Piloting IT-Innovations: a German approach to researching IT-Innovations in complex real-world social settings

Jan Marco Leimeister & Helmut Krcmar
Technische Universitaet Muenchen, Germany

"One must learn by doing the thing, for though you think you know it, you have no certainty until you try it." --Sophokles, 496-406 b.c. (quoted in (Rogers, 1995, p.161))

Researching the design and usage of complex socio-technical systems as for instance virtual communities is especially challenging. Such research subject can often hardly be reduced for meaningful study. Virtual communities, consisting of a (social) context that interacts with information technologies, can best be understood as whole entities. In order to develop an understanding of the interaction of complex social entities and their information systems we introduce the research approach of piloting IT-Innovations, a variation of action research.

Action research began growing in popularity for investigations of information systems since the 1990s (e.g. (Checkland, 1991)) and is currently receiving more and more attention (see e.g. MISQ Special Edition on Action Research MIS Quarterly Vol. 28 No. 3/September 2004). The method produces highly relevant results because it is grounded in practical action, aimed at solving an immediate problem situation while carefully informing theory (Baskerville, 1999) and is therefore very adequate for the objectives of this research or as Rapoport (, 1970) defines it: "Action research aims to contribute both to practical concerns of people in an immediate problematic situation and to the goal of social science by joint collaboration within a mutually acceptable ethical framework". The fundamental contention of an action researcher is that complex social processes can be studied best by introducing changes into these processes and observing the effects of these changes. This implies unavoidable effects: The adoption of an interpretivist and idiographic viewpoint of research enquiry and the acceptance of qualitative data and analyses (Baskerville, 1999).

In Action Research, the emphasis is more on what practitioners do than on what they say they do."(Avison, 1999, p.3)

Anyone familiar with the German IS research culture would expect to find numerous action researchers in Germany. However, a closer examination of the literature reveals there are relatively few if any. There are few publications claiming to report on action research and there is little if any ongoing debate on action research. This presentation argues that the lack of publications is a result of a different framing of action oriented research in Germany. The purpose of this presentation is to present a variant of action research, the piloting of an innovation, as a starting point for a debate on the action research methodology in Germany and to contribute to the international debate on action research. We do so in a general manner and by reflectings on the research approach in the socio-technical pilot project COSMOS (for further information on the project see also http://www.cosmos-community.org/ healthcare_eng.html)