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**Abstract**

The successful management of change continues to be a major issue for organizations. This article draws on rich qualitative data to provide evidence of issues faced by organizations as they try to realize benefits from investments in IT-enabled change, and as they try to develop and enhance their benefits realization capability. Several of these issues are not effectively covered by previous research, for example managing the overall portfolio of change initiatives and how to develop the capacity of the organization for benefits realization. The research also provides empirical evidence that supports the theoretical propositions from dynamic capability theory that routines (practices) are often similar across different organizations, and that organizations go through a number of stages in developing competences. A further contribution of the research is to develop an enhanced model of an organizational competence, which has important implications for the action required to develop competences.

**Keywords**

**Introduction**

Organizational success – indeed, organizational survival – depends on an ability to adapt and transform. Transformations are occurring at an unprecedented pace in a broad spectrum of

private, public and not-for-profit organizations grappling with a myriad of environmental issues (Self *et al.*, 2007). How to achieve business transformation successfully during economic crises is a question being asked by many organizations today.

Consequently, the ability to manage change is, or should be, a core organizational capability (Kanter *et al.*, 1997; Cummings and Worley, 2001). It is equally clear from the failure rate of change projects that the majority of organizations appear to lack this capability (Burnes, 2005; Peppard, 2007). Many studies report a high failure rate of 70% or above (Beer and Nohria, 2000; Brodbeck, 2002; Burnes, 2004; Styhre, 2002). The failure rate arguably indicates the lack of a valid framework for organizational transformation (By, 2005). Although there is consensus that organizations must transform, there is little agreement about how (Beer, 2001). Academics and practitioners recognize that change is a complex process (Higgs and Rowland, 2005). Indeed the literature on organizational change is large and fragmented and researchers have to face 'the sheer sprawl of' of it (Weick and Quinn, 1999: 364). There is a large and growing literature, which emphasizes the importance of change and recommends approaches to change, however there is little empirical evidence to support the different recommendations (By, 2005).

The resource-based view of the firm has become a major strand of strategic management research and as a result provides an important starting point when considering the management of change. As part of this work an increasing number of authors have considered the concept of the 'dynamic capabilities' of an organization (Ambrosini and Bowman, 2009). Dynamic capabilities can be defined as:

The firm's processes that use resources – specifically the processes to integrate, reconfigure, gain and release resources – to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource

configurations as markets emerge, collide, split, evolve, and die. (Eisenhardt and Martin, 2000: 1107)

Zahra *et al.* (2006) refer to a dynamic capability as the 'dynamic capability to change or reconfigure existing substantive capabilities'. This requires a definition of *substantive* capabilities, which they give as 'the ability to solve a problem' (Zahra *et al.*, 2006: 921). A dynamic capability is the ability to change the way a 'firm solves its problems.' As yet there is little empirical evidence related to dynamic capabilities and how they can be developed and applied by organizations (Ambrosini and Bowman, 2009).

In this article, we address the question: how can an organization develop the capability to succeed with IT-enabled transformation and change – we have referred to this as a 'benefits realization capability.' Firstly, we provide a brief review of literature related to different perspectives on the management of change and the factors contributing to success. Then we draw on the resource-based view of the firm and specifically the concept of dynamic capabilities, which provides a complementary perspective on managing change. We argue that organizations should have a 'benefits realization capability' to succeed with transformation and change. We then outline the research method for the empirical part of this study. The main part of the article outlines the findings from the first stage of a program of participative action research. We provide insights into the issues perceived to be inhibitors and facilitators in the development of a benefits realization capability. Finally, we explore the theoretical and practical implications of the work.

**Literature Review**

**Perspectives on Managing Change**

Change management literature is dominated by planned and emergent change theories. However, there is not one widely accepted, clear and practical approach to organizational

transformation that explains what changes organizations need to make and how to implement them (Burnes, 2005). The planned approach emphasizes the importance of understanding the different states which an organization will have to go through, in order to move from an unsatisfactory state to an identified desired state (Elrod II and Tippett, 2002).

The planned approach to change is long established and held to be highly effective (Burnes, 2005). It has, however, come under increasing criticism. It is suggested that due to its focus on small-scale and incremental change, it is not applicable to situations that require rapid and transformational change (Senior and Fleming, 2006). The planned approach is based on the assumptions that organizations operate under constant conditions, and that they can move in a pre-planned manner from one stable state to another (Bamford and Forrester, 2003). These assumptions are, however, questioned by several authors (Wilson, 1992; Burnes, 2005) who argue that the current fast-changing environment increasingly weakens this theory. Organizational change is more an open-ended and continuous process than a set of pre-identified, discrete and self-contained events. So by attempting to lay down timetables, objectives and methods in advance, it is suggested that the process of change becomes too dependent on senior managers who, in many instances, do not have a full understanding of the consequences of their actions (Wilson, 1992). The approach has also been criticized for ignoring situations where more directive approaches are required. This can be a situation of crisis, which requires major and rapid transformation, and does not allow scope for widespread consultation or involvement (Kanter *et al.*, 1997). Finally, the critics argue that the planned approach to change presumes that all stakeholders in a transformation project are willing and interested in implementing it, and that a common agreement can be reached (Bamford and Forrester, 2003). This presumption clearly ignores organizational politics and conflict, and assumes these can be easily identified and resolved (Burnes, 2005).

There has been a great deal of interest in the punctuated equilibrium model of change which espouses that organizations that accomplish transformations discontinuously and, in response to basic changes in their environments, perform better than organizations that either never transform or transform excessively with the clear stimulus of environmental change (Gersick, 1991; Romanelli and Tushman, 1994). This theory challenges the assumption of linearity and suggests that change may, in reality, be a more complex process. This view is shared by others whose approaches entail educating managers in a range of change theories and involving them more actively in the transformation process by equipping them with practical tools (Beer and Nohria, 2000). However, this model retains the assumption that change can be implanted uniformly throughout the organization. Empirical research has demonstrated that strategic intent led change programs to often have unpredictable outcomes generated by interactions within the organization (Harris and Ogbonna, 2002).

An alternative approach is the continuous transformation model, which seeks to apply complexity theories to organizational change (Brown and Eisenhardt, 1997). Its proponents claim that a complexity approach to change offers an explanation as to why organizations find change so difficult, and a method of overcoming this. They maintain that organizations are dynamic, non-linear systems and, as such, the outcome of their actions is unpredictable but, like turbulence in gases and liquids, they are governed by a set of simple order-generating rules (Lewis, 1994). From this, it is argued that most change efforts fail because they seek to impose top-down, transformational change instead of adopting the self-organizing approach necessary to keep complex systems operating at the edge of chaos (Styhre, 2002). The implications for organizations of this perspective are that organizations need to implement *structures, policies and practices* which create the conditions for self-organization. The constituent parts of an organization are then able to respond in a timely and appropriate manner to environmental changes through a process of continuous innovation

which focuses on local change, such as new product development, rather than organization-wide transformation (Brown and Eisenhardt, 1997; Burnes, 2005). According to the advocates of the emergent approach, it is the uncertainty of both the external and internal environment that makes this approach more pertinent than the planned approach (Bamford and Forrester, 2003).

There are gaps in the empirical evidence, which researchers are themselves quick to point out. Hannan *et al.* (2003) point out that their model of cascaded change strikes them as ad hoc and underdeveloped, and that a list of core features does not provide sufficient guidance for empirical research. Romaneli and Tusham (1994) agree that little research has explored the validity of their punctuated-equilibrium model. It is indeed too easy to find evidence in complex processes for whatever one expects (Van De Ven and Poole, 1995), which may account for the reason that we are still searching for the holy grail of how to achieve success with change in organizations.

**Dynamic Capabilities: The Organizational Capability to Succeed with Change**

The concept of the '*dynamic capability* to change or reconfigure existing substantive capabilities' (Zahra *et al.*, 2006: 921) is an important element of resource-based theory. Organizations realize value from their dynamic capabilities in the choices they make in how they are applied to develop new or improved 'substantive capabilities' (Zahra *et al.*, 2006). Value is then realized through the resulting substantive capabilities. This parallels the way value is realized from IT, with the direct impact being on business process performance which, in turn, contributes to improved organizational performance (Melville *et al.*, 2004) As a result, a key contributor to realizing value from dynamic capabilities is the 'entrepreneurial alertness' (Sambamurthy et al., 2003) that helps an organization recognize the opportunities and take action. Easterby-Smith and Prieto (2008) address the link between knowledge

management and dynamic capabilities: in addition to a common focus on learning, they also identify the importance of knowledge in enabling decisions on how dynamic capabilities should be applied.

Organizational capabilities, both dynamic and substantive capabilities, are developed through learning and application (Prahalad and Hamel, 1990; Grant, 1996; Powell and Dent-Micallef, 1997). There is also a risk of decay or loss of capability through lack of use, and substantive capabilities may become difficult to change if they are left unchanged for a period of time. The development of dynamic capabilities is path dependent and it is likely that there is a natural sequence of development (Eisenhardt and Martin, 2000).

The dynamic capability requires a range of individuals with different knowledge and skills working together in multi-disciplinary, cross-functional teams. To be effective there is a need for a common language and some level of common experience and common process (Grant, 1996; Eisenhardt and Martin, 2000). In addition, as Grant notes (1996), 'rules and directives' and, also, group problem solving are important in the effectiveness of this knowledge-intensive work. The degree of codification of the routines that is helpful will vary according to the velocity of markets (Eisenhardt and Martin, 2000). Similarly, Bohn (1994) explores the appropriate degree of proceduralization depending on the level of knowledge of a business process.

These routines are 'practices', representing the work people do (Ashurst *et al.*, 2008). They can be the basis for establishing a common approach, or a specific way of working as part of a substantive or dynamic organizational capability. These practices, which contribute to a capability, can be shared within an organization and also between organizations. As Teece *et al.* (1997) indicate there is value in inter-organizational learning.

Recent work in relation to the realization of benefits from information technology (IT) enabled change has taken a similar perspective. A 'fourth era' of information systems (IS)/IT

is proposed (Ward and Peppard, 2002), based on the concept of an 'IS capability' being the enabler of competitive advantage from IS/IT: that is, sustained competitive advantage does not come from any one project or solution but from the ability to continually deliver solutions that provide a stream of temporary sources of advantage. Empirical studies (Santhanam and Hartono, 2003) have indicated a link between IS/IT capability and firm performance and suggest that there is an opportunity to get a sustained advantage. The idea of an IS capability or 'benefits realization capability' (Ashurst *et al.*, 2008) is particularly relevant to the challenge of benefits realization from investments in IS/IT, as it facilitates exploration of the organization as a whole and not just the IT function (Peppard, 2007). Recent work (Ashurst *et al.*, 2008) develops a model of competences for benefits realization and identifies a framework of specific practices contributing to these competences (see Figure 1 and Table 1).

Figure 1. Organizational competences for realization of benefits from investments in business benefits realization enabled by IT
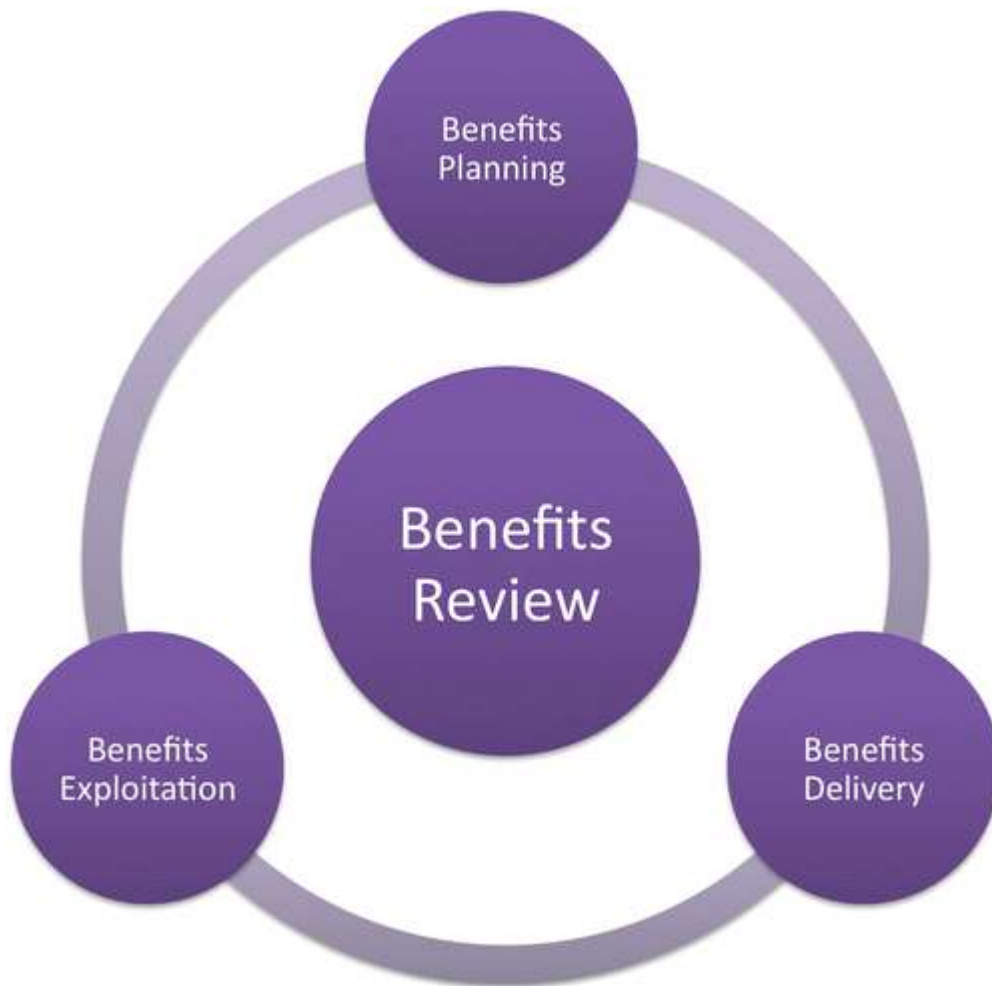
**Table 1.  Organizational competences for benefits realization from IT-enabled transformation and change**

Table 2 provides a brief summary of key findings from previous literature and shows a number of new perspectives provided by recent work on dynamic capabilities. The focus on dynamic capabilities shifts the emphasis from succeeding with a specific change or transformation initiative to the wider issue of the 'benefits realization capability' of the organization: the ability to select the right change initiatives; to approach them in the right way; to successfully deliver them; and to then sustain and exploit the results.

**Table 2.  Contrasting change management with dynamic capability and benefits realization capability perspectives**

**Research Objectives and Methods**

There appears to be an absence of empirical research that explores the relative efficacy of different approaches to change (Higgs and Rowland, 2005). There is also very limited empirical work exploring dynamic capabilities and, in particular, there is a need for further qualitative work (Ambrosini and Bowman, 2009).

Our aim in this research program is to explore how organizations can develop a 'benefits realization capability' enabling them to realize benefits from investments in IT-enabled change. As a first stage we have explored the current benefits realization capability of organizations and particularly the challenges they face in further developing this capability. We adopted the framework of competences set out by Ashurst *et al.* (2008) to provide a starting point for the current research (see Figure 1 and Table 1).

The research has an interpretative and participative foundation. This approach is well aligned with the overall goal of the research which is to produce 'relevant and timely' research (Davenport and Markus, 1999: 20) and to 'produce knowledge about how to intervene in the world and change it in order to satisfy real-world needs' (Lee, 1999b: 29). Breu and Peppard (2003) make the case for a *participatory paradigm* for IS research where researchers conduct an *inquiry from the inside*, together with the research subjects. They are seeking to build on the tradition of interventionist research, for example action research (Checkland, 1981), and by integrating reflection and action, theory and practice, to produce knowledge with greater potential for practical relevance (Breu and Peppard, 2003). The researcher *engages* together with the practitioner in the knowledge creation process.

Action research is 'one of the few valid research approaches' to study the effects of changes in 'methodologies' as change requires intervention (Baskerville and Wood-Harper, 2002: 137). This applies equally to the focus of this research on developing competences, as this is also a process of organizational change which requires intervention. A rigorous approach will

be adopted, building on the guidelines provided by previous authors (Checkland, 1981; West and Stansfield, 2001; Coughlan and Coghlan, 2002; Daniel and Wilson, 2004; Davison *et al.*, 2004; Iverson *et al.*, 2004; Martensson and Lee, 2004).

In this article we report on the first stage of a longer-term action research program. We were fortunate to be members of, and to work with, a forum for IT Directors (ITDF) which operates in the north east region of the UK. The forum includes representatives from a range of organizations in different sectors, and focuses on sharing knowledge to enable individuals and their organizations to realize value from IT and IT-enabled business change.

The members of the ITDF found that the focus of the research on 'benefits realization' was a helpful way to shift the attention away from technology. In particular, it is about delivering and sustaining value to internal and external stakeholders and improving organizational performance through benefits-driven IT-enabled change programs.

The action research project began in 2008. The first stage included: an exploratory workshop with 20 IT directors in April 2008, which provided an opportunity to review key findings from previous research and to clarify the objectives of the current research project. Following the workshop, a total of 65 business and IT managers contributed to the data collection interviews. The interviews were transcribed and then analyzed by both researchers, using the framework of benefits realization competences as a primary lens. At an early stage in the analysis we noted that challenges affecting the ability of the organizations to succeed in realizing benefits from IT-enabled change related to individual projects, as well as the overall portfolio of projects (investments in IT-enabled change) within the organization. This project/portfolio distinction was adopted to help refine the analysis. An iterative process was adopted to gradually develop an outline of the major challenges. Following this preliminary analysis of the interview data we held a second workshop to review the major findings with members of the ITDF. Approximately 20 people attended this workshop. This was an

important stage in the research process, allowing the researchers to clarify and refine the findings. A report aimed at ITDF members was then produced with a detailed discussion of the findings. This article builds on that work. We are currently taking the research forward to a second stage, which will involve designing and following through interventions to enable participants to develop the benefits realization capability of their organizations.

**Findings**

The framework of competences for benefits realization (Ashurst *et al.*, 2008) was used as an explicit mechanism for exploring the issues identified by the participants in the research. The framework of specific practices for benefits realization (Ashurst *et al.*, 2008) also provided support for the analysis and exploring the nature of the competences, but we have not attempted to present our findings at the practice level as it would not be possible within the scope of this article. We also worked directly from the data and identified broader themes raised by the participants that were related to the development of the required organizational competences.

In this section we first consider the drivers for change in the participant organizations and then explore a number of challenges faced by organizations seeking to develop their benefits realization capability. Table 3 provides a summary of the findings.

**Table 3.   Summary of findings from empirical work**

**Drivers for Change**

There is consensus in the literature that change, being triggered by internal or external factors, comes in all shapes, forms and sizes (Balogun and Hope Hailey, 2004; Burnes, 2005). External drivers might come from the economic, social, political, technological and legal environment in which an organization operates. The crisis in the financial markets in

2008, for example, resulted in the nationalization of several banks and the merger of others. Internal drivers include the structural, cultural and political environments through which ideas and actions for change proceed (Pettigrew, 1985).

Data from the study indicated that the key drivers for change were to address the dynamic, competitive environment and sustain competitive advantage. In the public sector, compliance with government directives was also a major theme (see Table 4).

**Table 4.    Drivers for change**

**Benefits Review: Measuring Success**

The Benefits Review competence can be defined as:

the organizations ability to effectively assess the success of a project in terms of the potential benefits, the delivered benefits, and the identification of the ways and means by which further benefits might be realised. (Ashurst *et al.*, 2008: 356)

The benefits review competence includes, but is not limited to, post-project evaluation of benefits. We know from much previous work on IS evaluation that organizations do not carry out these reviews consistently or effectively. Our findings support this:

Post project reviews are not carried out (Business manager, financial sector).

We need to increase benefits by focusing on post project evaluation and to tie this together across different budgets and cost centres…effective measurement is a key issue. (Senior IT manager, education sector)

A key issue is…the lack of evidence of the benefits of changes and more effective ways of working…We know what to do but are continuing to make the same mistakes. (IT manager, public sector)

Participants referred to a number of specific challenges. Firstly, business case decisions 'don't measure all relevant costs and benefits' (Director, IT services provider). Also, decisions are

taken which do not take into account relevant information about what is possible or the wider opportunities across the portfolio of projects within an organization. One interviewee provided a clear example: 'one project had specified a specific low cost router. A second project needed a higher specification – they refused to take advantage of the cross-project opportunity. The first project went ahead with the low cost solution (£50) the second project then replaced the kit' (Director, IT services provider).

One interviewee reported the success of a post implementation review and highlighted that how it was conducted was at least as important as the fact that it took place: 'a very positive factor was that the post implementation review was fair and objective – it highlighted the issues with each area involved and did not just point blame at IT, it was a mature approach to review and learning' (IT Director, higher education).

Perhaps prompted by the interviews, a number of participants raised the need for measures of the benefits realization capability of their organization. No organization had a set of measures in place.

**Benefits Planning: Taking a Broader View of Change**

Benefits do not emerge as if by magic when new technology is introduced. Benefits come when *people* do things differently and when IT-enabled business change has been planned to realize benefits for customers, staff, the organization and other stakeholders relevant to the scenario. We define the benefits planning competence as:

the ability to effectively identify and enumerate the planned outcomes of an IT development project and explicitly stipulate the means by which they will be achieved. (Ashurst *et al.*, 2008: 356)

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The challenge is not just planning for benefits. The focus of project delivery needs to shift from IT implementation to making the changes that will realize the planned benefits. We define the benefits delivery competence as:

the ability to design and execute the programme of organizational change necessary to realize all the benefits specified in the benefits realization plan. (Ashurst *et al.*, 2008)

A number of participants were struggling to deliver IT solutions effectively. Others were trying to move towards a benefits-driven approach. One participant saw the next challenge as moving to a more agile approach which would allow faster delivery and also a greater ability to evolve a solution through user engagement during the development process:

We are taking a very much 80:20 approach. It's like an architectural approach to building a skyscraper – you can dig a hole, pour the concrete, and establish the steelwork before all aspects of the design are finalised – it's a staged freeze. (IT Director, pharmaceutical)

A key topic raised by the participants is the need to take a broader view of change and not simply to focus on the business process impacts directly related to the system. The following have to be considered:

what is the change in the business that is going to benefit the customer? Then you have to look more broadly: technology – how is it exploited? People – how are the people engaged? Processes – how are the processes going to change? We also consider communication, training, and culture change. (Business Transformation Manager, public sector)

Participants identified the need to take different approaches to change in relation to designing the approach to a change program to deliver the intended benefits:

We need different approaches to change – e.g. Teaching and Learning needs transformation, Research requires more incremental change. (IT Director, higher education)

Participants highlighted that taking a broader perspective on change would have implications for the skills of the people involved and would need a significant expansion of the IT project toolkit. It also requires a broadening of the skills involved.

In a range of situations, organizations will also need to think harder about what they are changing and why. A lot of change is top-down to achieve a single, organization-wide system, process, or chart of accounts. One participant provided some powerful examples of problems with this approach:

corporate level justifications tend to be woolly; one project had a $17m corporate budget and was going to cost $1.2m to implement locally. In the end we did the whole thing locally for $660k. Very often it's centralisation for the sake of it. Is it really worth making the change given all the costs? Is it good enough? It might be better to have simpler, local systems at low cost – not common systems with lots of overhead from Group. Corporate teams become a bottleneck. There is also a focus on best practices – but often this comes from a very large site in the US – their needs and what makes good practice is very different – e.g. for a site with 5000 people where we might only have or 500 or even 50. (IT Director, pharmaceutical)

**Benefits Exploitation: Sustaining Benefits Realization**

We define the Benefits Exploitation competence as:

the adoption of a portfolio of practices required to realize the potential benefits from information, applications and IT service over their operational life. (Ashurst *et al.*, 2008: 356)

In many organizations Benefits Exploitation from investments in IT is mainly left to chance. One major issue is that of ongoing provision of education. How do new staff learn about the possibilities of the new system and how can they use it to realize benefits? Very often this is left to chance:

end users of systems lack knowledge – it's a case of loss of knowledge through staff turnover and passing on knowledge informally from one to the other. (Business manager, financial services)

The knowledge of what is possible and how to use the full potential of the new technology is quickly fragmented and lost. When many organizations are still using systems 20 years old or more, retention of knowledge to enable continued benefits exploitation is important.

A second major issue is that the initial training is only a start. What provision is there for ongoing learning and the realization of further benefits? 'MIS involves information technology as a form of *intellectual* technology'. Information technology is an intellectual technology, not an industrial technology, in that it has properties that are not fixed on implementation but can be 'innovated endlessly, depending on its interaction with the intellect of the human beings who implement and use it' (Lee, 1999a: 8). This can lead to an ongoing cycle of innovation and change as the technology extends the intellects of its users leading to further innovation. Unfortunately, participants had not got a management framework in place for realizing benefits from any significant investment in IT through a long-term process of learning and change. They recognized that they were missing the opportunity to gradually realize the full potential of a system over time as individuals and teams explore what is possible and how they can realize benefits.

**Benefits Planning: Managing the Benefits Realization Portfolio**

Previous work on realizing benefits from investments in IT-enabled benefits realization has largely focused on specific projects and programs. Participants raised a number of issues related to the overall *portfolio* of investments.

In many organizations there are many opportunities for action. Some are still trying identify current projects and then to establish a basic framework of controls over the portfolio of

projects. The portfolio perspective allowed one organization to deliver rapidly and incrementally: 'delivery was phased – earlier plans had been very broad and ambitious – this project tackled a well defined area and a small number of staff' (Operations Director, higher education).

Others have established control over a benefits-driven portfolio of IT projects and are now trying to incorporate all investments in change across the organization into the portfolio, and to establish a more strategic approach to management of the portfolio with strong engagement from senior business management:

We need a broader planning mechanism to bring together the various initiatives so there is a wider portfolio and we do not have separate Estates/HR/IT initiatives. We need a broader planning process which is top down and bottom up not just a budgeting process. (IT Director, higher education)

We are now trying to move from local, incremental change to organization-wide transformational change. The cross-organization changes also mean ownership is very difficult – it's either everyone or no one. (IT Manager, public sector)

One IT Director (higher education) noted that business culture was going to be a significant factor (barrier) in benefits realization as business areas, both academic departments and support departments, were not used to taking an organizational view: 'attitudes/behaviours are an issue – there is a real focus on the local situation not the wider issues of the university – which may become serious as we start to drive the change programs'.

Participants also noted the challenge of managing a portfolio of change projects within different organizational units and that without imposing a vast bureaucracy with central control of every single project, there needs to be a framework that scales up and down so different teams, departments, business units and so forth can manage local projects and also their engagement in centrally driven projects.

**Building the Capacity for Benefits Realization**

The participants raised the issue of the organizational capacity for benefits realization: 'there is a huge appetite for change – the capacity to deliver and absorb is less' (Head of IT, IT company). Capacity in terms of both IT solution delivery and capacity to absorb change was an issue: 'we do not have a basis for planning based on capacity of the business to manage and absorb change' (IT Director, higher education).

A wide range of factors were identified as affecting capacity:

We lack documented business processes and controls, so hard it's to know what you are changing. (Business manager, financial services)

We need to work better together – we work as separate departments. We need to enable better sharing of knowledge and experience. (IT Director, higher education)

Recognition and reward is an issue. (Operations Director, higher education)

There are windows in the year when we can't make changes – Jan to May is payroll year-end and we are too busy. Then it is half year and then it is Q4. We have a change freeze in these busy periods. How can you deliver change throughout the year? We need confidence that we can do it. (Head of IT, IT company)

In addition there are many planning issues that impact on the effective capacity of the organization, for example a lack of clarity about what to change: 'a key challenge in a fairly federal organization is to be clear what processes to standardise / centralise and what to leave local. There is a perception that the requirements of each department are different - but perhaps not awareness of the commonality' (IT Director, higher education). This issue of capacity appeared to be a critical one for the participants and requires further consideration.

**Skills and Knowledge: Building the Competence of Individuals**

Let's just remember that it is about casting more than anything else – we could have done the project with different people and it would have fallen flat. It really is about the people. They were one of the best project teams I've ever had the privilege of working with. This project team was handpicked – I have to say superbly for skills and personalities. (Project manager, public sector)

Many participants emphasized the importance of the skills and experience of the individuals involved as a (or *the*) critical factor in the success of benefits realization initiatives. One IT Director (higher education) provided a representative summary of the current situation: 'we seem to have skills gaps, possibly major ones.'

In some organizations, individuals are recognizing the gap and making the case to attend PRINCE2 or Managing Successful Programs education. In a few others a more strategic investment in education was being made. In one, all managers had taken part in a program covering core aspects of project management including risk management and lessons learned. It would be interesting to assess the value of this education in planned approaches to change and also to consider the potential for education taking a broader view of approaches to change.

One organization was going beyond education to establish a framework for ongoing coaching and support to staff to help develop experience. They also emphasized that they were focusing on ensuring that their 'top talent' was released to take part in benefits realization initiatives and that there was also a career path for business staff who became involved.

**Discussion**

The first stage of this action research project has made a number of contributions. Firstly, the qualitative empirical study has provided an insight into the current benefits realization capability of organizations and the challenges they face in further developing this capability.

Table 3 provides a brief summary of the findings. There are a number of areas where there is a significant knowing-doing gap (Pfeffer and Sutton, 1999) and current practice does not reflect either the results of research or what the practitioners recognize as good practice. These areas are very much in line with the findings of previous research. We have also identified a number of challenges, for example related to management of the *portfolio* of benefits realization initiatives and the development of the organizational *capacity* for benefits realization that are not emphasized in previous research.

Secondly, the findings provide support for the proposition put forward by Eisenhardt and Martin (2000) that routines are similar across organizations. The two practitioner workshops provided strong support for the value of sharing practices (routines) between organizations and also helped to refine the broad maturity profiles that emerged from the findings. In addition, Eisenhardt and Martin (2000: 1117) suggest that the 'order of implementation can be critical.' Our findings support this and suggest there is a broad pattern of development, which is recognizable across a range of different organizations. A 'maturity model' emerged when developing the findings with the research participants at the second workshop, with a number of different stages of maturity in relation to the different aspects of the benefits realization capability. This model provided a structure for the practitioner report of findings.

Table 5 provides an outline of the different maturity stages suggested by the empirical data. We present this as an initial framework, which emerged through the research process and was found helpful by the practitioners. An organization is likely to be at different levels for the different factors. Participants were typically at levels 1 or 2. It seemed that organizations understood their current situation well and could also understand the need to move to the next level. Further levels of maturity were tackling 'questions they were not yet asking' and were typically not seen as a priority or relevant. An organization at level 1, for example, would understand level 2 and would probably be aiming to get there, but levels 3 and 4 would be

hard to understand and lacking in relevance. The maturity model needs refinement and further research to test out its value to organizations as a diagnostic and planning tool.

**Table 5.    Outline of maturity levels for key factors**

The focus of the research on 'benefits realization' was found to be helpful by the participants in moving attention from technology to business issues. The emphasis on developing the benefits realization capability of the organization was also helpful in moving the debate away from which was the 'right' approach to change to the intended outcome – the ability to change. Although we did not discuss the different perspectives on change (Table 2) or dynamic capabilities at either practitioner workshop, a key finding was the desire to adopt a greater range of approaches to change. From a theoretical perspective this reflects recognition that a planned approach to change is not necessarily the best approach in a specific situation, and also the need to address the complexity of the organization when considering what needs to be changed.

A third contribution of the research, emerging as we immersed ourselves in the data and ongoing interaction with the participants, is to establish a revised perspective on how a competence can be conceptualized within an organization. A number of themes, related to the nature of a competence, kept occurring in the interview data. We felt these themes were not adequately reflected in the descriptions of an organizational competence that we had identified in the literature review. An improved understanding of a competence will be important as we move into the later stages of research and work with organizations seeking to develop the competences required for benefits realization.

Figure 2 sets out our view of the major perspectives on a competence. It shows the competence existing inside the 'black-box' of the formal organization represented by structures, roles and processes. We emphasize three new factors, which build on previous

work and, in particular, the framework put forward by Ward and Peppard (2002: 180).

Firstly, the *paradigm* or principles. At one of the participant organizations there was a shared understanding of 'IT as an enabler' which, along with an emphasis on the skills of individuals, underpinned their development of competences for benefits realization. This contrasted with a second participant organization where there was a focus on introducing benefits related practices but without a change in the technology-centric paradigm or an emphasis on skills. Adoption of benefits focused approaches to IS/IT is a 'paradigm shift' (Johnson, 1992) in perspective. Making this shift is potentially a significant challenge for individuals and organizations. An important finding that emerged from the research is that a range of practices, for example risk management or phased delivery, can be applied to IS/IT solution delivery or to a benefits realization project. The shift from solution to benefits from IT-enabled change is subtle, for example affecting who is involved and the emphasis taken. Although subtle, this shift appears to be extremely important. For many practices, the shift is more about a new paradigm or mindset, than a substantial change in the actual practice. There is also a potential bonus that once the shift in perspective is made, a lot of what is already known is very valuable in the new paradigm. This potentially has important implications for the adoption of benefits related approaches and the development of competences for benefits realization.

Figure 2. Competences – within the 'black box' of the formal organization.

Within the 'black box' of the formal organisation: aspect of a competence

| Structures | Roles | Processes |

Drivers for transformation

Paradigm/ principles

Attitudes/ behaviours

Practices

Knowledge

Relation-ships

Improved orgainsational performance

Additional aspects of a competence hightlighted by the research
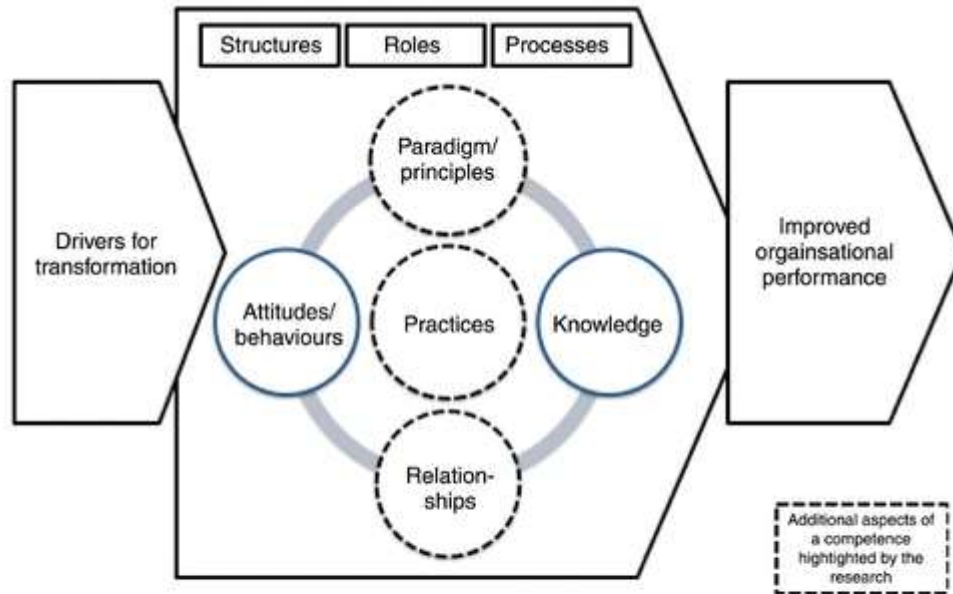
Figure 2 illustrates important aspects of a competence – within the formal organization. A number of competences contribute to the overall benefits realization capability.
In the diagram and the discussion we emphasize the three aspects not identified in previous work (Peppard and Ward, 2004), that is paradigm, practices and relationships.

We also noted the importance of *relationships* as a crucial element of the required

competences. These relationships contribute to the social capital, that Peppard (2007) notes is

a vital ingredient of successful benefits realization. In virtually all organizations, there are

different groups with their own ways of working and cultures. Often there are considerable

barriers between different groups that affect their ability to listen to each other, to understand

each other, to value each other's skills and to work together effectively. In many cases, there

are big gaps of culture, language, communication and perhaps credibility between IT and

other business function, and between IT and top management (Taylor-Cummings, 1998;

Peppard, 2001).

Unfortunately, in the context of benefits realization, this is a critical issue. The realization of

benefits from IT-enabled change requires IT to be effectively engaged with the business at all

levels. The alternative is that some other function takes the lead in relation to benefits

realization and the role of IT does become limited to technology delivery. The key

implication is that IT needs to build truly effective relationships with each business area and with top management.

In addition, we emphasize the importance of *practices* in developing competences (Ashurst *et al.*, 2008). Our findings support the proposition that practices (routines: Eisenhardt and Martin, 2000) are shared between organizations. This provides an important finding and a starting point for further research.

The revised view of a competence (Figure 2) appears to provide a more complete view, which will be important as a basis for further research and also for action within organization to develop these competences.

**Conclusion**

In a recent report (NAO, 2006), the National Audit Office identified that 'successful delivery of IT-enabled business change is essential for improving public services.' The role of IT is likely to increase as technology innovation continues. Successful exploitation of IT to enable business change and benefits realization is an important driver of organizational performance in all sectors of the economy.

We have provided empirical evidence, based on rich qualitative data, of issues faced by organizations as they try to develop and enhance their benefits realization capability and, in particular, as they try to realize benefits from investments in IT-enabled change. Several of these issues are not effectively covered by previous research. It was very encouraging to see practitioners grappling with issues that are important from a research perspective. At the same time, the gap between existing theory and management practice provides an opportunity for a contribution to practice in participating organizations by sharing existing knowledge rather than having to wait for the results of further research. We have also provided support for the proposition that there are shared practices across different organizations and there is a

maturity effect as organizations adopt new practices over a period of time to gradually develop a benefits realization capability.

The research raises a number of questions, which provide starting points for further research. In particular: do the drivers for change require different competences? How can the maturity model proposed as an output from this research be refined to provide a resource for organizations seeking to develop their benefits realization capability? Does the revised model of an organizational competence (Figure 2) provide a good starting point for the development of organizational competences for benefits realization? How can work on dynamic capabilities inform the development of research on the benefits realization capability of an organization?

**References**

Ambrosini, V. and Bowman, C. 2009. What are dynamic capabilities and are they a useful construct in strategic management?. *International Journal of Management Reviews*, 11(1): 29–50.

Ashurst, C., Doherty, N. and Peppard, J. 2008. Improving the impact of IT development projects: the benefits realisation capability model. *European Journal of Information Systems*, 17: 352–370.

Balogun, J. and Hope Hailey, V. 2004. *Exploring Strategic Change*, 2, Pearson Education Limited.

Bamford, D. and Forrester, P. 2003. Managing planned and emergent change within an operations management environment. *International Journal of Operations and Production Management*, 23(5): 546–564.

Baskerville, R. and Wood-Harper, A. T. 2002. "A critical perspective on action research as a method for information systems". In *Qualitative Research in Information Systems*, Edited by: Myers, M. D. and Avisonresearch, D. Sage. chap. 8

Beer, M. 2001. How to develop an organization capable of sustained high performance: embrace the drive for results – capability development paradox. *Organizational Dynamics*, 29(4): 233–247.

Beer, M. and Nohria, N. 2000. Cracking the code of change. *Harvard Business Review*, 98(3): 133–141.

Bohn, R. (1994) Measuring and Managing Technological Knowledge. *MIT Sloan Management Review*, 36(1), pp. 61–73.

Breu, K. and Peppard, J. 2003. Useful knowledge for information systems practice: the contribution of the participatory paradigm. *Journal of information Technology*, 18: 177–193.

Brodbeck, P. W. 2002. Implications for organizational design: teams as pockets of excellence. *Team Performance Management: An International Journal*, 8(1/2): 21–38.

Brown, S. and Eisenhardt, K. 1997. The art of continuous change: linking complexity theory and time-paced and evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42(1): 1–34.

Burnes, B. 2004. *Managing Change*, 4, Harlow: FT/Prentice Hall.

Burnes, B. 2005. Complexity theories and organizational change. *International Journal of Management Reviews*, 7(2): 73–90.

By, R. T. 2005. Organizational change management: a critical review. *Journal of Change Management*, 5(4): 369–380.

Checkland, P. 1981. *Systems Thinking, Systems Practice*, Chichester, England: John Wiley and Sons.

Coughlan, P. and Coghlan, D. 2002. Action research for operations management. *International Journal of Operations and Production Management*, 22(2): 220–240.

Cummings, T. G. and Worley, C. G. 2001. *Organizational Development and Change*, Minneapolis: West. ConneXions

Daniel, E. and Wilson, H. 2004. Action research in turbulent environments. *European Journal of Marketing*, 38(3/4): 355–377.

Davenport, T. H. and Markus, M. L. 1999. Rigor v relevance revisited; response to Benbaset and Zmud. *MIS Quarterly*, 23(1): 19–23.

Davison, R., Martinsons, M. and Kock, N. 2004. Principles of canonical action research. *Information Systems Journal*, 66: 65–86.

Easterby-Smith, M. and Prieto, I. 2008. Dynamic capabilities and knowledge management: an integrative role for learning?. *British Journal of Management*, 19(3): 235–249

Eisenhardt, K. M. and Martin, J. A. 2000. Dynamic capabilities: what are they?. *Strategic Management Journal*, 21: 1105–1121.

Elrod II, P. and Tippett, D. 2002. The death valley of change. *Journal of Organizational Change Management*, 15(3): 273–291.

Gersick, C. 1991. Revolutionary change theories: a multilevel exploration of the punctuated equilibrium paradigm. *Academy of Management Review*, 16(1): 10–36.  Grant, R. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17: 109–122.

Hannan, M., Polos, L. and Carroll, G. 2003. The fog of change: opacity and asperity in organizations. *Administrative Science Ouarterly*, 48: 399–432.

Harris, L. and Ogbonna, E. 2002. The unintended consequences of culture interventions: a study of unexpected outcomes. *British Journal of Management*, 13(1): 31–49. **28.** Higgs, M. and Rowland, R. 2005. All changes great and small: exploring approaches to change and its leadership. *Journal of Change Management*, 5(2): 121–151. **29.** Iversen, J., Mathiassen, L. and Neilsen, P. 2004. Managing risk in software process improvement: an action research approach. *MIS Quarterly*, 28(3): 395–433

Johnson, G. (1992) Managing strategic change – strategy, culture and action. *Long Range Planning*, 25(1), pp. 28–36.

Kanter, R., Kao, J. and Wiersma, F. 1997. *Innovation: Breakthrough Thinking at 3M, DuPont, GE, Pfizer and Rubbermaid*, Edited by: Kanter, R., Kao, J. and Wiersma, F. New York: Harper Business.

Lee, A. S. 1999a. "Researching MIS". In *Rethinking Management Information Systems*, Edited by: Currie, W. and Galliers, B. 7–27. Oxford: Oxford University Press.

Lee, A. S. 1999b. Rigor and relevance in MIS research; beyond the approach of positivism alone. *MIS Quarterly*, 23(1): 29–33.

Lewis, R. 1994. From chaos to complexity: implications for organizations. *Executive Development*, 7(4): 16–17.

Martensson, P. and Lee, A. 2004. Dialogical action research at Omega Corporation. *MIS Quarterly*, 28(3): 507–536.

Melville, N., Kraemer, K. and Gurbaxani, V. 2004. Information technology and organizational performance: an integrative model of IT business value. *MIS Quarterly*, 28(4): 283–322.

National Audit Office (2006) Delivering successful IT- enabled business change. Report by the comptroller and auditor general, HC 33–1 session 2006–2007, 17 November 2006. (London: The Stationery Office).

Peppard, J. 2001. Bridging the gap between the IS organization and the rest of the business: plotting a route. *Information Systems Journal*, 11(3): 249–270.

Peppard, J. 2007. The conundrum of IT management. *European Journal of Information Systems*, 16: 336–345.

Pettigrew, A. 1985. *The Giant: Continuity and Change in ICI*, Oxford: Blackwell.

Pfeffer, J. and Sutton, R. 1999. Knowing 'what' to do is not enough. *California Management Review*, 42(1): 83–103.

Powell, T. and Dent-Micallef, A. 1997. Information technology as competitive advantage: the role of human, business, and technology resources. *Strategic Management Journal*, 18(5): 375–405.

Prahalad, C. K. and Hamel, G. 1990. The core competencies of the corporation. *Harvard Business Review*, 68(3): 79–91

Romanelli, E. and Tushman, M. 1994. Organizational transformation: as punctuated equilibrium – an empirical test. *Academy of Management*, 37(5): 1141–1166

Sambamurthy, V., Bharadwaj, A. and Grover, V. 2003. Shaping agility through digital options: reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly*, 27(2): 237–263.

Santhanam, R. and Hartono, E. 2003. Issues in linking information technology capability to firm performance. *MIS Quarterly*, 27(1): 125–165.

Self, D. R., Achilles, A. A. and Schraeder, M. 2007. Organizational change content, process, and context: a simultaneous analysis of employee reactions. *Journal of Change Management*, 7(2): 211–229.

Senior, B. and Fleming, J. 2006. *Organizational Change*, 3, Harlow: FT/Prentice Hall.

Styhre, A. 2002. Non-linear change in organizations: organizational change management informed by complexity theory. *Leadership and Organizational Development Journal*, 23(6): 343–351.

Taylor-Cummings, A. 1998. Bridging the user-IS gap: a study of major information systems project. *Journal of Information Technology*, 13(1): 29–54.

Teece, D., Pisano, G. and Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7): 509–533

Van de ven, A. and Poole, M. S. 1995. Explaining development and change in organizations. *Academy of Management Review*, 20(3): 510–540.

Ward, J. and Peppard, J. 2002. *Strategic Planning for Information Systems*, 3, Chichester, England: John Wiley and Sons.

Weick, K. and Quinn, R. 1999. Organizational change and development and development. *Annual Review of Psychology*, 50: 361–386

West, D. and Stansfield, M. 2001. Structuring action and reflection in information systems action research using Checkland's FMA model. *Systemic Practice and Action Research*, 14(3): 251–281.

Wilson, D. 1992. *A Strategy for Change*, London: Routledge.

Zahra, S., Sapienza, J. and Davidsson, P. 2006. Entrepreneurship and dynamic capabilities: a review, model and research agenda. *Journal of Management Studies*, 42(4): 917–955.