

Project Logo:



Project website:

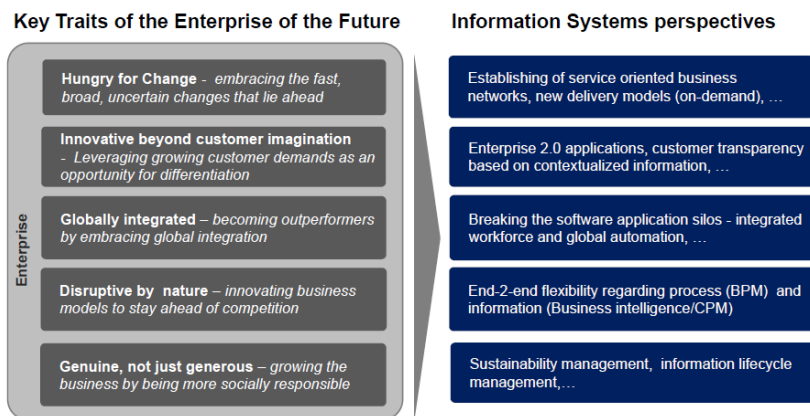
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The importance of knowledge management among SMEs

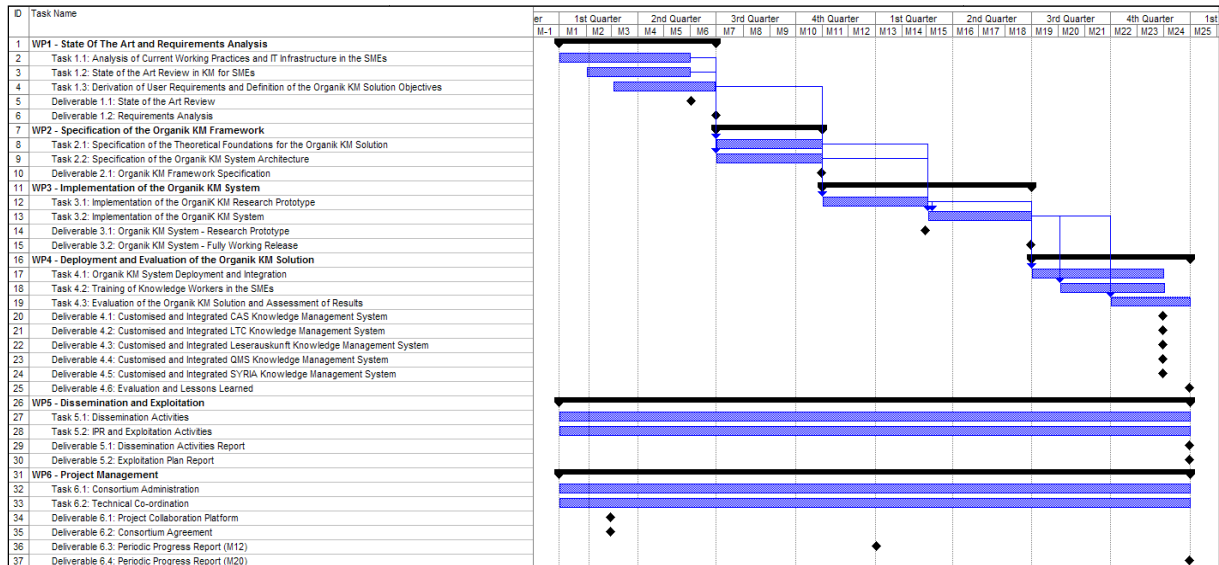
Knowledge if properly harnessed by SMEs will enable them to stand out in the competition and outperform their rivals, thus maintaining a competitive edge. The idea is reflected in the IBM Global CEO study 2008.



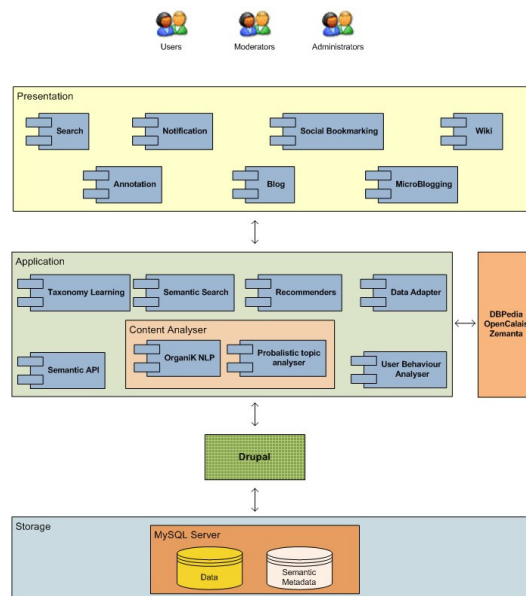
[Source: IBM Global CEO Study, 2008]

Work Done:

The following Gantt-chart demonstrates that all work packages are completed.



Organik Architecture



Features:

The set of Organik Knowledge Management Client Interfaces comprises of a Wiki, a Blog, a Social Bookmarking and a Search Component that together constitute a Collaborative Workspace for SME knowledge workers. Each of the components consists of a Web-based client interface and a corresponding server engine.

The components that comprise the Business Logic Layer of the OrganiK Knowledge Management Server are:

- the Recommender System,
- the Semantic Text Analyser,
- the Collaborative Filtering Engine
- the Full-text Indexer

The Wiki Component is a web-based collaborative authoring tool that allows the knowledge workers of the participating SMEs to simultaneously create, edit, and share the knowledge artifacts of the company (i.e. documents, diagrams, designs, photographs, binary files, etc).

The Blog Component provides a simple content management tool enabling the knowledge workers of the participating SMEs to build easily updatable web project monitoring diaries. Posts are published chronologically and in an open manner, with links and commentary relating to various aspects of each specific project. The Social Bookmarking Component enables knowledge workers of the participating SMEs to collect and annotate (tag) their favorite resources (e.g. intranet documents, Wiki entries, blog posts, etc) in an online, open environment, which other employees are free to read and use (bookmarks are stored in a central server location and are accessible over the Web from any location). The Semantic Search Component supports browsing, searching, retrieval and display of knowledge resources. It provides advanced search functionality based on the available semantics. The Recommender System is the central provider for ontological reasoning services. In extension to traditional reasoning approaches, the Recommender will also handle the weak semantics of tag clouds and socially-evolving terminology spaces. Faced with these dynamic and vague foundations, the core services provided by the Recommender are a) the suggestion of tags and classifications; b) the suggestion of related information items.

The Semantic Text Analyzer processes the text of information items within the system, using linguistic and statistical algorithms. The core result of this analysis is the identification of existing entities such as used tags or entities in existing databases (e.g. customers) which can be used by the Recommender System to suggest the most appropriate tags and classifications. As a number of well-known text analysis systems are available within the scientific community, OrganiK will concentrate on the selection of suitable tools and their integration and mash-up within the system architecture. Based on previous cooperation and a preferential access to detailed information, IBM's UIMA system is a preferred candidate for this.

The Collaborative Filtering Engine enables individual knowledge workers to benefit from the common search experience within their groups. Individual searches - whether traditional keyword-based searches or searches using the enhanced capabilities of the semantic search components - will result in lists of retrieved documents; it remains the user's task to select the most relevant documents from such lists.

To complete the range of content retrieval techniques proposed in OrganiK, a Full Text Indexer will be integrated into the system architecture. This component will enable the efficient retrieval of documents containing queried text snippets/key words. We plan to rely on the well-known Lucene system or similar tools as a basis for this component.

Specifically, the key business benefits of OrganiK Enterprise Social Software Platform can be summarized as follows:

- More ad-hoc and informal collaboration between knowledge-workers who can find each other's work. OrganiK can be more than just an effective communication channel; it can act as a mechanism to find, identify, and record information directly from knowledge workers.
- More globally persistent, discoverable business information can be made available over time. Wikis, Blogs, Social Bookmarking and other components of OrganiK can be examples of persistent, reusable knowledge-bases. OrganiK can provide knowledge workers with a flexible environment in which they can document and share knowledge and ideas, with the ability to relate topics with others.
- OrganiK can help the emergence of a deep hyperlinked infrastructure, built continuously by knowledge-workers using the applications of the system to create links, making business information more discoverable. Using OrganiK within the enterprise can become a new form of discovering and gaining knowledge by means of timely sharing of information among team members and individuals. Over time, employees can discover information resources of the organization that they were previously unaware of.
- Access to information can be more efficient as more business information becomes available internally and externally via syndication and recommender functionalities of OrganiK. Communication and awareness mechanisms such as OrganiK's RSS and recommendations help move knowledge within the company, among knowledge-workers, delivering collaborated content stored in knowledge bases.
- OrganiK content tagging capabilities allow business information to be organized and cross-referenced from various points of view. Using folksonomies and leveraging emergent content with more structured taxonomies can help create dynamic knowledge structures that are more socially focused. This helps people discover content in an easier, more convenient way.
- Potentially higher levels of innovation can be expected as more previously unavailable company thinking is available to be accessed, repurposed, and built upon. OrganiK components can offer an integrated Web-based space where everybody can contribute content on top of each other's. OrganiK's collaboration tools allows knowledge-workers to be aware of content created by others or content previously created by one user and augmented by the knowledge of others.