

# Action Research and Network Development: Creating Actionable Knowledge

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## Abstract

To make a valuable contribution to our society today, knowledge must be relevant, applicable and actionable. On the side of managers it calls for collaborative approaches to knowledge creation and knowledge transfer between their organisations and knowledge institutions. On the side of academics, it calls for engaged scholarship aimed at knowledge transfer and knowledge contribution to the practical know-how of managers and organisations. Action researchers have long advocated collaborative knowledge creation processes as the way forward, despite the fact that working within an environment that aspires for knowledge to become applicable and actionable can be complex and challenging. This paper discusses actionable research methods with a focus on networks and learning in a regional development context.

## Introduction

With the rise of globalisation, technological innovation, diffusion of information via the Internet, and related changes in business values and beliefs, countries, regions, governments and institutions everywhere are facing changing preconditions for knowledge formation and competitive advantage (Pfeffer & Sutton, 2000). A recurring theme in the networked economy is one of a complex network of interaction, whereby emphasis on collaboration between firms and cooperation with other organisations is placed as the key for new models of innovation (Castells, 2000). As connectivity is conducive to linking stakeholders in networks, new structures are emerging in which networks and inter-organisational alliances play an increasingly important role (Gulati, Nohria, & Zaheer, 2000; Kogut, 2000).

In geographic terms, knowledge economy innovation can operate on an international, national, regional and local level. Regions can foster innovative milieux in which information knowledge diffused throughout the local milieu is believed to augment creative capacity for firms and reduce uncertainty regions (Amin, 1999; Cooke & Morgan, 1998; Marceau & Dodgson, 1998; Storper, 1997). In the transition to a learning-based economy, the 'new regionalism' (MacKinnon, Cumbers, & Chapman, 2002) focus is on social and institutional learning as the prime driving forces behind regional economic growth. Recognising that economic growth is accomplished by designing regional-level intervention which allows actors within regions to shape their own development prospects and stimulate learning, regions have been turned into so-called learning regions in which socially a variety of regional agents, networks and institutions are intended to take part in action-oriented and interactive learning cycles.

### **Network Learning**

Networks, like learning regions, are also caught up in the new learning buzz. As a result, the term network suffers from semantic ambiguity, since it has become a simile for just about any collaborative venture or relationship (Van Wijk, Van Den Bosch, & Volberda, 2003). The concept of network formation for knowledge creation and innovation is, however, not a new one. Network forms have been discussed for over 40 years (Philips, 1960). An advocate of the networked organisation concept, Senge (1992) advanced the practice of shared vision, team approach and continuous enlightenment through lifelong learning. Nonaka and Takeuchi (1995) progressed the shared vision and lifelong learning concepts into the knowledge-creating company, whereby learning and knowledge creation are considered spiraling processes of interaction fusing explicit and tacit knowledge.

With the advent of connectivity facilitating economic agents to operate in local, regional, national and global networks of interaction, learning and knowledge creation have become central attributes of network-based global and regional innovation (Castells, 2000, Dyer & Nobeoka, 2000; Gulati et al., 2000; Shapiro & Varian, 1999). What is, however, different in the knowledge economy is the unprecedented emphasis on learning, the extreme rate of change related to knowledge production, and the impact of knowledge production across regions as well as social groups (Asheim, 2001; Lundvall & Archibugi, 2001).

### **Institutional Learning**

With the new economy inextricably linked to learning and knowledge creation; and regional learning being associated with, *inter alia*, institutional relationships within regions, it is also important to gain some insight into the changing role of universities. Knowledge creation and learning has traditionally been the domain of universities and learning institutions, although the topic of cooperation between universities and the business world is not new either. Alternately referred to in the literature as 'technology transfer', 'knowledge exploitation' or 'industry-science relations', in the past most university-industry interaction appears to have been a one-way rather than a bi-lateral knowledge transfer process (Brulin, 2001). However, after decades of intense debate and criticism, eroding relationships between universities and the economic sector, spurred on by new initiatives and financial necessity, are being recultivated (Brulin,

2001). By putting external relationships back on the institutional agenda, universities are expected to increase their contribution to public knowledge creation for society in general and their regional community in particular (Bardi, 2002).

While there appears to be growing consent that the way forward for academia is to change the forms of knowledge creation rather than to find appropriate theoretical frameworks (Toulmin & Gustavsen, 1996), collaboration between universities and practitioners is, in some ways, a relatively new and intricate process for which new practices need to be developed. “Few academics spend enough time in organisations to appreciate the challenges of managerial practitioners and to engage in mutual learning” (Senge & Scharmer, 2001, p239). In accepting knowledge as the basis of practice, both the public and private sector require new skill sets.

This is not to say that all forms of knowledge creation currently in use are defective or that institutional research agendas need a total overhaul. However, researchers that aspire to move away from linear processes of knowledge transfer need to be amenable to utilizing bi-directional or joint knowledge creation processes that can deliver “knowledge as a base for action and as a platform for further inquiries” (Brulin, 2001, p441). Gibbons et al (1994) refer to this form of knowledge creation as Mode 2 knowledge production, the collaborative production of (often more practically relevant) new knowledge, co-created by academics and practitioners in the field. In reflexive organisational learning, mode 2 knowledge production brings together the ‘supply side’ of knowledge, including universities, with the ‘demand side’, including businesses (Gibbons et al, p7). When researchers support interactive development processes and organisational linkages, powerful and efficient results can ensue (Gustavsen, 1998).

Historically, action research projects are underpinned by the concept of collaborative learning and change, making action research a choice methodology to assist learning organisations, learning regions and regional networks in new economy innovation processes.

## **Regional Development**

Regional development is a good example of a multi-faceted arena of intervention. The environmental conditions of today and the speed of change make regional innovation and change interventions particularly complex for both organisations and action researchers (Elden & Chisholm, 1993). The issue of linking diffusion of change within a single unit to stretch across the domain, e.g., an industry sector or a region, has been central in Scandinavian action research towards work life reform, where networking and organisational processes in regional contexts have solid roots in projects with strong action components, be it in the form of consultancy or in the form of actual research projects (Pålshaugen, 2004). American action research projects undertaken towards the development of networks for regional development (Chisholm, 1998), are similarly grounded in a socio-ecological perspective. To widen the scope of inquiry across the entire regional network, Australian action research interventions in regional development have also adopted the socio-ecological and socio-technical thinking first outlined by Emery and Trist in 1965 (see Braun, 2004, 2002). In network development through action research, the content or design element of the development process is

believed to be of minor importance. Instead, a network "...should work on as broad a range of topics as possible, to maximise the scope and variety of the experience available within the network" (Engelstad & Gustavsen, 1993, 230).

### **Integrating Action Research Components**

Considering regional settings, it is important consider the context as the success of any action research intervention strongly depends on the degree to which the actors are committed to and become engaged in the process. At the one extreme, when client-researcher interaction is low, knowledge creation and actionable outcomes are likely to be negligible; at the other extreme, high client-high researcher involvement has greater potential to create knowledge and actionable outcomes (Schein, 2001). Although researchers may have aspirations towards Mode 2 double loop learning (Argyris and Schon 1978) and third-order change (Bartunek & Moch, 1987), this will be entirely dependent upon the researcher's position to direct the learning process (Schein, 2001). The challenge, therefore, is to effectively place oneself in the research frame, combine participation and observation in order to understand, participate in, and record actors' deliberative processes and, where possible, aim for at least a second-order change outcome.

Heron's (1990) comprehensive typology of helping interventions may be of use in determining the researcher's position within the contextual research frame, as it includes *prescriptive*, as in directing the behavior of others; *informative* as in imparting knowledge and information; *confronting*, as in challenging limiting behavior; *cathartic*, as in enabling a discharge of emotion; *catalytic*, as in enabling self-directed action; and *supportive*, as in affirming the worth of the client. In defining which of these categories to use for regional development intervention, Heron (1990) stresses the importance of the practitioner choosing the appropriate category; being skilled in the chosen category; and ensuring that both the catalytic and supportive categories underpin all intervention, so that the intervention is grounded in respect for the client, and precedence is given to the needs of the client over the needs of the practitioner or action researcher.

Since participants in the intervention process will have varying degrees of engagement or interest in the process from which action might or might not flow, the researcher will have to be both adaptable and creative within the research context, whereby common and differing conceptualisations of problems and solutions have to be addressed on an emerging basis. Rather than continuing to be frustrated by a situation, it may be necessary to acknowledge that a desired position may not be established during the intervention time and that a new strategy is in order. Charting project activities may help to pinpoint where sustained dialogue does or may best occur, so that a constructive shift may be made towards working with the most accessible actors; in certain settings peripheral rather than central actors may be the most receptive conduits of change.

As Chisholm (1998) has demonstrated, using action research can be helpful as an orientation toward network development, as, ideally, the approach pervades every network member, group and activity. When one does not encounter engagement difficulties, action researchers can help expose such elements as worldview – described by Reason (1996) as the fundamental basis of our perceptions, thinking, values and

actions – and firmly place pluralism and cultural diversity on the agenda. The control of knowledge is also critical to the outcomes of the intervention (Reason & Bradbury, 2001). As Gaventaa and Cornwall (2001) have observed, the hidden face of power is as much about keeping issues and actors (including the researcher) from getting to the table as it is about control over the learning processes. Competent action researchers acknowledge and address complex issues such as power inequities; they challenge power structures and pay attention to whose voices or knowledge are not represented. The latter may be achieved through informed debate and democratic processes and by accommodating voices from ‘above’ and ‘below’ (Gaventaa & Cornwall, 2001).

The experiences gained by Scandinavian action researchers in regional development have revealed that general models of theory may underpin action, but it is the *interpretation* of general theories fused with the agents of local knowledge (e.g. the participants in the domain) that create locally applicable outcomes (Gustavson 2004; Palshaugen 2004). Action researcher would hence aim to create a balance between social interaction and searching for solutions, whereby the contextual point of departure determines the knowledge creation structure and productivity thereof. As Schein (1997) has suggested, we jointly own the inquiry process, but ultimately the client owns the problems and the solutions.

Utilising action research as primarily a communicative process, with an emphasis on face-to-face communicative tools such as dialogue conferences, the Scandinavian work highlights the importance of relationship building in improving capacity for learning, developing ideas and taking action. It is of value to recognise how such relationship building might be undertaken and how intervention can move beyond mere information exchange. Scandinavian approaches to knowledge creation recognise the existence of multiple pools of knowledge, which through mixing and matching can be formed into partnership-based pool management, e.g. establishing relations between various kinds of practitioners and researchers in accordance with the circumstances, tasks and problems at hand (Palshaugen 2004). Dialogue settings are facilitated to create new perspectives, which recognise plurality and multiple pools of knowledge, which in turn create mutual commitments to further contacts and joint efforts between the participants (Gustavsen, 2004).

Within action research approaches to network and community development, the inward focus of such infrastructures is on creating (generally face-to-face) environments for high quality conversations or dialogue (Chisholm, 1998, Gustavsen, 2001; Senge & Scharmer, 2001). In Scandinavian projects the external infrastructure seems to typically include a so-called development or referent organisation that takes on certain functions for the network or domain (Finsrud, 1999). As well as internal functions like initiating projects, supporting network formation, providing information, and supporting the exchange of experiences, the referent organisation will also perform more outwardly focussed functions such as influencing policy making in the larger system, attracting resources to the domain, and establishing external links to other institutions and networks (Hanssen-Bauer, 1998).

With many university charters now reflecting a commitment to collaboration with industry in their local or regional communities (Burlin, 2001), it is possible for learning institutions to adopt a referent organisation role and progress the relationship between regional development strategies and capacity building processes. By creating sustained learning experiences through ongoing and action-oriented dialogue (Tell, 2001), learning institutions and resident action researchers can augment their social capital within their region and work with clients/domains on those drivers that can best lead to collaborative relationship changes. This may be particularly important to consider in regional contexts where there may not be a strong tradition of learning for learning's sake. Where there is little social glue between regional actors or limited external links exist, there may initially be more affinity with an approach that is seen to have concrete and practical benefits – for example, addressing shared problems or opportunities.

## Conclusion

This paper has discussed the use of action research in a regional development context. Identifying a number of context-specific issues, the paper then explored prevalent action research practices for regional development settings. The paper concluded by exploring some contextual components and constructive choices for consideration by action researchers to augment outcomes of analogous action research interventions.

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