Taxonomies - Week 7

Information management is an essential business function that involves the acquisition, collection, indexing, sorting, retrieving and disposing of information within the business. A taxonomy is an excellent tool used to manage information of any kind within organisations of any size. Taxonomies are defined as ‘meaningful hierarchical categorizations of documents into topics reflecting the natural relationships between the documents and their business objectives’ (Kreulen, Spangler 2005). Taxonomies (or classification schemes) are integral to this function and require a high amount of attention to be successful. This paper discusses the issue of taxonomies while reviewing ‘The Truth About Taxonomies’, written by Denise Bruno and Heather Richmond of the Information Management journal 2003.

Bruno and Richmond describe the approach to organisational taxonomies as greatly enhancing organisations ability to identify, retrieve and deliver information for its many users. The authors emphasize the importance of having in place, a structured and more importantly, documented information management systems in place to deal with information storage and retrieval. ‘In today's information-dependent environment, where we are receiving, accessing and using information in its many forms, it is absolutely imperative that there are well-defined and documented structures in place’ (Bruno, Richmond 2003). The authors follow on to explain, through reference to Jean Graef of the Montague Institute, that taxonomies should inspire trust from its users, considering the information may be shared across global networks, taxonomies should be specific and comprehensive at the same time. The authors continue to describe the Genus/species and whole-part relationship classification theories, however do not come to a conclusion as to which one is best suited to an organisational environment, they do nevertheless explain that more than one taxonomy may be needed depending on the organisational structure, I agree strongly with this. Bruno and Richmond go forth to explain that no set taxonomy is able to function within all organisations and that organisations must assess their needs before designing or implementing a taxonomy or classification system. ‘Each organisation must assess its needs and requirements to decide on the taxonomy structure that is right for it’ (Bruno, Richmond 2003).

Taxonomies of some kind are an essential component of any business that has information of importance that it wishes to store. Many different taxonomies are needed for different organisations, with different issues arising involving different needs, Jeffrey Kreulen and Scott Spangler of the IBM Almaden Research Centre in California see information cluster as a major issue when creating taxonomies and have created an automated system for creating them, which automatically selects information features and creates a base taxonomy, used as a model for the final product. Automated taxonomy systems are becoming more popular as the manual organisation of information, especially by organisations with large amounts of textual documents is becoming almost impossible. Rakesh Agrawal, Soumen Chakrabarti, Byron Dom and Prabhakar Raghavan of the IBM Almaden Research Centre in California describe another automated taxonomy system in their paper titled ‘Scalable feature selection, classification and signature generation for organizing large text databases into hierarchical topic taxonomies’. The authors describe an automated taxonomy that ‘starts with a small sample of the corpus in which topics have been assigned by hand, and then updates the database with new documents as the corpus...’
grows, assigning topics to these new documents with high speed and accuracy.’ (Agrawal, Chakrabarti, Dom, Raghavan 1998). This system is described as being essential to the creation of any taxonomy that deals with large amounts of information and documents. The automated system is used to detect feature key words within articles and categorize them accordingly, something that is restricted by the systems ability to correctly categorise an article according to a specific criteria.

A common taxonomy used in office situations is a task taxonomy which is essentially a taxonomy which outlines different activities that a worker may perform within an office situation, however as Christopher A. Higgins and Frank R. Safayeni of University of Western Ontario and University of Waterloo describe, these taxonomies have their limitations; ‘However, there are numerous problems associated with using taxonomies for such studies. These are related to three common assumptions that are made: (1) the assumption of categorization, (2) the assumption of finite representation, and (3) the assumption of technological validity’ (Higgins, Safayeni 1984). These taxonomies are a good way to sort and format information which is usually either disregarded or not taken seriously enough, a problem that taxonomies can help to solve.

The concept of a taxonomy has been around for a very long time, organising information in a logical order based on certain criteria, however, ever since the introduction of the internet, intranets and online retrieval, management of taxonomies has taken a huge step forward in the minds of ordinary individuals who seek information management at an organised level.

In my opinion taxonomies play a vital role for information professionals who need to perform certain tasks with information, this includes the collection, storage and retrieval of information. Taxonomies are a very important investment, as they reduce the amount of time needed by organisations to manage their information through allowing its employees to search through different categories of information, rather than the broader information itself, information is manageable and related, but more importantly easily accessible.

Taxonomies provide information managers with an opportunity to better manage the information they control, however they can be extremely difficult to create and incredibly time consuming to manage.

There are many issues concerning taxonomies that information managers need to consider before creating or implementing any type of taxonomy into an organisation. I believe that there are certain types of taxonomies that suit different organisations and every organisations needs are different when considering how to best manage information (Go to www.taxonomywarehouse.com for over 500 different types of taxonomies). Taxonomies need to be built around an organisation, in order to sufficiently control information – an organisation's most important asset. Taxonomies, although very beneficial, needs an incredible long-term commitment if they are to be successful and this commitment needs to be established before the design and development takes place, however, if committed and capable, an organisation can greatly benefit from the use of a taxonomy and so can the individuals using them.
References


[Accessed 19 September 2005]


[Accessed 19 September 2005]


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