, contextual information and expert insight that provides an environment and framework for evaluating and incorporating new experiences and information” [7].

Knowledge management is a managerial activity which develops, transfers and applies knowledge, as well as providing the members of the organization with real information to react and make the right decisions, in order to attain the

organization's goals. It is well-known that KM offers organization's significant opportunities for innovation and change, if applied to public sector, the demand for services to be delivered efficiently and effectively will be responded [3, 4].

This document is organized as follows. It starts off with the general introduction of the research area. Literature review is presented in section 2. Methodology is discussed in section 3. Results and Discussion is discussed in section 4. Finally this paper winds up with the conclusion.

1.1 Problem Statement

Since employees may leave an organization, there is a possibility of loss of useful knowledge, skills and experience. This effects the smooth operation of the organization. Therefore have to wait for a long time to complete such work until a new person comes and replace the job position. When the new person takes over the position, he or she may face difficulties to continue the work and takes some time to adapt to the new culture and environment. No such facility available to get updated information/ knowledge for employees in the governmental organization. And also information/ knowledge are not available in a central place. Information seekers may have difficulties to search and access experts' knowledge within the organization.

1.2 Main Objective

To examine the possibilities of retaining experts' knowledge in the organization and make it available for others which they can use to improve the quality, productivity and efficiency of the business in that organization.

1.2.1 Specific Objectives

- To examine literature in order to find out current status and their information/ knowledge requirements of the public administration.
- To propose a suitable KM framework which can be used to develop Knowledge Management System for the organization.

2.0 Literature Review

There are different perspectives of knowledge management as shown in figure 2.1. Knowledge mainly can be classified as Tacit knowledge and Explicit Knowledge [7]. Tacit knowledge is embedded in the human mind through experience and jobs. It is highly experiential. Explicit knowledge codified and digitized in books, documents, reports, corporate policy manuals, databases, etc.

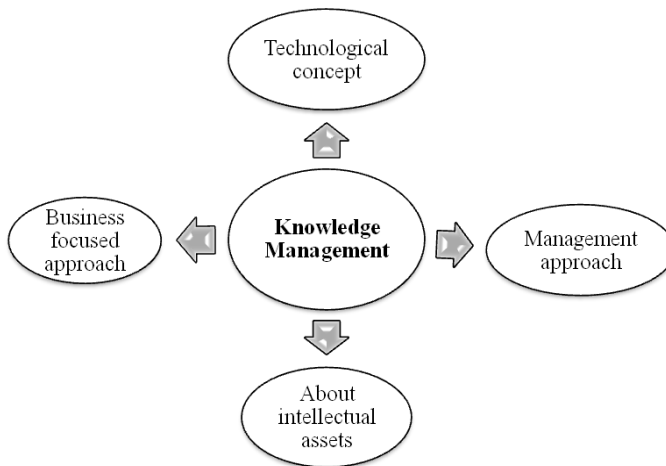


Figure 2.1: Perspectives of Knowledge Management

Growth of Knowledge Management (KM) began with the dawn of the Internet. By the early 1990s, the private sector, notably large companies such as IBM, Xerox, Hewlett-Packard, and

Chevron, had begun to apply their technological capabilities to managing knowledge [2, 9]. In general, the public sector has been relatively slow to adopt the concept. Few studies have been performed on knowledge management in the public sector.

KM is seen as a key initiative recognized as essential to information sharing and access between public sector agencies and between public sector and the citizens they serve [6, 8]. Barriers to successful KM adoption are largely from lack of awareness and lack of time [8]. The lack of time can be interpreted as lack of awareness of KM's importance. These trends point to an opportunity for governments from developing nations to use KM as a key driver towards increasing public sector productivity and building trust in government by focusing on a few key policies and designating the accountable department to driving these policies into effective implementations.

3.0 Methodology

Since, District Secretariat is a Knowledge based organization where major asset is data and information which is available to the public and it was selected for the study. A broad range of information related to knowledge management is required in order to develop a solid understanding of the topic from the perspective of a variety of divisions at Batticaloa District Secretariat. Primary and secondary data were used. Primary data was collected using structured questionnaires. There are several types of secondary data such as census, official statistics and web information which has been included here. Based on the quantitative and qualitative data analysis, this research study proposes a knowledge management framework to provide better service to public.

Scope of this research includes an analysis of Batticaloa District Secretariat, particularly the divisions such as administration, accounts, assistant district secretary unit, land

registry, land reforms, cultural affairs, samurdhi, planning, social security unit and consumer affair authority which are dealing with the public.

Methodology focuses on data collection, data analysis, research outcome and propose KM framework as illustrated in figure 3.1.

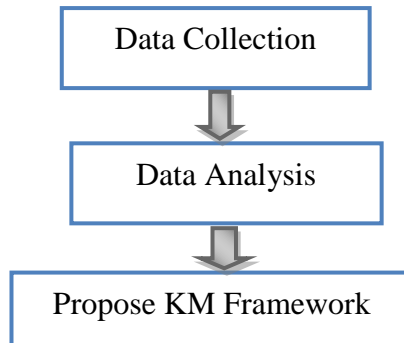


Figure 3.1: Block diagram of proposed methodology

Divisions come under Batticaloa District Secretariat were considered as the population of this study. The population has further confined to ten divisions using purposive sampling technique. Questionnaires based on literature review of research and find out the categories of gained knowledge, information, best practices, data they need, processes and lessons learned.

This study was conducted among 60 respondents in Batticaloa District Secretariat, using structured questionnaires distributed to different groups of respondents (from ten divisions) using two stage cluster sampling. In two stage cluster sampling, the total population is divided into groups (or clusters) and a sample of the groups is selected. Then the required information is collected from the elements within each selected group.

4.0 Results and Discussion

Data analyzed using SPSS 16.0. The ways knowledge workers of Batticaloa District Secretariat use to complete their work are their knowledge and skills, experience and shared knowledge. According to the analyzed results which are shown in figure 4.1, most of the knowledge workers use Non-IT related tools and few use IT related tools to capture or share knowledge within the district secretariat. Non-IT related tools include verbal communication with others, attending workshops/conferences, documentation, training, mentoring, meetings and other.

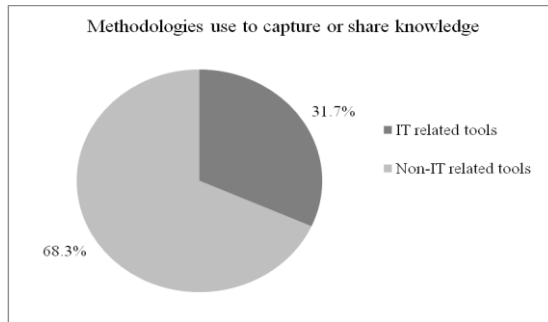


Figure 4.1: Analysis about Knowledge Management methodologies

Following figures show the ranking orders of respondents' opinions about reasons for KM practices and problems they have in using information technology for KM as shown in figure 4.2 and 4.3 respectively.

Table 4.1: Reasons for KM Practices

Reasons		Mean Rank
R1	To improve the competitive advantage	2.76
R2	To help integrate knowledge	3.28
R3	To improve the capture and use of knowledge from external sources	3.25
R4	To improve sharing or transferring of knowledge	3.34
R5	To protect from loss of knowledge due to worker's departures	2.35

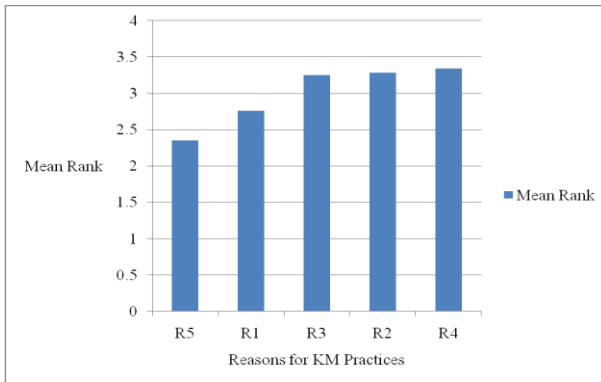


Figure 4.2: Reasons for KM Practices

Table 4.2: Problems when using Information Technology for KM

Problems	Mean Rank	
P1	Lack of training	4.48
P2	Lack of identifying the proper IT tool	4.52
P3	Lack of time to learn	3.57
P4	Unsuccessful due to technical problems	3.52
P5	Low computer literacy	4.44
P6	Fluctuation in electricity	4.31
P7	Budgetary constraints	5.65
P8	Insufficient information technology (IT) equipments	5.51

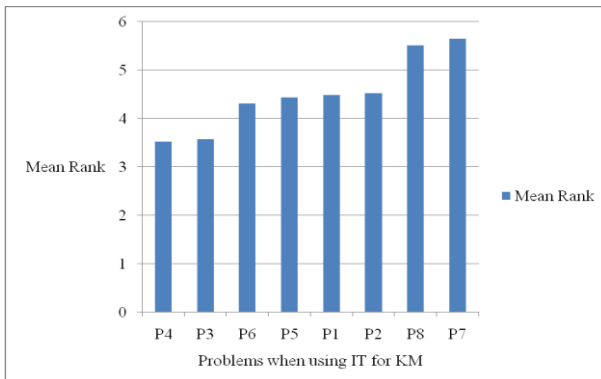


Figure 4.3: Problems when using Information Technology for KM

Summary of the Data Analysis:

- Majority of the respondents' work experience 1-5 years.
- Majority of the respondents (62%) were directly dealing with public.
- Number of clients handle per day
 - 1 - 5 clients =30.6%
 - 6 – 10 clients =27.8%
 - 11 – 15 clients =13.9%
 - more than 15 =27.8%
- According to analyzed results which shown in figure 4.4, most of the knowledge workers (68%) use non-IT related tools and few use (32%) IT related tools to capture or share knowledge within district secretariat.
- Once they have a knowledge management system, they realize that it will play major role in sharing best practices and help in enhanced productivity or service delivery.

Therefore this study proposes a solution to cater knowledge processes such as creation, storage/retrieval, transfer and application. Different kinds of knowledge resources need to be preserved and utilized in district secretariat is shown in figure 4.4.

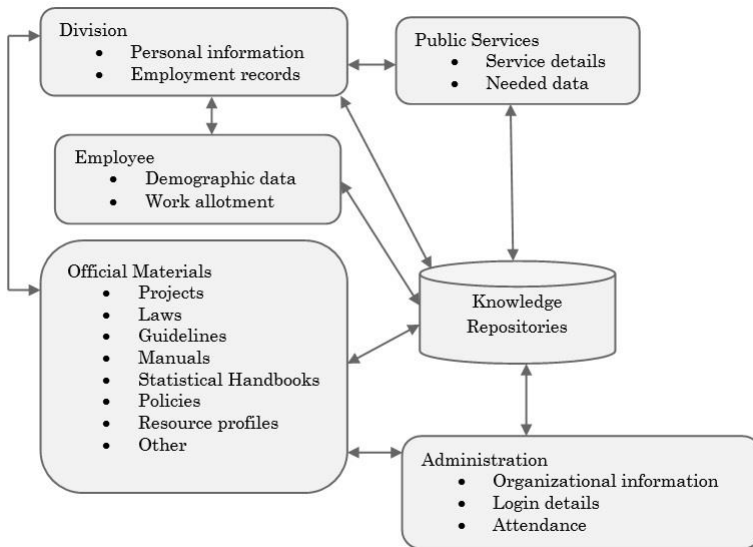


Figure 4.4: Knowledge resources

An organization's knowledge management system is the collection of information technologies used to facilitate the collection, organization, transfer and distribution of knowledge among employees. Specifically, benefits of applying Knowledge Management technologies in the District Secretariat include:

- Facilitate effective communication throughout the entire district secretariat and break down the barriers created by geographic isolation (External departments, Non government organizations and other agencies)
- Reduce the financial costs of communication and travelling and length of time it takes to make decisions.
- Create a sustainable competitive advantage through the creation of working environment that shares knowledge so it can cope with any change, no matter how large.
- Knowledge is available whenever it is needed, eliminating time-wasting distribution of information. Put in place work procedures and best practices to help

staff to share knowledge and information with their colleagues.

These knowledge resources can be accessed by a knowledge workers to perform several tasks as illustrated in figure 4.5.

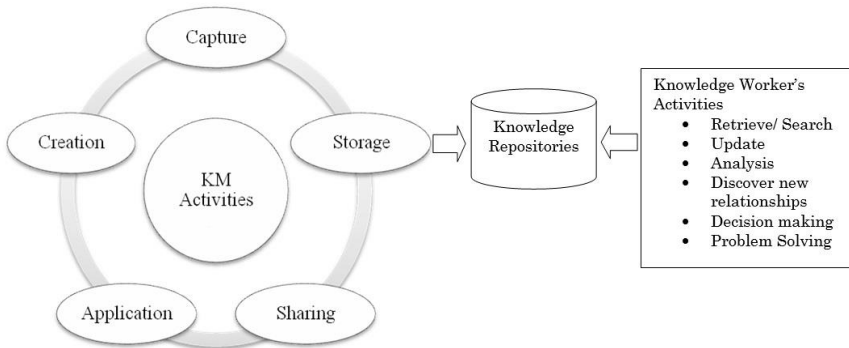


Figure 4.5: KM framework

Expected functionalities of the proposed KM framework to improve public service delivery are:

- Store documents electronically
- Store scanned images of paper based information
- Retrieve the documents when needed
- Distribution
- Maintain knowledge worker's personal details and employment details
- Facilitate Searching and collaboration
- Maintain series of public services details
- Generate reports

5.0 Conclusion

Knowledge Management is acquisition and use of resources to create an environment in which information is accessible by individuals for the benefit of the organization. The ultimate

objective of this research is to maximize productivity in the public sector while enhancing public service delivery. The aim of this study is to raise awareness of KM and its potential to support governmental organization to retain and utilize experts' knowledge which can be accessed by authorized employees. A questionnaire was prepared to collect data from Batticaloa District Secretariat. Based on the gathered data and the data analysis, proposes a knowledge management framework which will be helped to develop a knowledge management system (KMS) for district secretariat. When use KMS, it provides quality services to the public and to gain competitive advantage. This framework helps to address the communication gap among different divisions and reduces the financial costs of communication and travelling.

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