



Chapter 21

Argumentation and Knowledge-Sharing

Mike Metcalfe and Samantha Grant
University of South Australia, Adelaide, Australia

This paper discusses the conceptual basis for a social-technical system aimed at assisting geographically separate companies to use the Internet to achieve the economic benefits of clustering. The knowledge sharing literature, and the evolutionary economics literature, is used to focus on tacit knowledge sharing and learning through verbal interaction. The first section looks at the evidence for “structured talk,” which includes the role of argumentation systems on research, problem solving, communication and decision-making. The chapter goes on to argue that rural regions have the core competencies needed to cluster but not the interaction. Ensuring appropriate arguments between appropriate people may provide a policy around which to design Internet conferencing infrastructure aimed at enabling the benefits of clustering.

INTRODUCTION

This paper discusses the conceptual basis for a social-technical system aimed at assisting geographically separate companies to use the Internet to achieve the economic benefits of clustering. In Komito's (1998) terms, it is about managing a disperse community's knowledge by building knowledge sharing systems for “wicked unstructured, ill-defined” problems. The knowledge sharing literature, and the evolutionary economics literature, is giving more attention to tacit knowledge sharing and learning through the verbal interaction of group members. This includes Argyris

Previously Published in *Managing Information Technology in a Global Economy* edited by Mehdi Khosrow-Pour, Copyright © 2001, Idea Group Publishing.

This chapter appears in the book, *Knowledge Mapping and Management* by Don White.
Copyright © 2002, Idea Group Publishing.

and Schon's [1996] concept of learning or inquiry systems and Lawson's (1999) comments that initiatives follow from dynamic verbal interaction between persons with core competencies.

A lack of verbal interaction between knowledgeable people suffering the tyranny of distance offers new communications technology a chance to overcome the market failure. However, as is now well documented, merely dumping communications technology on people in geographically-disperse areas is not sufficient. Having access to appropriate infrastructure is essential but it may not be sufficient. If an effective system is to be built, then some understanding of how to structure conversations needs to be thought through. Why would talk bring economic benefits? What types of groupings might benefit from more talk? How is the talking to be structured? The example that will be used for illustration purposes is farm and mining companies working in remote regions seeking to cluster to achieve further vertical integration up or down their supply chain. The paper provides a conceptual roadmap of why and how such industries might learn how to develop economically. More specifically this paper argues that:

A well-structured interactive community based discourse (argument/debate) provides a mechanism for an appropriate virtual community to achieve economic development.

The evidence to support this claim will be presented in 5 sections. As the claim is that "structured talk" will bring outcomes, the first section looks at the evidence for this, which includes the role of argumentation systems on research, problem solving, communication and decision making. This is followed by discussion on how clustering works in the context of the paradox of some management writers calling for geographically-independent organisational structures, while others are calling for physical clustering by core competencies. Next the application of these systems will be considered by first identifying essential attributes for a group likely to be in a position to turn this talking into commercial outcomes. An example using remote rural communities is then given.

Talk for Knowledge Sharing

Nonaka and Takeuchi (1995) have suggested that knowledge can be created through four different modes:

- 1) Socialisation, which involves conversation from tacit knowledge to tacit knowledge,
- 2) Externalisation, which involves conversation from tacit knowledge to explicit knowledge,
- 3) Combination, which involves conversation from explicit knowledge to explicit knowledge, and

9 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/argumentation-knowledge-sharing/25394

Related Content

Exploring the Extent and Impediments of Knowledge Sharing in Chinese Business Enterprise

Wen Bing Su, Xin Liand Chee W. Chow (2012). *Conceptual Models and Outcomes of Advancing Knowledge Management: New Technologies* (pp. 266-290).
www.irma-international.org/chapter/exploring-extent-impediments-knowledge-sharing/62427

Postmortem Reviews

Torgeir Dingsoyr (2008). *Knowledge Management: Concepts, Methodologies, Tools, and Applications* (pp. 3175-3182).
www.irma-international.org/chapter/postmortem-reviews/25332

Capturing and Conveying Chamorro Cultural Knowledge Using Social Media

Tonia San Nicolas-Roccaand James Parrish (2013). *International Journal of Knowledge Management* (pp. 1-18).
www.irma-international.org/article/capturing-and-conveying-chamorro-cultural-knowledge-using-social-media/99640

A Knowledge Strategy Oriented Framework for Classifying Knowledge Management Tools

Gianluca Elia (2009). *Knowledge Networks: The Social Software Perspective* (pp. 1-16).
www.irma-international.org/chapter/knowledge-strategy-oriented-framework-classifying/25442

Improvement of Software Engineering by Modeling Knowledge-Intensive Business Processes

Jane Fröming, Norbert Gronauand Simone Schmid (2006). *International Journal of Knowledge Management* (pp. 32-51).
www.irma-international.org/article/improvement-software-engineering-modeling-knowledge/2690