Chapter VIII

Rhetoric, Practice, and Context-Sensitivity in Sociotechnical Action:
The Compass Case

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Abstract

Sociotechnical action, as interpreted in this chapter, comprises a wide array of elements which shape technological artefacts as socio-material and linguistic devices. Concepts grounded in different theoretical streams are used to account for the ambiguous and multiple process of technology construction. Categories of “interpretative flexibility,” “inscription,” “work-around,” and “misunderstanding” are reviewed and used in this account. Starting from the implementation of an intranet-based knowledge management system in a 100-staff British firm, different courses of action in technology implementation and appropriation are analysed. Interpretations performed by different actors can raise misunderstanding, failure, and innovation in processes of negotiation and are strongly oriented by power issues. The gap between rhetoric of public discourse and practice situated in specific organisational contexts is argued to be crucial in framing expectations and patterns
of sociotechnical action. Ambiguity and multiplicity of the knowledge management system studied (the Compass) illustrate how the mutual constitution of the social and the technical makes technology a "context-sensitive" artefact.

Introduction

The concept of sociotechnical action emerges from a dialogue between different theoretical streams which emphasise the necessity of a non-deterministic approach to technology. Among these “traditions,” social informatics (Kling, 1999) and social construction of technology (Bijker, 1995; Bijker & Law, 1992) seem to be especially relevant in providing a rich account of how technology cannot be reduced to either a set of tools driving social change from outside or to a mere outcome of pre-existing social structures.

The horns of this apparent dilemma can be overcome through sociotechnical action as a concept able to account for the multiplicity and complexity of the process from which technology emerges.

Therefore, the core arguments of this contribution aim to understand the constitution of sociotechnical action along the following lines:

- Discursive frames setting up favourable links between technologies and a specific social order (Iacono & Kling, 2001);
- Gaps between rhetoric framed in public discourse and practice embedded in local contexts;
- Misunderstanding and ambiguity in the interpretative flexibility of technology (Bijker, 1995);
- Construction of technology as “success/failure” following narrative patterns (Fincham, 2002);
- Appropriation of technology as based on work-around (Pollock, 2005) performed on the vision inscribed in the artefact (Akrich, 1992);
- Multiple points of view as irreducible resources for sociotechnical action (Horton, Davenport, & Wood-Harper, 2005);
- Power issues which establish multiple institutional regimes of truth in knowledge management (Ekbia & Kling, 2003);
- Eventually, unintended outcomes in technology appropriation and use (e.g., marginalisation and non-use of technological artefacts).
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