

**DEVELOPING THE RECORD MANAGEMENT AND FILING  
STRUCTURE IN THE ORGANIZATION USING  
KNOWLEDGE MAPPING TECHNIQUE**

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**ABSTRACT**

*Managing records, physical or electronic, are now more challenging as the data and information are overloaded in various types of medium. Information professional, records manager and archivist are facing tremendous challenges to ensure the proper organization, identification, storage, retrieval, circulation and disposal of records in the organization. The awareness on the importance of managing records in many organizations contributed to the failure of most records management initiatives. This paper attempted to document tacit experiences in developing records management and filing structure in the higher learning organization with knowledge mapping technique.*

**Keywords:** Knowledge mapping; Knowledge translation; Records management; Taxonomy

**ABSTRAK**

*Buat masa kini, pengurusan rekod, fizikal atau elektronik, adalah lebih mencabar memandangkan data dan maklumat sarat dalam pelbagai jenis perantara. Profesional maklumat, pengurus rekod dan arkivis menghadapi cabaran yang amat hebat untuk memastikan penyusunan, pengenpastian, penstoran, capaian kembali, sirkulasi dan pembuangan rekod dilakukan dengan sempurna dalam organisasi. Kesedaran betapa pentingnya pengurusan rekod dalam banyak organisasi menyumbang kepada kegagalan kebanyakan inisiatif pengurusan rekod. Kertas ini cuba untuk mendokumen pengalaman tidak bertulis dalam membangunkan pengurusan rekod dan struktur penyusunan fail dalam organisasi pembelajaran tinggi melalui teknik pemetaan pengetahuan.*

*Sharifah Fahimah Saiyed Yeop*

**Kata kunci:** Pemetaan pengetahuan; Penterjemahan pengetahuan; Pengurusan rekod; Taksonomi

## **INTRODUCTION**

The proper management of records in an organization is crucial as they are a vital corporate asset and are required to provide evidence of actions and decisions. Records are becoming more important in an organization to support accountability and transparency, to comply with legal and regulatory obligations including Data Protection Act and Intellectual Property Act. In the higher learning organization, for example, the records are important to protect the interest of academicians, students and other stakeholders.

Knowledge mapping is one of the techniques used to identify and translate knowledge in an organization. Knowledge of administrative personnel, support staff, management experts, researchers and academicians exist in records such as minutes of meetings, memo, financial documents, presentation slides, letters, research articles, conference papers and others. The proper organization of these materials will support the knowledge translation through integration of knowledge map and conceptual framework for understanding many complex processes, resources and people involved in the organization.

The objective of developing the filing structure in an organization should not only to produce standard guidelines in managing files and records, but it should help us to understand how knowledge flows and where the assets are. The filing structure should be used as a comprehensive tool to understand complex processes, practices, and should be able to trace the non-efficient process flow in an organization.

## **OVERVIEW OF KNOWLEDGE MAPPING**

A knowledge map is “an association of items of information (e.g. process, network, policy, geography...), preferably visual, where the association itself creates new actionable information“ (Vail, 1997). “A knowledge map is the intellectual infrastructure for knowledge management initiatives. The basis for it consists of multiple taxonomies for content repositories, dynamic categorization of people, their expertise, and the communities they belong to, and finally a set of taxonomies for the variety of tasks that are performed within and by the company’s communities. The taxonomies of content, people, and tasks then

*Developing the record management and filing structure in the organization using knowledge mapping technique*

have to be mapped across the three components in order to provide a foundation for such knowledge management enterprise projects as knowledge retrieval for both document based knowledge and the tacit knowledge located within the minds of the company experts.” (Anon, 2003).

According to Grey (1999) a knowledge map is a navigation aid to explicit and tacit knowledge, illustrating how knowledge flows throughout an organization. Knowledge map portrays the sources, flows, constraints and terminations of knowledge within an organization. Knowledge mapping helps to understand the relationship between knowledge stores and dynamics.

Knowledge mapping is the process of creating the knowledge map, which consist of the steps of examining the documents and materials type, where the resources and materials is located, where it is created, how it is moving around in the organization, where and when it is needed. The effective knowledge map should be created with reference to four elements namely the function of the map, knowledge type, the users or recipients and the map type (diagram or map).

Davenport and Prusak (1998) noted that the development of a knowledge map involves locating important knowledge in the organization and then publishing some sort of list or picture that shows where to find it. Knowledge map typically points to people as well as documents and databases.

**KNOWLEDGE MAPPING : A MODEL**

There are many knowledge mapping models and framework that have been developed and a wide variety of software exist to do the knowledge mapping. A knowledge map may not be similar from one organization to another, depending on the environment and knowledge that we are dealing with. For example the knowledge map developed in an industry may differ from a higher learning institution. Below are some entities that determine the model of knowledge mapping in organization.

- a. People - the person who is significant to such process, experts and researchers that are interested on certain knowledge from others
- b. Process – flow of process involved for business in an organization for each department and dependencies on data, information and knowledge required by them

*Sharifah Fahimah Saiyed Yeop*

- c. Knowledge resources – files, document (articles, letter, memo, and others)
- d. Terms – keywords used to describe each concept

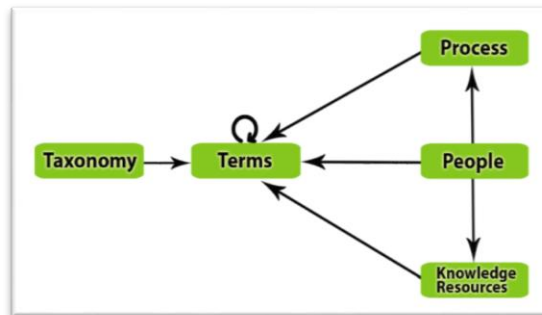


Figure 1: Relationship between knowledge entities that produced the structure of knowledge in the organization

The taxonomy structure is the final product of the knowledge mapping process. Taxonomy in the organization or so called corporate taxonomy is the hierarchical classification of entities of interest of an enterprise, organization or administration, used to classify documents, digital assets and other information.

CORPORATE	
2	2.1 Human Resource and Management
8	2.2 Improvement and Quality Assurance
17	2.3 Corporate Services
38	2.4 Health Safety and Environment
30	2.5 Research and Innovation Office
42	2.6 Finance and Fund Management
63	2.7 Registry
85	2.8 Information Resource Centre
45	2.9 Information Technology and Media Services
39	2.10 Mosque Administration
91	2.11 Security Services
62	2.12 Student Support Services
68	2.13 Residential College
69	2.14 Property Management and Maintenance
70	2.15 Vice Chancellor
71	2.16 Deputy Vice Chancellor
72	2.17 Alumni
73	2.18 Transformation Office

Figure 2: The examples of corporate taxonomy produced from the knowledge mapping process

*Developing the record management and filing structure in the organization using knowledge mapping technique*

Row	Code	Description
2	2.1	Human Resource and Management
8	2.2	Improvement and Quality Assurance
17	2.3	Corporate Services
38	2.4	Health Safety and Environment
39	2.4.1	Planning & Procedures
75	2.4.2	Implementation & Monitoring
82	2.4.3	Audit
85	2.4.4	Management Review
86	2.4.4	HSE Annual KPI result
87	2.4.4	HSE Policy and Strategic Objective Review
88		
89		
90	2.5	Research and Innovation Office
91	2.5.1	Grant
92	2.5.1	Agreement
93	2.5.1	Research Officer Matters
94	2.5.1	Financial
95	2.5.1	Purchase Requisition
96	2.5.1	Invoice
97	2.5.1	Payment receive
98	2.5.2	Consultancy
99	2.5.2	Agreement
100	2.5.2	Research Officer Matters
101	2.5.2	Financial
102	2.5.2	Purchase Requisition
103	2.5.2	Invoice
104	2.5.2	Payment receive
105	2.5.2	Sample testing
106	2.5.2	Workshop

Figure 3: The examples of corporate taxonomy produced from the knowledge mapping process

**METHODOLOGY**

The ultimate objective of developing the knowledge map is to represent the explicit and tacit knowledge for the organization’s survival. A knowledge map will be used as a global positioning system (GPS) for the corporate knowledge in an organization. It shows the creator, custodian, location, use and relationship between knowledge.



Figure 3: Knowledge mapping in an organizational KM framework

*Sharifah Fahimah Saiyed Yeop*

### **HOW TO DEVELOP A KNOWLEDGE MAP?**

Knowledge maps are created by transferring tacit and explicit knowledge into graphical formats that are easy to understand and interpret by the end users, who may be managers, experts, system developers, or any individual. The basic steps in creating a knowledge map are as follow:

1. To identify objects in knowledge mapping. Below are the objects in organization that identified in knowledge mapping process;
  - 1.1. Explicit knowledge
    - 1.1.1. subject
    - 1.1.2. purpose
    - 1.1.3. location
    - 1.1.4. format
    - 1.1.5. ownership
    - 1.1.6. users
    - 1.1.7. access right
  - 1.2 Tacit Knowledge
    - 1.2.1 expertise
    - 1.2.2 skill
    - 1.2.3 experience
    - 1.2.4 location
    - 1.2.5 accessibility
    - 1.2.6 contact address
    - 1.2.7 relationships/networks
2. To develop a graphical/illustrative knowledge map - A series of workshops conducted to produce a graphical knowledge map that shows the sources, flows, constraints, and sinks of knowledge within an organization. It is a navigational aid to both explicit information and tacit knowledge, showing the importance and the relationships between knowledge stores and the dynamics. The following list will be more illustrative in this regard:
  - a. Available knowledge resources
  - b. Knowledge clusters and communities
  - c. Who uses what knowledge resources?
  - d. Paths of knowledge exchange
  - e. Knowledge lifecycle in the organization
  - f. What we know we don't know (knowledge gap)
  - g. Knowledge resources in the organization

***Developing the record management and filing structure in the organization using knowledge mapping technique***

3. To identify knowledge sources - Knowledge in the organization can be found in the following sources:
  - a. Correspondents, internal documents
  - b. Library
  - c. Archives (past project documents, proposals)
  - d. Meetings
  - e. Best practices
  - f. Experience
  - g. Corporate memory

**KNOWLEDGE MAP AS A TOOL IN DEVELOPING RECORDS MANAGEMENT AND FILING SYSTEM IN AN ORGANIZATION**

A knowledge map that is successfully developed can be used as the filing structure. In many organizations, there is a lack of transparency of organization wide knowledge. Valuable knowledge is often not used because people do not know it exists. Even if they know the knowledge exists, they may not know where. Below is an example of files codes based on taxonomy or filing structure. It shows the ownership, location, scope, and commonly used terms in the organization.

HRM > Training and staff development program > Food and Beverages > 2014

The map also serves as the continuously evolving organizational memory, capturing and integrating the key knowledge of an organization. It enables employees' learning through intuitive navigation and interrogation of the information in the map and through the creation of new knowledge via the discovery of new relationships. In simple words, a knowledge map gives employees not only the know-what but also the know-how.

The knowledge map can also be used as a guideline in developing records preservation, retention and disposition procedures in the organization. We are able to do records tracking by location, ownership and records life cycle according to the file structure. The electronic filing can also be developed according to the physical filing procedures as it is implementing a similar format that can be synchronized in electronic systems.

*Sharifah Fahimah Saiyed Yeop*

## **CONCLUSION**

The strategic planning for knowledge management in the organization is the key success factor in implementing a knowledge map that will benefit an organization in developing records management and filing systems. The top management's involvement and understanding are the most important elements in developing a knowledge map as it requires cooperation from various divisions.

Knowledge can be found in processes, relationships, policies, people, documents, conversations, links and context, and even with partners and stake holders in an organization. A knowledge map provides an assessment of existing knowledge and will guide us in predicting the expected knowledge that we can gather in future.

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