

# Towards a Systematic Evaluation of Personal and Small Group Information and Knowledge Management

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Knowledge and information workers, working as individuals within virtual team structures, acquire information, which they store in a large number of arbitrarily complex ways: some being paper-based, but increasingly computer-based.

Over the last two decades a significant number of computer-based tools (sometimes referred to as Personal Information Managers or PIMs) [1] have been created in order to assist in the storage and management of such information. Examples include email, contact and event management software (e.g. Microsoft Outlook); hierarchical outliners; mind-mapping software (e.g. MindManager) and the use of general applications such as spreadsheets and relational databases (e.g. Microsoft Access). So far it is arguable that no tool has achieved ubiquity, whether measured in terms of the extent of its use or the generality of its application.

There is little consensus about the evaluation of information technology or information systems [2] and little efforts have been made in this direction. Models have been developed for Information Systems evaluation [1] in an attempt to specify necessary organizational process that reinforce the importance of evaluation and minimize Information Systems failure; but so far Information Systems

evaluation remains underdeveloped and undermanaged [5].

The underlying hypothesis of the research-in-progress presented in this paper is that individuals working in groups should be encouraged and educated to make better use of the available tools, and that the tools themselves should evolve into (or be replaced by) better ways of representing information and knowledge. As a first step, it is necessary to classify and evaluate the effectiveness of existing tools and techniques.

This paper summarises current trends in the academic and practitioner's literature in the areas of knowledge representation and communication by individuals and small groups [6] and proposes a methodology for evaluating them which is firmly in the tradition of the systems approach originally formulated by Churchman [3].

The paper presents a multidimensional evaluation approach suggesting a classification scheme based primarily on their data representation [4]. The paper also suggests that a judicious mix of existing and emerging tools, coordinated by semantic desktop approaches, will permit evolution or revolution in the

management of individual and shared information and knowledge.

## References

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