Abstract

This paper presents the empirical findings of a case study of communities-of-practice networks in a previously privatised research laboratory in the information technology sector. The communities-of-practice studied were formed by scientists undertaking research in the fields of intelligent systems and artificial intelligence. The context of this study is particularly complex, with an organisation fragmented by a dual culture of scientific and business communities. Following privatisation, the introduction of a new business model of financial accountability for research created a growing antagonism: the business community’s objective of re-orientating research directions by market needs to achieve financial sustainability compromised the scientific community’s objective of self-determined scientific pursuit.
Literature and research objectives
The study was conceptualised using the original literature on legitimate peripheral participation (Lave, Wenger), communities-of-practice (Wenger, Brown, Duguid) and the associated empirical research (cf., Orr, Brown, Duguid, Wenger, Snyder). The research, however, did not concentrate on processes of learning in the community-of-practice environment. Instead, it sought to understand the conditions and resources that communities-of-practice need in order to emerge and survive in a business context and also the benefits they achieve both for their members and the organisation.

Method and sample
The method of the research relied on an inductive approach, using individual and focus group interviews for data collection and grounded theory methodology for data analysis. Data were collected from 41 interviewees in the roles of scientists, laboratory managers and business managers. Further data will be collected in November 2001 in structured form from an additional set of 250 employees. This data will be used to assess the wider validity of the qualitative findings and be included to produce the final manuscript.

Findings
The findings at this stage of the project suggest that communities-of-practice, especially in networked form, offer an effective mechanism for consolidating employee resistance to imposed change and amplifying its impact on the organisation. The data revealed how the scientists use their communities-of-practice networks to subvert the implementation of a market-driven business model into a public company culture.

Systems of shared values, beliefs, behavioural rules and norms, and firm external boundaries were found to provide the communities-of-practice with internal cohesion and shared worldviews. When the business community in the organisation announced the implementation of the new business model, the members of the scientific communities-of-practice assumed a shared interpretation of the change intervention in terms of a threat to their community cultures and working practices. The strong cultural cohesion then enabled these communities to engage the collective will and mechanisms for effectively resisting the change.
**Contribution**

The paper makes a theoretical contribution in reporting empirical evidence that challenges the overwhelmingly positive representation of communities-of-practices in the knowledge management literature as, for instance, environments for creating and sharing knowledge across boundaries or for providing the glue that holds the organisation together in times of adversity and change.

The paper also makes a practical contribution for professionals implementing people-centred strategies for knowledge management. It makes recommendations on how to foster the emergence and survival of communities-of-practice in a business context, and exemplifies the contributions they can achieve and the potential disadvantages they can create, especially when networked across the organisation.