



# Surfacing Occupational Threats to Electronic Government – A Neglected Role for Organization Development?

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## INTRODUCTION

Throughout much of the last four decades the introduction of new information technology (IT) based systems has posed formidable challenges for many organizations, both public and private sector alike (Dearden, 1972; Clegg et al, 1996). While each new decade has witnessed significant investment in both administrative and technological innovations, with the lure of achieving significant efficiency and economic gains, it remains that outcomes from such investment programmes have been continuously disappointing (McDonagh and Coghlan, 1999; 2000). Indeed, it appears that underperformance and failure are common experiences with as little as ten percent of IT-enabled change initiatives delivering promised business value (McDonagh, 1999).

Investments in eGovernment initiatives are prime examples of how administrative and technological innovations coalesce with the implicit promise of significant benefits for all stakeholders involved. Yet, it remains that eGovernment initiatives are fraught with difficulties (OECD, 2001; Performance and Innovation Unit, 2000). Furthermore, such difficulties evoke memories of ongoing pathologies that have routinely derailed the effective introduction of IT in work organizations over the years.

Drawing from both the information systems domain and its reference disciplines, this paper presents a detailed critique of this enduring dilemma and in particular explores the role of occupational groups in its perpetuation through time. This paper concludes by way of noting that effecting an integrated approach to the introduction of IT that accounts for economic, technical, human, and organisational facets of change is inordinately difficult since the requisite knowledge and expertise are widely dispersed among diverse occupational groups.

## AN ENDURING DILEMMA

Outcomes from IT investment initiatives all too frequently fail to deliver much promised business value. Indeed, many organisations appear to experience significant underperformance and failure with regard to their IT investments as opposed to the promise of superior performance so frequently claimed in the business press. Consider for a moment a number of high profile cases where the introduction of IT has been a fiasco.

- The California Department of Motor Vehicles embarked on a major project to revitalise its driver's licence and registration applications process. By 1993, after \$45 million dollars had been spent, the project was cancelled (Johnson, 1995).
- After a total of \$125 million dollars had been invested, Hilton Hotels Corporation, Marriott Corporation and Budget Rent-A-Car Corporation cancelled what had become a major IT failure (Oz, 1994).
- FoxMeyer Drug, a large Texas-based pharmaceutical company, filed for bankruptcy in August 1994 as a consequence of a \$65 million dollar IT investment that went devastatingly wrong (James, 1997).
- Having invested £600 million, the Child Support Agency in the United Kingdom admitted that its new system was a failure and was being abandoned (Jones, 1997).

- After seven years and about \$500 million dollars trying to implement the mainframe-based SAP R/2 enterprise software package, Dow Chemical scrapped the project and started from scratch with a client / server version instead' (Cambridge Information Network, 1999).
- Having invested £878 million on a magnetic stripe card that never saw the light of day, the UK Government admitted that its PATHWAY initiative was a failure and was being cancelled (Ranger, 2000).

There is significant evidence to suggest that failures of the nature outlined above are a constant feature of the IT landscape (Sabbagh, 1998; McDonagh, 2000; Ranger, 2000). A recent analysis of twenty-seven sources of evidence between 1979 and 1998 concludes that around 50 percent of IT initiatives fail or are completely abandoned while another 40 percent are delivered late and over budget (McDonagh, 1999). Unfortunately, the percentage of initiatives that deliver business value is as low as 10 percent (Clegg et al, 1996; Johnson, 1995; Kearney, 1990; McDonagh, 1999).

Recent literature addressing the challenge of managing eGovernment initiatives echoes many of the sentiments expressed above, paying particular attention to the high probability of failure in IT-enabled change programmes in the public sector. Both the OECD and the Cabinet Office have clearly addressed the nature of this enduring dilemma (OECD, 2001; Performance and Innovation Unit, 2000).

## IMPAIRED LEARNING

Considering that such poor outcomes from IT investment initiatives has been a pervasive theme both in management literature and organisational practice throughout the last four decades, how can one readily account for such outcomes? To understand the persistent nature of this phenomenon one must understand the essential nature of the challenge involved in the introduction of IT into work organisations. That challenge necessitates fostering an integrated approach to the management of change, an approach that concurrently co-ordinates and integrates economic, technical, human and organisational facets of change. Recognising the systemic nature of this challenge it is disappointing then to find that most IT-enabled change initiatives are dominated by economic and technical considerations to the relative exclusion of human and organisational considerations (Lunt and Barclay, 1988; More, 1990). The tangible nature of this dilemma readily manifests itself when one considers that extant empirical research supports the assertion that economic and technical considerations are unlikely to feature prominently when IT fails to deliver (Clegg et al, 1996).

What then are the consequences of failing to nurture a systemic approach to change that concurrently accounts for economic, technical, human, and organisational aspects of IT. Indeed, they appear rather grave since failing to attend to human and organisational facets of change are considered to be the root of much IT-related underperformance and failure (Lucas, 1975; Benyon-Davies, 1997). Lucas (1975) states that the difficulties with IT are primarily of a behavioural nature, a view

well supported by Bariff and Ginzberg (1982). Other writers have succinctly noted that 90 percent of the problems encountered in IT-enabled change are of a human and organisational nature (Clegg et al, 1996; Long, 1987; Isaac-Henry, 1997).

Recent studies by both the OECD and the Cabinet Office provide confirmatory evidence that failure to address the human and organisational aspects of change associated with eGovernment initiatives all too frequently contribute to rather poor outcomes in such investments (OECD, 2001; Performance and Innovation Unit, 2000).

Considering the wide array of evidence that suggests that human and organisational aspects of change are routinely marginalized and ignored in IT-enabled change initiatives, it is worth considering why this dilemma persists through time. Are organisational actors genuinely unaware of the human and organisational facets of change or in a more sinister sense do they wilfully collude to marginalize and ignore these key dimensions of change? While the themes of both individual and collective learning are chic in the field of management and organisation studies one could be excused for believing that organisations learn little, if anything, from their difficulties with IT-enabled change. In the words of Andriole and Freeman (1993), 'we seem to learn relatively little from our mistakes ... we are not learning from our experience'.

## **A SOCIAL PHENOMENON**

Reflecting on such poor outcomes from IT investment initiatives, it is hardly surprising that the introduction of IT into work organisations offers a potent arena in which organisational actors are regularly drawn into a milieu of intense discord. Evidence of such discord abounds. Many IT specialists are considered lacking in the core skills required to integrate IT with the business (Martin et al, 1995). Company directors have little faith in the business judgement of their IT counterparts, even though IT is recognised as critical to corporate success (Stammers, 1997). Bosses tend to accuse IT colleagues of hiding behind techno babble to cover their lack of business acumen (McGinn, 1997). IT people are often aloof and uncooperative, uncomfortable with teamwork and unable to listen effectively to users (Vora, 1997). Indeed, a recent survey of 340 CIOs (chief information officers) in the United States, the UK, Germany and France noted that CIOs show a lack of business acumen and shrewdness' and 'are generally perceived as geeks and not business professionals (Korn/Ferry International, 1998).

Conversely, a UK survey of 1,000 full time IT professionals and 200 IT employers carried out by Harris Research revealed that 32 percent of IT professionals felt that 'senior management did not fully appreciate the role of IT in their business' (Briggs, 1996). Similarly, a survey of the UK's top IT directors carried out by the Butler Group revealed that 73 percent did not think their business managers were IT focused (Briggs, 1997). IT specialists accuse management of profound ignorance when it comes to new technology (McGinn, 1997). Those who work in IT often complain that their non-IT colleagues don't really understand the true potential of technology. This is held to be especially true of directors, who can seem radically out of touch (Hallahan, 1998). Golden (1997) sums it up when he says that all too often there is a yawning gap of understanding between business management and IT professionals.

It is of interest to note from the above that much of the discord surrounding the introduction of IT in work organisations appears to manifest itself in the polarisation of diverse occupational groups, namely executive management and IT specialists. 'Information technology has a polarising effect on managers; it either bedazzles or frightens. Those who are afraid of it shun it, while bedazzled IT departments frequently become prisoners of their own fascination, constructing elaborate technology architectures and enterprise information models' (Davenport, 1994). The level of inter group dissent highlights the need for a deeper understanding of how such groups separately and collectively influence the process of introducing IT into work organisations.

On closer inquiry, it emerges that the plight with IT is of an enduring nature sustained by the behavioural patterns of polarised occupational groups who have vested, but divergent, interests in exploiting IT (McDonagh, 1999). Executive management view the introduction of

IT as an economic imperative while IT specialists view it as a technical imperative. The coalescent nature of these two imperatives is such that human and organisational considerations are regularly marginalized and ignored during the process of introducing IT into work organisations (McDonagh, 1999; McDonagh and Coghlan, 2000).

Reflecting more closely on the manner in which the executive community shapes the introduction of IT in work organisations, it becomes increasingly apparent that this worldwide community of practitioners has a potent effect on IT-enabled change (McDonagh, 1999).

- Many senior executives see people as costly impersonal resources that generate problems rather than solutions.
- Many senior executives embrace a narrow economic focus on IT believing that IT merely offers an opportunity for rationalisation and cost reduction.
- Many senior executives see IT as a cost-pit rather than a strategic capability.
- Many senior executives embrace a short-term focus on IT and exert inordinate pressure to achieve rapid payback and short-term gain.
- IT executives charged with delivering business value from IT are more often than not excluded from boards of management, executive management teams, and the corporate strategy process.
- Many senior executives fail to commit to the IT strategy process.
- The clear separation of managerial and technical work serves to reinforce and invigorate the divide between business and IT.

In a similar vein IT specialists, as a worldwide community of practitioners, have a profound impact upon the introduction of IT in work organisations (McDonagh, 1999).

- Much of the community embraces a technical focus on IT attending primarily to the task and technology components of work organisations into which IT is being introduced.
- The tools, techniques, and methods used by the community of practitioners sustain this narrow technocentric agenda.
- Much of the community is genuinely unaware of the human and organisational factors that account for the majority of IT-related under-performance and failure.
- There is no apparent incentive for the community of practitioners to embrace a more holistic perspective on IT-related change.

Conflict and discord between the executive and IT communities is undoubtedly a predictable outcome considering the manner in which each community shapes IT-enabled change. Each community assumes a limited perspective on IT-enabled change, executives assuming an economic focus and IT specialists assuming a technical focus. Each community shares a predilection to design people out of rather than into systems. Similarly, each community shares a genuine lack of knowledge concerning the human and organisational aspects of IT-enabled change.

## **FRAGMENTED CHANGE**

It remains unclear then as to whom is responsible for nurturing a more integrated approach to IT-enabled change that concurrently attends to economic, technical, human and organisational considerations. Clegg and Kemp (1986) and Clegg (1995) note that IT specialists see their job as being complete once the software application has been developed. Similarly, Markus and Benjamin (1997) note that 'Deeply held beliefs that IT can cause change lead both line managers and IT specialists to restrict their own efforts as change agents. With everyone assuming that change management is the job of someone – or something – else, there is often no one left to perform change management tasks. Change then fails, and lack of learning about the root causes of failure promotes future failures'.

Considering the power and influence that both the executive and IT communities exert on the process of introducing IT into work organisations, the challenge of embracing a more integrated approach seems daunting. In light of this, and without being prescriptive, how can organisations influence the process of introducing IT to ensure that human and organisational issues are given equal consideration with economic and technical? One distinct possibility is to consider the involve-

ment of organisation development (OD) expertise since such expertise is generally well informed concerning the human and organisational factors that are generally ignored as part of the process of introducing IT (Burke, 1994).

Over the last two decades, various writers within the disciplines of OD and IT have advocated a potential role for such expertise. Notwithstanding such advocacy, the reality remains that the IT and OD communities are equally polarised with respect to their perspectives on change. IT specialists pursue a technocentric agenda ignoring the human and organisational consequences of that agenda. Similarly, OD specialists pursue an explicitly humanistic agenda and do not consider the IT domain as one to which they can naturally contribute (McDermott, 1984; Burke, 1997).

The potential role for a humanistic focus in the process of introducing IT is a central theme for neither the OD community nor the IT community. While some elements in both communities have pointed to the need for an integrated perspective on IT-related change, the reality remains that the IT community do not understand OD and the OD community do not understand IT (Markus and Benjamin, 1997a; 1997b). Considering the lack of understanding between these communities, should we be surprised to find that IT-related change remains, for the most part, technically driven?

## CONCLUSION

While the process of introducing IT into work organisations warrants an integrated perspective on economic, technical, human and organisational aspects of IT, it appears that technical and economic considerations dominate the practitioner landscape. Paradoxically, when IT fails to deliver as it so often does, human and organisational considerations are the prime determinants of such underperformance and failure. This poses an intractable dilemma for many organisations.

The dilemma is of an enduring nature, sustained by the behavioural patterns of polarised occupational groups who have vested, but divergent, interests in exploiting IT. Executive management tend to view the introduction of IT as an economic imperative while IT specialists tend to view it as a technical imperative. The coalescent nature of these two imperatives is such that human and organisational considerations are regularly marginalized and ignored during the process of introducing IT into work organisations.

Implementing a more integrated approach to the introduction of IT that accounts for economic, technical, human, and organisational considerations is inherently difficult since the requisite knowledge and expertise are widely dispersed among diverse occupational groups (Clegg et al, 1996; Andriole and Freeman, 1993; Clegg et al, 1997; McDonagh and Coghlan, 1999; 2000). 'This calls for expertise that cuts across the social, behavioural, computer, mathematical, engineering, management, and even physical sciences' (Andriole and Freeman, 1993). 'Those who understand the technology tend not to appreciate the wider organisational issues, and those who have the knowledge of these are often technically naive. This places a very high premium on finding ways of integrating different forms of knowledge and expertise' (Clegg et al, 1996).

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