

Facing Disruption

Responsive Contents and Technological Responsibility

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Abstract

The panel explores an alternative conceptual framework to understand and manage the implications of non-linearly structured work forms that emerge in current work environments. The framework of complexity is used for this purpose and to assess the importance of boundaries and limited perspective for systems in which technology is constructed as a ferment of change. The question of which change data are needed to face disruption in information systems is raised at a general level. The panel audience is presented with a possible framework for the discussion.

Keywords

Complexity, disruption, emergence, responsibility & change data.

Panel Objective

The objective of this panel is to strengthen the thematic focus on complexity as a dimension of information systems. For this reason two panellists – each of them prominent in the field – who complement each other. They complement each other in the sense of having followed different but convergent itineraries towards their common focus on complexity dynamics in organisations (Merali & Snowden, 2000).

Complexity represents a strategic focussing of the information systems concept to centre on the evolution of human systems, in which the technological dimension is of structuring rather than featuring importance. And it represents an occasion to discuss how the emergence of new contents in such dynamics may be linked to *disruptive* as much as to contextually embedded uses of technology.

In this panel, we will explore non-linearly structured approaches to the evolution of dynamic systems in which the technological component *punctures* rather than carries, or conveys, the context. Technology will be explored as a ferment of change in processes where actors (1) need to be forgetful of their original goal to become involved in temporary objectives, (2) need to remember their final target when the intermediary ones have become obsolete. This is a mindset, or a framework, allowing to raise the questions of (a) the role of boundaries in the knowledge process [Merali, 2002]; (b) how strategy and complexity management may be fruitfully connected (Kurz & Snowden, 2003).

The structuring impact disruption may well be independent of the size and sophistication of the technological component in information systems. Exploring this possibility may be worth while since it allows us to keep it simple (Axelrod, 1997). Disruption may generate both integrating and fragmenting dynamics and is a central dimension in networks of innovation (Barth, 2002). The panel will seek to bridge the research and the practitioner's point of view on situated learning (Lave & Wenger, 1991): in dynamic systems that evolve under the conditions where the calls and cries of business (c.f., Bourdieu, 1979) makes responsibility a question of 'the ability to respond' (c.f., Merali, 2000).

Both the panel and the chair work daily to facilitate such processes, and profess an involvement in complexity studies, not from the outside, but from the midst of complexity. This 'internal view' of complexity and the approaches & technologies that may be used to manage it, moves the searchlight to those "islands" – the eye of the whirlwind – from where changes in the environments, and concomitantly the systems dynamics, may be appraised.

The panel's question is addressed to the session's audience at ecis2003: how should we address the problem of disruptive technologies to make a proper assessment of change data in systems defined by users?

Profile of the Panelists

Yasmin Merali is the Director of the Information Systems Research Unit, at the Warwick Business School. Yasmin Merali's particular interest is in complexity and emergence in the transparently interconnected world (without technology references). She is currently writing about the exploration of patterns of emancipation and domination that emerge as actors "do their thing" from their situated perspectives, and the notion that "complexity theory" allows us to play with ideas and break out of the "managing complexity" paradigm, allowing the emergence of a self-aware mode of accepting complexity and harnessing complexity (Axelrod & Cohen, 1999).

David Snowden, who has a background as a philosopher, is a leading figure in complexity management research. He is the director of the Cynefin Centre for Organisational Complexity (IBM). He has developed uses of narratives in organisational change combining a generic methodology of approaching complexity, emergence and disruption in organisational dynamics while using very simple visual models to manage such dynamics and reflect on them. He is currently working on decision theory (Tversky, 2000) in general with particular emphasis on alternative history and the impact of limited perspective on decision makers (Neustadt and May, 1986).

Panel Structure and Objectives

The panel will be introduced by the chair for ~10 minutes, each of the panel members will then talk for 15-20 minutes, and 10-15 minutes will be used for open discussion. The purpose of the panel is to shed light on how interactive processes in technology-use generate a human pull in systems development, and to supplement current views in this domain (Ciborra, 2002). In this connection, there may be a need for a cultural approach to emerging technology uses, deriving from a certain number of unanswered questions concerning "thick descriptions" (c.f. Geertz, 1973): i.e., the mobilisation of knowledge, attitudes and skills in organisations.

Organisations that non-linearly structured performance from their employees, have taken on the challenge of managing complexity. The rationale for introducing 'complexity' at this juncture is not to raise the discussion at an "academic level": in fact, quite the contrary (arguably). Complexity is an issue emerging from changes in contemporary work life, where a section of our knowledge culture has become part of the infrastructure. We know that learning may be abstracted from work, but in the current setting it becomes ever more clear that *work cannot be abstracted from learning*.

What happens to these emergent knowledge issues if placed back into the academic arena? Have we come far enough to start working from a unified platform? Or, will disciplinary boundaries still go on living their own life for long time, despite the substantial changes in the technical resources and the forms of co-habitation human beings and artefacts in our contemporary work environments? What are the unifying frameworks, approaches and mindsets we presently have at our disposal? In the social sciences, the statement that complexity research represents a brokerage between natural science and the humanities was made already in Lisbon in 1996 (Gulbenkian Report, 1996), and elsewhere by Wallerstein (1991). The concern that a trans-disciplinary use of complexity "theory" to address issues in the human sciences is shared by Merali and Snowden.

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