Chapter XIII

Social Construction of Information Technology Supporting Work

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EXECUTIVE SUMMARY

In the beginning of 1999, the CIO of a Portuguese company in the automobile industry was debating with himself whether to abandon or to continue supporting the MIS his company had been using for years. This MIS had been supporting the company's production processes and the procurement of resources for these processes. However, in spite of the fact that the MIS system had been deployed under the CIO's tight control, the CIO felt strong opposition to the use of this MIS system, opposition that was preventing the MIS system from being used to its full potential. Moreover, the CIO was at lost as to how to ensure greater compliance to his control and fuller use of the MIS system. Therefore, the CIO decided that he needed someone external to the company to help him understand the fundamental reasons, technical, social, or cultural, for the opposition to the MIS system.

THEORETICAL BASIS FOR THE STUDY

Innovative, organization-transforming software systems are introduced with the laudable goals of improving organizational efficiency and effectiveness, reducing costs, improving individual and group performance, and even enabling individuals to work to their potentials. However, it is very difficult to get these software systems to be used

successfully and effectively (Lyytinen et al., 1998; Bergman et al., 2002). Some people in some organizations resist the changes. They resist using the systems, misuse them, or reject them. As a result, the goals are not achieved, intended changes are poorly implemented, and development budgets and schedules are not respected. Misguided decisions and evaluations and less than rational behavior are often offered as the causes of these problems (Norman, 2002; Dhillon, 2004). Bergman, King, and Lyytinen (2002) observe (p. 168), "Indeed, policymakers will tend to see all problems as political, while engineers will tend to see the same problems as technical. Those on the policy side cannot see the technical implications of unresolved political issues, and those on the technical side are unaware that the political ecology is creating serious problems that will show up in the functional ecology". They go on to say (p. 169), "We believe that one source of opposition to explicit engagement of the political side of RE [Requirements Engineering] is the sense that politics is somehow in opposition to rationality. This is a misconception of the nature and role of politics. Political action embodies a vital form of rationality that is required to reach socially important decisions in conditions of incomplete information about the relationship between actions and outcomes".

The implementation of complex systems, such as enterprise resource planning (ERP) systems, are rarely preceded by considerations about:

- The system's degradation of the quality of the employees' work life, by reducing job security and by increasing stress and uncertainty in pursuing task and career interests (Parker & Wall, 1998, pp. 55-70; Davidson & Martinsons, 2002; Thatcher & Perrewé, 2002);
- The system's impact on the informal communication that is responsible for friendship, trust, feeling of belonging, and self-respect (Goguen, 1994; Snizek, 1995; Piccoli & Ives, 2003);
- The power imbalances the system will cause (Bergman et al., 2002; Dhillon, 2004); and
- The employees' loss of work and life meaning, which leads to depression and turnover (Parker & Wall, 1998, pp. 41-49; Bennett et al., 2003; Davison, 2002).

Recent work by Krumbholz et al. (2000) considers some of these issues after implementation of ERP systems. Specifically, this work investigates the impact on user acceptance of ERP-induced organizational transformation that results from a mismatch between the ERP system's actual and perceived functionalities and the users' requirements, including those motivated by their values and beliefs (Krumbholz et al., 2000; Krumbholz & Maiden, 2001).

This case study describes an on-site examination of one particular ERP-induced organization transformation. The prime champion of the ERP system in one company was surprised by the resistance to the system's use shown by the employees of the company. He ended up asking the help of the first author of this case study to understand the sources of this resistance and what to do about it. The present report is a distillation of the first author's final report to the champion and of her PhD dissertation (Ramos, 2000). The focus of the study is on understanding the technological, social, and cultural reasons of the employees' resistance against the ERP.

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