

The intranet as actor: the role of the intranet in knowledge sharing

Hazel Hall, School of Computing, Napier University

Paper presented at the International workshop on understanding sociotechnical action, 3-4 June 2004, Edinburgh, Scotland.

Although intranet implementations in large, distributed, information-intensive organisations may be successful insofar as they are useful and used, the deployment of intranets for the stated purpose of knowledge sharing as part of a knowledge management implementation often fail to deliver exactly what is expected of them. Recently, for example, Huysman and de Wit (2002), who write from an organisational studies perspective, have used the case of the intranet at Gap Gemini (amongst others) (1) to identify how companies inadvertently implement sub-optimal knowledge management initiatives and (2) to suggest means of avoiding such practice. These findings build on earlier work such as that completed by Orlikowski (1996) who revealed numerous difficulties of introducing new technologies into large, decentralised firms, not least that of changing established work practices related to knowledge sharing. Those managing the process had high expectations that the technology would be adopted by employees as a tool for knowledge sharing. However, the staff in the firm were preoccupied with billable client work to earn revenue and reluctant to share information that could be used as a currency for future career success (Orlikowski, 1996). Equally case studies examined by Kling and Scacchi reported in the 1980s also show how the operation and enhancement of computer implementations are compromised by the complexities of shifting technical and social relationships (Kling & Scacchi, 1982).

This paper presents a sociotechnical analysis of knowledge sharing practice in a large, distributed, information intensive case study organisation. The findings of the study are discussed with close reference to the significance of the research approach in facilitating their discovery.

Primary data were collected from agents of knowledge management within the firm in late 2001. These were analysed in combination with evidence from a comprehensive review of the firm's corporate documentation on the

development of the intranet as the main artefact of a broad knowledge management programme in the period 1995-2001. The data are framed as episodes in the life-span of an actor-network centred on the firm's knowledge management implementation. This approach provides grounded explanation of the data analysed. The discussion of the knowledge management implementation actor-network draws attention to three episodes in the time frame of the firm's knowledge management implementation: (1) intranet adoption in the mid-1990s; (2) formalisation of the firm's knowledge management programme in 1998 and (3) disillusion with the knowledge management implementation in 2001.

The role of the intranet is not a simple determinant of knowledge sharing. It has, in effect, multiple roles. The perceived roles at any given time depends on a number of factors such as the maturity of the implementation, the "knowledge" to be shared, prior expectations of its purposes, and the interests of the actor whose view is interpreted. The research summarised identifies seven main roles of the intranet. It can:

- (1) furnish individuals and small groups with personal projects;
- (2) demonstrate status;
- (3) connect people together for the purposes of knowledge sharing;
- (4) focus corporate attention on issues related to knowledge sharing;
- (5) inhibit knowledge sharing;
- (6) provide career direction;
- (7) measure engagement with corporate knowledge management initiatives.

There is variety in the roles identified because shared perceptions of appropriate technology use within specific environments differ (Lamb & Kling, 2002, para 64). So, for example, when the intranet is deployed for the purposes of demonstrating the status of the organisation, the role is determined internally for the benefit of an external constituency. Some of the roles are intended. For example, in this case the firm expected the intranet to facilitate knowledge sharing. In contrast others are not. For example, here the firm did not predict that a tool introduced to facilitate knowledge sharing would also have the potential to inhibit it. However, although the firm did not make such a prediction, from the research point of view this finding was not unanticipated given the

indications in previous studies that computer implementations planned with high hopes often do not deliver on their promise. Equally, the connector role identified strengthens the arguments of earlier studies that the intranet is a form of boundary object (even though such studies have not used the vocabulary of Star and Griesemer (1989)). In contrast, some roles that emerge from the data are novel in that they appear not to have been prefaced by previous studies, nor deliberately sought by the case study organisation. These are the roles of demonstrating corporate status, providing career direction and supplying measures of engagement with knowledge management within the business. Each of these roles can easily be associated with attempts to increase power: public relations power of the organisation as an innovator; career power of the individual and selling power to support an internal corporate initiative.

The broad explanatory factor for these intranet dimensions is the nature of power relations within the case study firm. It concludes that the actor power of those charged with managing a knowledge management implementation, as exhibited in their status, is a major determinant of the degree to which planned initiatives can be delivered. In this case the difficulties experienced by knowledge management staff of attracting attention to their efforts, and capitalising on it when they had the opportunity, had negative consequences. This research thereby develops the subject of ICTs and knowledge sharing, and adds clarification to the role of the intranet in such activity. Furthermore, it contributes new insight to the theme of power relations in knowledge management. This is a topic which to date has largely been neglected, and not made explicit in the literature (Ekbja & Kling, 2003).

The value of the research approach adopted can be measured in the contribution that the work makes in providing significant new insights on the multiple and fluid roles of a technology artefact, and on the influence of power relations in technical implementations. The issue of power relations revealed itself in this work because the methods employed in the research allowed it to do so. The research strategy of following a grounded approach in the data collection process, with a single case study as output, presented in the form of a sociotechnical analysis, permitted a exploration of issues related to the “success” and “failure” of aspects of a knowledge management implementation

that produces deeper explanation than previous studies. In addressing the issue of the status of those charged with managing knowledge management across the organisation it responds to Ekbia and Kling's call to examine questions of knowledge sharing practice with reference to the power as an explanatory factor (Ekbia & Kling, 2003). The nature of the work as a piece of academic research, rather than a consultancy exercise (which is often the case in published studies related to knowledge management issues), is also important. It brings to the fore topics that may be considered taboo in work that attempts to provide prescriptive managerial solutions for the management of knowledge management implementations.

References

Ekbia, H., & Kling, R. (2003). *Power issues in knowledge management*, [Online]. Available: <http://slis.indiana.edu/CSI/WP/WP03-02B.html> [2004, 23 January].

Huysman, M., & De Wit, D. (2002). *Knowledge sharing in practice*. London: Kluwer.

Kling, R., & Scacchi, W. (1982). The web of computing: computer technology as social organization. *Advances in Computers*, 21, 1-90.

Lamb, R., & Kling, R. (2002). *From users to social actors: reconceptualizing socially rich interaction through information and communication technology* (Draft 6.4), [Online]. Available: <http://www.slis.indiana.edu/CSI/WP/WP02-11B.html> [2004, 23 January].

Orlikowski, W. J. (1996). Learning from notes: organizational issues in groupware implementation. In R. Kling (Ed.), *Computerization and controversy: value conflicts and social choices* (2nd ed.). San Diego: CA Academic Press.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, "translations" and boundary objects: amateurs and professionals in Berkeley's Museum of Vertebrate Zoology. *Studies of Social Science*, 19(3), 387-420.