Information Brokerage – A new Approach using Knowledge Management

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Submitted to the Higher Education and Training Awards Council in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

May 2009

Acknowledgements

Many thanks to my supervision team: Dr. Brendan Murphy (now president) and his successor Dr. Paul Walsh from Cork Institute of Technology, who have supported and encouraged me during my research; special thanks to Prof. Dr. Udo Bleimann from the University of Applied Sciences Darmstadt, who supervised me for a long time during my Diploma thesis, my Master thesis and last but not least during this PhD thesis. Thanks to all of you for the suggestions and the correction of the thesis and all the supervisory work.

I wish to thank Ingo Stengel (igdv Darmstadt) and Claudius Spellmann (University of Plymouth) for their invaluable assistance.

Also thanks to all of my comrades from the Institute of Applied Informatics Darmstadt (aiDa) for cooperating over years in several projects, especially to all Diploma, BSc and MSc students who have been part of the information brokerage project since 2002.

Thanks as well to intelligent views GmbH, the vendor company of the knowledge management system K-Infinity^{R} used for the prototypes, for supporting this project and helpful discussions concerning knowledge management strategies.

There are no words to express my gratitude to all the people who supported me during this project, especially my family. Therefore, I would like to introduce a short story of a brilliant writer that describes the behaviour during the information brokerage project:

Samuel Clemens alias Mark Twain (1835-1910)

A Tramp Abroad

CHAPTER XXVIII ***The Jodel and Its Native Wilds***

In a few words the story aims on climbing the Rigi-Kulm, an imposing Alpine mass, six thousand feet high, to watch the rising sun. The following citation, from the first part of the story, illustrates the different views on the project status:

“ I asked: »Are we nearly to the top?«

»Nearly to the TOP? Why, bless your soul, you haven’t really started, yet.« ”

Another citation shows some crucialpoints regarding working periods:

“You’ve got up at half past seven o’clock in the evening to see the sun rise, that’s what you’ve done.”

(See last page of literature section for URL of the story / German title: “Eine Rigi-Besteigung”)

Abstract

Information Brokerage – A New Approach using Knowledge Management

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Traditional knowledge management attempts to store the total enterprise knowledge into IT related structures, but knowledge management strategies should focus also on people and organisations and not just on technology.

This can be addressed in part by communicating knowledge between people, in and across organisations. Such communication focuses on the development and exchange of people's experience.

This thesis introduces a hybrid knowledge management solution consisting of an automated system that includes people: employees, experts and Knowledge Brokers (KB). The hybrid concept supports the identification of suitable people for certain topics of discussion. Further, it supports the knowledge communication process by providing a communication infrastructure. When employees cannot find the appropriate information or expert, then they can ask a personal Knowledge Broker for assistance. Knowledge Brokers can cooperate, forming the Knowledge Broker Network (KBN).

A knowledge or semantic network is used to model relationships between the key concepts of the company and the topics of expertise of employees and experts. Instead of storing data in repositories, this novel KBN concept uses "meta-knowledge", which describes relationships between people and their experiences, and their ability to answer questions in a certain area. Users' documents are analysed and classified automatically with the aim to discover and update their experiences.

The integration of external resources and an algorithm that proposes personalised hints to valuable information are part of the KBN approach.

In addition, the concept comprises personalisation, focusing on:

- the user's personalised view into the knowledge network, based on his information ratings;
- the user's private part of the knowledge network.

The support of communities by Knowledge Brokers focuses on identifying topics of expertise for already existing communities of practice or for new ones that have to be created.

Implementing the KBN approach within a company supports the development of an organisational culture that allows enterprise wide knowledge exchange. This is illustrated by a prototype and three further example applications of the man-machine-hybrid approach.