

ANALYSIS OF KNOWLEDGE MANAGEMENT TOOLS

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Abstract

This paper describes experiences in applying knowledge management tools, that are ISYSDesktop8Setup, kmAnywhere 2005 Pro and junior v3.6. This paper describes the performance analysis of three knowledge management tools (KMT) in term of their storage capabilities and their performance on the basis of searching capabilities. From the outlook all three KMT's are meant for large organizations and form a single platform basis for information gathering and management. The distinctive features of these tools are their graphical user interface (GUI) facilities like contacts, calendar, notes, lectures and data storage etc.

Keywords: Knowledge Management, Searching, Analysis, GUI, Indexing, File format.

1. Introduction

An effective knowledge management is an asset to any organization .Because it can greatly enhance the returns and reputation of an organization. Knowledge management helps the organization to find, select, organize, disseminate and transfer important information and expertise. This has led to a rise in the number of knowledge management tools available on the software market. So wide variety of knowledge management tools are available. However, the wide range of choice can make it difficult for an organization to select a tool (Ingie Holland, 2003) that suitably meets their requirements. In this paper we evaluate the above three knowledge management tools. These tools are analyzed based on search criteria.

2. What is knowledge management?

For the purpose of introduction it is useful to differentiate between raw information and knowledge (Edwards, 1994). Raw information may be widely available to a number of agencies (Brian Newman, Kurt W.Conrad, 1999), but only some organizations will be able to convert the information into relevant knowledge and to use this knowledge to achieve their aims. There are two strategies first and second generation KM strategies. The first generation strategy relies on organizing and controlling the existing knowledge and knowledge sharing within organization, the second generation KM strategies have shifted towards enhancing the conditions for innovation and knowledge creation (McElroy, 2000).

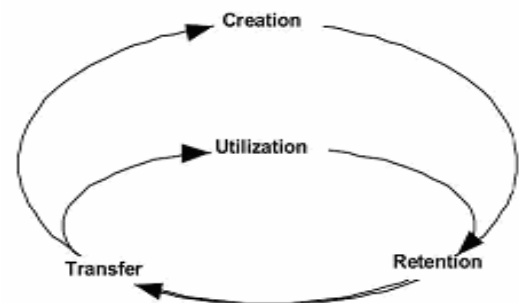


Figure1. The General Knowledge Model

Knowledge Creation:

This stage accumulates all the activities related to the addition of new knowledge to the system including knowledge development, discovery and capture.

Knowledge Retention:

This stage incorporates all the activities that retain knowledge and permit it to remain in

the system once introduced. It also contains those activities that preserve the viability of knowledge within the system.

Knowledge Transfer:

This stage holds all the activities that are related to the transfer of knowledge from one party to another. This process comprises communication, translation, conversion, filtering and rendering.

Knowledge Utilization:

This stage includes all the events concerned with the application of knowledge to business processes (Nayna Pate1 Vlatka Hlupic, 2002).

3. Knowledge management tools

Knowledge management tool is software used for planning knowledge management projects which promote sharing and use of knowledge such as ideas, expertise, and best practices (www.content-management-junction.com, Jan 4, 2008).

3.1 Why to use knowledge management tools?

Almost eighty percent of an organization's business content is unstructured. The unstructured business content include information in files, messages, memos, reports, and proposals created in different formats and stored in many locations. The vast amounts of information need to be put in context to be filtered through and be made available to those (www.content-management-junction.com, Jan 4, 2008) who need it in a format that they want. This enables you to realize the full value of organizational knowledge assets. The Knowledge management tools help enables organizations to tackle all the problems related to knowledge management more effectively at reduced costs. In addition, the Knowledge management tools allow them to leverage the collective knowledge and experience of an organization to accelerate innovation and sharpen competitive advantage. The Knowledge management tools dramatically improve the way organizations manage their knowledge assets. The Knowledge

management tools allow user to conduct single, unified searches across multiple unstructured information sources which include websites, file repositories, document management systems, multimedia libraries, etc.

3.2 Different knowledge management tools

There are many knowledge management tools available in the market, but we have selected the following three tools,

1. ISYSDesktop8Setup
2. KmAnywhere 2005 Pro
3. Junior v3.6

4. Features of selected tools

4.1 ISYSDesktop8Setup

Retrieval: With ISYSDesktop8Setup, you can preview a result's contents to ensure it's the right one. Preview features include a built-in preview pane, complete with hit highlighting and hit-to-hit navigation; a Tool Tip window, which displays relevant document information and meta data; and Outline Browse, which shows only the relevant portions of a document with your search terms in context.

Display: ISYSDesktop8Setup can display your documents in the ISYS Browser, or let you view them in their original applications, if they are available. You can annotate documents with virtual notes and attach photos, video or sound files, all without altering the original document.

Indexing: ISYSDesktop8Setup recognizes and indexes more than 150 different file formats. You select the computers, folders and files to be incorporated into your index, as well as specify where the index is located, when updates will occur and how frequently.

Searching: ISYSDesktop8Setup supports both simple and sophisticated searching mechanisms to enable you to find the precise document you need as quickly as possible. Search methods include Natural Language

Query, Fielded, Phrase Matching and our popular Menu-Assisted Query, for easily constructing advanced Boolean and proximity queries.

Navigation: ISYSDesktop8Setup automatically categorizes your documents as they are indexed, giving your results more contexts, and allowing users to navigate and refine a results list with a simple click of the mouse.

Discovery: ISYSDesktop8Setup enables users to better understand the who, what and where of a given result list, thanks to ISYS Entities. The only desktop search application offering this feature, ISYS: desktop automatically extracts entities such as names, places, email addresses and more.

4.2 KmAnywhere 2005 Pro

Retrieval: With KmAnywhere 2005 Pro, you can preview a result's contents to ensure it's the right one. Preview features include a built-in preview pane; it only shows those documents which have your search name given to it do not search with in the document.

Display: KmAnywhere 2005 Pro, can display your documents in the Browser, or let you view them in their original applications, if they are available. You can only add images and DOC or PDF files to it.

Searching: KmAnywhere 2005 Pro, has just one type of searching capability. It has a browser showing the options through which we can select either to search from notebooks, emails, contacts or time sheet. It is powered by Essential Skills Consultants.

Navigation: It is achieved through the Navigation pane on the left side of the main GUI which has all the main functions that can be performed and a Start button to get things running in case if you're a beginner.

4.3 Junior v3.6

Retrieval: With junior v3.6, you can preview a result's contents to ensure it's the right one. Preview features include a built-in preview pane; it has the capability of searching within the documents and can find even if a single word is there in any document it'll show it.

Display: The main interface of the junior is not that user friendly as it tends to get hard when you are looking for something. It only adds notepad or plain text files and can cross reference with another document in the same database.

Searching: junior v3.6 has just one type of searching capability. It has a small window which appears at the bottom of the main window and there you can enter the text which you want to search.

Navigation: It is achieved through the tool bar on the top of the main GUI which has all the main functions that can be performed.

5. Related work

From the initial observation the authors have observed that all these three tools are reasonably good and very flexible in terms of usage and maintenance but a detailed review of these tools show that only one is better than the rest two and that is ISYSDesktop8Setup. For the reason that junior v3.6 is not user friendly and KmAnywhere 2005 Pro also has only file name searching capability not an inside file searching capability. ISYSDesktop8Setup actually first indexes all the files in a manner that user first specifies a target location for indexing and then it is stored with in ISYSDesktop8Setup and whenever a search is given, it shows each file name and every possible combination in which the search can occur. In KmAnywhere 2005 Pro only the file name is searched which can be either in the notes that are specified or time sheet or in the contacts. junior v3.6 has a very simple and straightforward mechanism of searching as there is a small window and there

one can enter the search criteria and by pressing ALT+ page up or ALT+ page down can scroll through the records having the given word or phrase. The junior saves all the text files and the related data in a database file, Which is hard for normal user to identify that currently which database file needs to be loaded into the junior and which files need to be searched. While in KmAnywhere 2005 Pro, there is concept of notes and contacts and each is stored under the same context. If a contact is added, only that contact is saved under that tab and if a DOC or a PDF file is stored in the KmAnywhere 2005 Pro, it is saved under the notes tab. KmAnywhere 2005 Pro has a very user-friendly environment where one has ease in moving around, searching and adding things in the knowledge base. KmAnywhere 2005 Pro has a windows based approach that each time you open a contact or a search, it is opened in a separate tab making it easy to look back into the stuff and the search results for the given data that has been added to it. On exiting the application, it asks the user to save all the related data which is not been saved yet.

6. Conclusion

From the analysis of the above tools the authors have reached to the conclusion that ISYSDesktop8Setup is the best among these three tools in case of searching capabilities and the manner in which it shows the search results as compared to the rest two. It searches the whole data and shows all the relevant results by highlighting the required results throughout the document and indexes all the files on its database which enables it fast to search and produce accurate results. Extreme clarity in the results is shown and very easy to navigate.

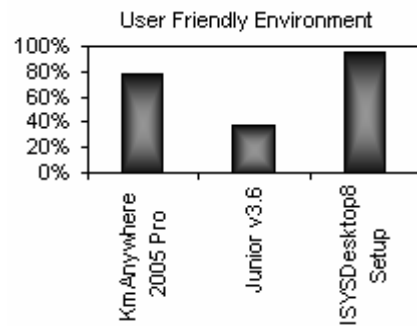


Figure2. Comparison by using User Friendly Environment Feature

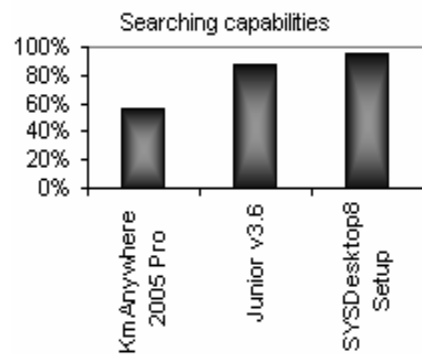


Figure3. Comparison by using Searching Capabilities Feature

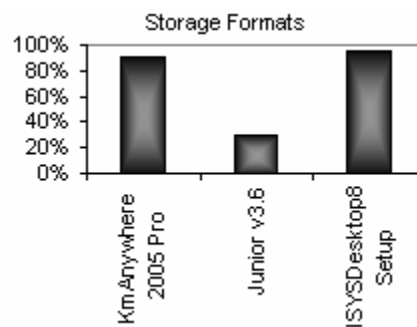


Figure4. Comparison by using Storage Formats Feature

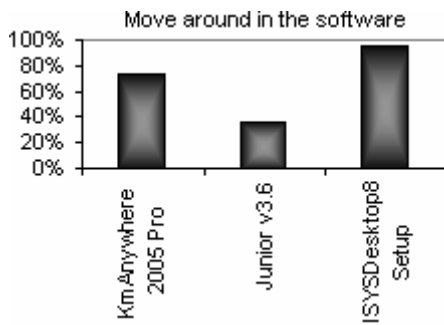


Figure5. Comparison by using Move around the Software Feature

7. Future work

The analysis of these tools leads to the conclusion that one tool is better than the other two and the authors observe that all the tools are not semantically correct. So there is a need to develop a tool that is semantically correct which should provide the best and most desirable results.

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