

Knowledge Management Tools and Their Desirable Characteristics

Juan Ares

University of A Coruña, Spain

Rafael García

University of A Coruña, Spain

María Seoane

University of A Coruña, Spain

Sonia Suárez

University of A Coruña, Spain

INTRODUCTION

The Knowledge Management (KM) is a recent discipline that was born under the idea of explicitly managing the whole existing knowledge of a given organisation (Wiig, 1995) (Wiig et al., 1997). More specifically, the KM involves providing the people concerned with the right information and knowledge at the most suitable level for them, when and how best suit them; in such way, these people will have all the necessary ingredients for choosing the best option when faced with a specific problem (Rodríguez, 2002).

As the knowledge, together with the ability for its best management, has turned into the key factor for the organizations to stand out, it is desirable to determine and develop the support instruments for the generation of such value within the organisations. This situation has been commonly accepted by several authors as (Brooking, 1996) (Davenport & Prusak, 2000) (Huang et al., 1999) (Liebowitz & Beckman, 1998) (Nonaka & Takeuchi, 1995) and (Wiig, 1993) among others. Technological tools should be available for diminishing the communication distance and for providing a common environment where the knowledge might accessible for being stored or shared.

As KM is a very recent discipline, there are few commercial software tools that deal with those aspects necessary for its approach. Most of the tools classified as KM-related are mere tools for managing documents, which is unsuitable for the correct management of the organisations knowledge. Bearing such problem in mind, the present work approaches the establishment

of a KM support software tool based on the own definition of KM and on the existing tools. For achieving this, section 2 presents the market analysis that was performed for studying the existing KM tools, where not only their characteristics were analysed, but also the future needs of the knowledge workers. Following this study, the functionality that a KM support tool should have and the proposal for the best approach to that functionality were identified.

BACKGROUND

The first step for developing a complete KM support tool according to the present and future trade needs is the performance of a study of the existing market. After the initial identification of the characteristics that a KM support tool should have, a posterior work reveals how the studied tools provide support to every one of the previously identified characteristics. Lastly, an evaluation of the obtained results will be performed.

Characteristics to be Considered

The previously mentioned definition of KM was the basis for the identification of the characteristics to be considered, bearing in mind the different aspects that should be supported by the tool.

A KM tool should give support to the following aspects (Andrade et al., 2003a):

- Corporate Memory
 - Yellow Pages
 - Collaboration and Communication mechanisms
1. Corporate Memory
The Corporate Memory compiles the knowledge that exists within an organisation for its workers disposal (Stein, 1995) (Van Heijst et al., 1997). Due to this, to compile and to make the relevant knowledge explicit is equally important than providing the suitable mechanisms for its correct and easy location, as well as recuperation.
 2. Yellow Pages
A KM program should not make the mistake of trying to capture and represent the whole existing knowledge of the organisation, as this attempt would not be feasible; in this sense, the relevant knowledge for the performance of the organisation should be the one to be included. However, not making all the knowledge explicit does not mean that it has to be obviated; for that reason, it is important to determine which knowledge has every individual at the organisation by means of the elaboration of the Yellow Pages. These ones identify and publish additional knowledge sources, human and non-human, that are at the organisation disposal (Davenport & Prusak, 2000).

3. Collaboration and Communication Mechanisms
At the organisations the knowledge is share, as well as distributed, regardless of the automatism, or not, of the process. A knowledge transfer occurs every time that an employee asks a workmate of the adjoining office how to perform a given task. These daily knowledge transfers made the routine of the organisation up but, as they are local and fragmentary, some systems for user collaboration and communication should be therefore established. An adequate KM support tool should include mechanisms that guarantee the efficiency of the collaboration and the communication, regardless of the physical or temporal location of the interlocutors.



Analysed Tools

Once the aspects that a KM support tool should consider have been identified, the following step involves analysing how the current tools consider them.

With such purpose, the main so-named KM support tools that exist currently were analysed, discarding certain tools such as information search engines or simple applications for documents management, as they merely offer partial solutions.

Table 1. Tools analysed

	Corporate Memory	Yellow Pages	Collaboration and communication mechanisms
K-Factory	✓		✓
Norma K-Factor	✓	✓	✓
Hyperwave	✓	✓	✓
GTC	✓		✓
Epicentric	✓	✓	✓
Plumtree	✓	✓	✓
Intrasuite	✓	✓	✓
Coldata	✓	✓	✓
Intranets	✓	✓	✓
WebSpace	✓		✓
Knowledge Discovery System	✓	✓	✓
Documentum 5	✓		✓
Livelink (Opentext)	✓	✓	✓
Adenin	✓		✓

5 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/knowledge-management-tools-their-desirable/10362

Related Content

Motorola's Experiences in Designing the Internet of Things

Andreas Schaller and Katrin Mueller (2011). *Ubiquitous Developments in Ambient Computing and Intelligence: Human-Centered Applications* (pp. 84-92).

www.irma-international.org/chapter/motorola-experiences-designing-internet-things/53327

VaTIS: A Travel Information Service for the City of Valletta, Malta

Alexiei Dingli and Maria Attard (2016). *International Journal of Conceptual Structures and Smart Applications* (pp. 1-15).

www.irma-international.org/article/vatis/176584

An Agent Based Intelligent Dynamic Vulnerability Analysis Framework for Critical SQLIA Attacks: Intelligent SQLIA Vulnerability Analyzer Agent

Jeya Mala Dharmalingam and M Eswaran (2018). *International Journal of Intelligent Information Technologies* (pp. 56-82).

www.irma-international.org/article/an-agent-based-intelligent-dynamic-vulnerability-analysis-framework-for-critical-sqlia-attacks/204953

Evolutionary Approaches for ANNs Design

Antonia Azzini and Andrea G.B. Tettamanzi (2009). *Encyclopedia of Artificial Intelligence* (pp. 575-580).

www.irma-international.org/chapter/evolutionary-approaches-anns-design/10305

An Advanced Entropy Measure of IFSSs via Similarity Measure

Pranjal Talukdar and Palash Dutta (2023). *International Journal of Fuzzy System Applications* (pp. 1-23).

www.irma-international.org/article/an-advanced-entropy-measure-of-ifss-via-similarity-measure/319712