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The Role of Action Oriented Inquiry

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Introduction

Since the 1950s the process of introducing IT into work organisations has been marred by reports of significant underperformance and failure. While it emerges that such underperformance and failure is due, in no small way, to an inability to effect integrated strategic change, it is unfortunate that much IT related inquiry has failed to adequately address this dilemma. Acknowledging the weaknesses of dominant positivist research approaches, this paper outlines the case for action oriented inquiry as a legitimate and profoundly important post-positivist family of research approaches relevant to investigating this enduring dilemma with IT.

The Plight with IT

Empirical studies over the last twenty-five years provide substantial evidence to support the assertion that underperformance and failure all too frequently mar the introduction of IT into work organisations (Tomeski and Lazarus, 1975; Kearney, 1990; Standish Group, 1998). Unfortunately, the number of IT related change initiatives that actually deliver espoused business benefits is in the order of ten percent while the number of initiatives that fail or are abandoned completely is in the order of fifty percent (Comptroller General, 1979; Kearney, 1990; Johnson, 1995; Clegg et al, 1996). The impermeable and enduring nature of this dilemma is of concern to both investigators and practitioners alike.

Such underperformance and failure are rarely explained by way of attending purely to economic and technical criteria (Long, 1987; Eason, 1988; Bancroft, 1992; Clegg et al, 1996), yet such criteria appear to dominate the introduction of IT into work organisations (Lunt and Barclay, 1988; More, 1990; Clegg, 1993; Kling and Allen, 1996). Executive management tend to view the introduction of IT as an economic imperative (McLoughlin and Clark, 1988; Harrington, 1998; Marion, 1998; Taylor, 1998; Wagle, 1998) while IT specialists tend to view it as a technical imperative (Scarbrough and Corbett, 1992; Davenport, 1994; Schein, 1992; 1996). Alas, this narrow techno-economic bias, sustained over time by the coalescent behavioural patterns of both the executive and IT communities, results in the human and organisational aspects of IT related change being marginalised and ignored (Eason, 1988; Hornby et al, 1992; Howarth, 1992; Clegg, 1993).

Such an outcome is rarely inconsequential since failing to attend to the human and organisational aspects of IT related change is said to be responsible for the high incidence of underperformance and failure (Long, 1987; Eason, 1988; Bancroft, 1992; Clegg et al, 1996). Indeed, investigators are increasingly of the opinion that economic and technical aspects of IT account for less that ten percent of underperformance and failure while human and organisational factors account for more that ninety percent (Long, 1987; Isaac-Henry, 1997). The nature of this dilemma is both obstinate and enduring (Sauer, 1993; 1999; Galliers and Baets, 1998).

This predicament is further compounded by an inability to effect integrated change due to the requisite knowledge and expertise being widely dispersed in organisational settings (Andriole and Freeman, 1993; Clegg et al, 1996; 1997; McDonagh, 1999; McDonagh and Coghlan, 1999; 2000). Those organisational actors who understand the technology have little appreciation of the human and organisational aspects of IT (Clegg et al, 1996; 1997). Similarly, those organisational actors who understand the human and organisational aspects of IT have little appreciation for the technology (Clegg at al, 1996; 1997). Addressing this plight inevitably places a high premium on integrating different forms of knowledge and expertise (Andriole and Freeman, 1993; Clegg et al, 1996; 1997).

The Plight with IT Related Inquiry

Reflecting on the need for an integrated approach to IT related change it seems prudent to consider the current state of research in the IT domain. Considering the perplexed nature of the domain (Markus and Robey, 1988; Agarwal and Tanniru, 1992; Checkland and Holwell, 1998) it is hardly surprising that the fruits of inquiry have been seriously challenged in recent times (Keen, 1980, 1991; Galliers, 1995, 1997; Benbasat and Weber, 1996; Robey, 1996; Robey and Markus, 1998; Saunders, 1998; Senn, 1998; Benbasat and Zmud, 1999). Keen (1980:15) contends that while 'the world of practice is central not peripheral' the reality remains that 'research is too divorced from practice' and 'research issues arising from practice remain unstated'. Galliers (1997:154) notes that 'It does appear that we IS investigators are pursuing somewhat different agendas than those of our colleagues in practice'. More recently, the dilemma has been

articulated with precision noting that 'a great deal of the academic research conducted in information systems is not valued by IT practitioners' and that such research 'is not relevant, readable, or reachable' (Senn, 1998:23-24).

This relevancy crisis is not unique to the IT domain (Keen, 1980; Galliers, 1987; Senn, 1998) since similar allegations have been made against the broader domain of management and organisation studies (Susman and Evered, 1978; Shrivastava, 1987; Bettis, 1990; Schein, 1991; Pfeffer, 1993; Gopinath and Hoffman, 1995). Of particular interest in these writings is the assertion that positivist approaches to inquiry 'are deficient in their capacity to generate knowledge for use by members of organisations' (Susman and Evered, 1978:585) since they are biased towards the production of 'very reliable results about very unimportant things' (Schein, 1991:2). Similarly, it has been argued that most research in the strategy domain is 'irrelevant' since it is 'increasingly and prematurely stuck in a normal science straightjacket' (Bettis, 1991:315). This is a rather harrowing scenario considering that positivism dominates IT related inquiry (Kaplan and Douchon, 1988; Landry and Banville, 1992; Lacity and Janson, 1994; Walsham, 1993, 1995).

Reflecting on the aforementioned weaknesses in extant research approaches, action oriented inquiry emerges as a legitimate and profoundly important post-positivist family of research approaches relevant to IT related inquiry.

The Nature of Action Oriented Inquiry

Kurt Lewin, the founding father of action research, 'stressed the limitations of studying complex, real social events in a laboratory' (Foster, 1972:530) and 'the artificiality of splitting out single behavioural events from an integrated social system' (ibid.). Lewin, stressed 'the advantages of understanding the dynamic nature of change, by studying it as it takes place' (ibid.) and asserted that 'one cannot understand a human system without trying to change it' (Schein, 1991:4). 'It is in the attempt to change the system that some of the most important characteristics of the system reveal themselves, phenomena that even the most talented ethnographer would not discover unless he happened to be present when someone else was trying to produce some change' (ibid.).

Action research, then, is founded and legitimised on the premise that deliberate intervention in human activity systems is both the key to their understanding and a preferred approach to research in social settings. What is of the critical importance is not whether to intervene or not but rather the nature of the desired intervention. 'The illusion among some investigators or ethnographers that they can go into organisations without influencing them

has been the source of a great deal of misunderstanding. Instead of attempting to maintain this fiction or to argue for minimal influence, why not acknowledge that any appearance of an outsider on the organisation's doorstep is an intervention. The issue then is to decide what kinds of intervention are desirable' (Schein, 1991:10).

Action research is best conceptualised not as a single research approach but as a family of approaches that share common characteristics (Eden and Huxham, 1996; McDonagh, 1999). One of the most widely cited interpretations of action research is that of Rapport (1970:499). He states – 'Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework'. Eden and Huxham (1996:526) state that action research refers to 'research which, broadly, results from an involvement by the investigator with members of an organisation over a matter which is of genuine concern to them and in which there is an intent by the organisation's members to take action based on the intervention'.

Various writers have sought to crystallise the distinctive nature of action research – e.g. Susman and Evered (1978), Peters and Robinson (1984), Argyris et al (1985), Israel et al (1992), Greenwood et al (1993), Coghlan (1994), Eden and Huxham (1996), and Coghlan and McDonagh (1997). A synthesis of these writings reveals that action research is: diagnostic, problem focused, action-oriented, collaborative, situational, cyclical, ethically based, experimental, scientific, naturalistic, normative, re-educative, emancipatory, eclectic and case-oriented, emergent, stresses group dynamic, balances research and social action, incorporates local knowledge, multidisciplinary, and contributes to human systems development.

The Appeal of Action Oriented Inquiry

Reflecting once again on weaknesses in the dominant approaches to IT related inquiry and the enduring plight with IT, it appears that action oriented approaches to inquiry offer an unrivalled opportunity of developing a more holistic approach to inquiry. This assertion is based upon four important postulates. First, action oriented inquiry is capable of simultaneously embracing the concerns of both practitioners and investigators (Argyris et al, 1985; Coghlan, 1994; Eden and Huxham, 1996; Coghlan and McDonagh, 1997). The practitioner and investigator are equally concerned with the immediacy of a particular problem situation and are equally focused on social action with a view to effecting change. The rich insights gained by wholeheartedly embracing the world of the practitioner provide the investigator with a sound basis for the generation of social knowledge. The tri-foci

of social action, social knowledge, and human systems development embodied in action research suggest its appropriateness as a research approach for investigating organisational processes of change (Baburoglu and Ravn, 1991; Gummesson, 1991) of which strategic change and IT related change are constituent parts.

Second, action oriented inquiry is capable of embracing the developmental or unfolding nature of strategy and IT related interventions attending to both the interventions themselves and the socio-political contexts in which they are embedded. A critical weakness in traditional research approaches such as surveys and experiments is that they ignore both the developmental nature of such interventions and their socio-political contexts (Abbott, 1990; Pettigrew, 1990; 1992). Third, action oriented inquiry is capable of embracing the integrative nature of IT related interventions simultaneously accounting for technical, human, economic, and organisational considerations. Action oriented approaches yield rich insights into the nature of such integration, a welcome development considering that such insights have long escaped organisational investigators and IT practitioners alike.

Fourth, an action oriented approach to inquiry such as action science is capable of uncovering, challenging and changing the polarised patterns of cognition and action with respect to IT embodied in the executive and IT communities. The importance of explicating implicit theories, which guide informed human action with respect to IT, is of the utmost importance when one considers the unintended consequence of the economic and technical mindsets of the executive and IT communities respectively. The coalescent nature of these mindsets is such that human and organisational aspects of IT are frequently marginalised and ignored. Considering the embedded nature of the executive and IT mindsets with respect to IT, the effective introduction of IT necessitates real-time reeducation for both communities. Action research and more specifically action science wholeheartedly embrace this re-educative agenda as part of the investigative process.

A Paucity of Action

Notwithstanding such advocacy and the enormous appeal of action oriented approaches to inquiry, how prevalent are such approaches in the IT literature? Rare, to say the least. Once again, reflecting on North American trends in empirical research methods during the 1970s and 1980s (Hamilton and Ives, 1982; Farhoomand, 1992; Keen, 1991; Orlikowski and Baroudi, 1991; Cheon et al, 1993), only one empirical study employed an action research approach during this period. In a separate review, not confined to North America, on the use of action research in IT studies over the last twenty-five years Lau (1997) identifies ten discussion papers and twenty field studies embracing action research, action science, participatory action research, and action learning. Unfortunately, none of these were published in mainstream IT journals such as *MIS Quarterly*, *Information Systems Research*, *Communications of the ACM*, or the *European Journal of Information Systems* (Lau, 1997).

Outside North America, action oriented research approaches have made more contributions to the literature of the IT research community (Baskerville and Wood-Harper, 1996, 1998). In particular, Checkland's work on soft systems methodology (Checkland, 1981; Checkland and Scholes, 1990; Checkland, 1991; Stowell, 1995; Checkland and Holwell, 1998) has influenced IT research by linking action research and the systems development process. Similarly, Galliers (1992, 1995) and Reponen (1992) have respectively applied soft systems methodology and action research to IS strategy development.

Conclusion

This increased emphasis on the appropriateness of action oriented approaches to inquiry for the study of IT is discernible (Mansell, 1991; Baskerville and Wood-Harper, 1996, 1998; Serror, 1996; Lau, 1997; Stowell et al, 1997; Checkland and Holwell, 1998, 1998a; Avison et al, 1999). Notwithstanding such advocacy, unfortunately 'despite its overwhelming acceptance in organisation development, it is virtually non-existent among North American IS research' (Baskerville and Wood-Harper, 1996:235). In a European and Australian context it has been equally noted that 'action research is not a predominant IS research method even in those geographic areas' (ibid.).

How can a family of research approaches which holds such promise be embraced by so few? 'Action research can address complex real-life problems and the immediate concerns of practitioners. Yet, paradoxically, the academic community has almost totally ignored action research' (Avison et al, 1999:95).

References

References available from author upon request.