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“EATING OUR OWN DOG FOOD” TO TRANSFORM RESEARCH INTO PRACTICE

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“EATING OUR OWN DOG FOOD” TO TRANSFORM RESEARCH INTO PRACTICE

Abstract

In this paper I have followed the practice I learnt while a consultant at Microsoft: that is “eating your own dog food”. At Microsoft it means running the business on your own software including the latest beta software. I have used Benefits Management as a framework to explore the huge challenges involved in transforming research into practice and to clarify some of the changes required. I have explored how learning from practice can influence the process of research so that research can become more relevant. In particular, I have considered how ‘agile’ principles and practices can be adapted to research projects. This appears to be a valuable line of inquiry with good opportunities for transforming research into practice for individual researchers as well as the wider academic community.

Keywords: Agile, Benefits Management, Practice, Relevance, Research Methods

1.0 Introduction

Transforming research into practice is a topic of great importance to me personally. I have spent 29 years in a variety of roles as a Chartered Accountant, IT manager, and Information Systems (IS) consultant and most recently as a teacher and researcher at a Business School. My main research focus is enabling organisations to develop the IS capability required to realise the potential of information systems (Peppard and Ward, 2004). We know there is a major gap between theory and practice and many successful practices are not widely adopted (BCS, 2004). This ‘knowing-doing gap’ (Pfeffer and Sutton, 1999) is a crucial factor affecting my wider teaching and research. This is important context because I am adopting an interpretive philosophy for this research and as a result I have made clear something of my background and assumptions to enable the reader to evaluate the main discussion in this paper. As Harvey and Myers (2002: p177) note: ‘the researcher does not suspend their own prejudices – they become critically aware of them – making them explicit in the process of learning.’ This is important as ‘researchers prior assumptions, beliefs, values and interests always intervene to shape their investigations’, so you need this information to help assess this research (Orlikowski and Baroudi, 2002: p66)

There has been an extended debate about rigor and relevance. There have also been many reports tackling the area of business and university collaboration (for example: Lambert Review, 2003). We have seen the growing acceptability of research methods

such as action research that can be helpful in connecting research and practice (Baskerville and Myers, 2004). I do not want to rehash all these discussions and arguments. In this paper I am following the guidance to “eat your own dog food.” “Eating your own dog food” is a phrase I became very familiar with when working as a consultant at Microsoft. It means taking your own advice – or in the case of Microsoft, running your business on your own software and in particular pre-release versions of new software, so that you can discover any problems and learn how to exploit the possibilities before your customers do. I hope the relevance of this view of ‘practicing what we preach’ is clear for us as teachers and researchers. I will take key ideas that inform my teaching and research and apply them to the challenge of transforming research into practice. In particular, I have used the Benefits Management framework (Ward and Daniel, 2006) to explore the changes required to allow research to have a greater impact on practice and help avoid ICT failures in future. I have also taken the principles and practices of an agile approach to projects (Highsmith, 2004) and used these to explore how research projects could be more ‘agile’ and potentially increase the links between research and practice.

The paper is structured as follows. Firstly, I have considered the *context*: I have explored the drivers for change and why we need to take action to transform research into practice. I draw on a range of literature as well as interviews carried out for this project. Secondly, I have examined the *content*: I have used the Benefits Dependency Network (Ward and Daniel, 2006) as a way of structuring and analysing primary and secondary data to examine the changes required to realise benefits from transforming research into practice. This section also includes a portfolio view of possible change initiatives. Thirdly, I have focused on the *process* of research and considered how we can learn from agile approaches to projects when carrying out research. There is then a discussion of findings and overall conclusions. This broad context, content, process structure will be familiar, I have followed the recent Advanced Institute of Management report (Bradley et al., 2004) and who in turn draw on Pettigrew and Whipp (1991).

To provide a focus for the research I have used my own organisation as the basis for the discussion. I think we face similar issues to many other business schools, certainly those that are part of highly ranked, research-led universities. I think that much of the

analysis will apply elsewhere and certainly the very significant impact of the national and global context is not specific to my School, so I hope the discussion and findings will be relevant to others.

2.0 Context: perspectives on the drivers for change

The starting point for an investment in change is to consider the question “why is there a need for change?” Ward and Daniel (2006) refer to this as driver analysis. In planning an IS project we would use a range of strategy frameworks such as the ubiquitous ‘5 forces’ or perhaps ‘competitive competences’ (Ward and Peppard, 2002). For this research I am drawing on review of academic writing, government sponsored reports, and a range of primary evidence from a series of semi-structured interviews. Ward and Daniel (2006) stress the importance of considering different stakeholders in planning and delivering change and this is certainly important in this case as “IS is a field which has multiple stakeholders scholars, practitioners educationalists, users, politicians” (Harvey and Myers, 2002; p169). In this discussion of the context I discuss the perspectives of a number of important stakeholders.

2.1 Business Perspective

Is there a demand from business for more relevant research? Is there a demand for knowledge and engagement with the academic community? A starting point for my fieldwork was the Deans office – which is the hub of activity within the School. The Deans PA was aware of only one enquiry from a local business asking for help over the last 18 months and that was to do with applying the Balanced Scorecard, a subject that is now quite low profile on the syllabus as academic thinking and fashions have moved on.

A very unscientific sample of business people, who clearly have some contact with the academic world, as I know them, revealed that there is relatively little demand. The definition from the dictionary sums it up:

ac·a·dem·ic - 3. irrelevant in practice: theoretical and not of any practical relevance

http://encarta.msn.com/dictionary_/academic.html

Bradley et al. (2004: p3) make the same point in slightly more measured terms: ‘there is a lack of industry pull’ as well as a lack of ‘academic push’ in relation to business-university collaboration. Even where organisations do have academic links it is likely that they are not good at putting these ideas into practice (Pfeffer and Sutton, 1999) or of sharing ideas and good practices within the organisation. As Manns and Rising (2005) note, new ideas are often left to fall on stony ground and are not nurtured and exploited.

2.2 Academic Perspective

Academic excellence is largely defined by publishing in top journals. Which immediately takes us into a wider rigour v relevance debate and the extent to which these journals are read by practitioners, have anything useful to say to practitioners or influence practice. As Galliers and Land comment (2002: p13): “We believe we should draw attention to two disturbing tendencies in information systems research. The first relates to the primacy of traditional, empirical research more suited to the natural sciences at the expense of less conventional approaches that nevertheless provide important contributions to our search for improved knowledge. Although the experimental design of traditional IS research may well be academically acceptable and internally consistent, all too often it leads to inconclusive or inapplicable results.” Harvey and Myers (2002: p170) take a slightly more positive position and note that ‘scholars in the IS field are characteristic in that they must be concerned to generate valid knowledge which can, at least in principle, be informative to practice’ and ‘areas of research concern are delineated in such a way as to reflect practical areas of development.’ They also note that this is not reflected in research *practice* where there continues to be a focus on positivism ‘thus rendering the voice of the practitioner less legitimate and making more invisible the knowledge generated by practitioners.’

If we consider the PhD, which provides the apprenticeship and induction into the academic profession, it is interesting to note that the requirements for succeeding with a PhD require a contribution to knowledge but not relevance to practice. Philips and Pugh (2000: p51) refer to ‘problem-solving research’ as one of three basic types of research, which ‘will usually involve a variety of theories and methods, often ranging across more than one discipline since real-world problems are likely to be ‘messy’ and not soluble within the narrow confines of an academic discipline’. Fitzgerald

comments on the perceived value of the PhD (2005: p269): 'whilst the PhD is considered as essential training for academia, it is not generally regarded as much use for anything else in the UK.'

Teaching is the other aspect of the academic perspective to consider. At my School it is not the case that senior researchers research, and others teach. Everyone spends time teaching. It is the case though, that research track record is a major factor in the recruitment of staff. Mintzberg (2004) makes it very clear that in his view the way that the business academic world has divided into narrow disciplines based on research interests is a major problem, as a more integrated approach is required to tackle the real world issues of management in the classroom. One of many other factors to consider would be the extent to which academic teaching influences practice. As one example, a study was carried out on the impact of undergraduate education on the adoption and use of Multiview (Lundell et al. 2005: p110). Only 16% of students were using, or had used, aspects of Multiview, although interestingly the philosophy (Weltanschauung) had been adopted more broadly.

2.3 Government Perspective

The government is also a key stakeholder. In the UK the government is sending confused messages. At one level the 'knowledge economy' is seen to be of critical importance and a driver for increasing the skills of the workforce. However, from a higher education perspective there is a concern that this is creating a tactical focus on specific skills rather than deeper education to really build a more capable workforce. Also, exercises such as the REF create huge pressure to publish according to the existing academic rules (i.e. in highly ranked journals that do not reward practical relevance). Work on university and business collaboration has also tended to focus on knowledge transfer in the sense of scientific knowledge, for example in the form of intellectual property and patents, rather than the role of the business schools in enhancing management practice (Lambert, 2003). Similarly, reports with a specific focus on ICT (BCS 2004; IAP 2007) tend to focus on IT knowledge and software engineering rather than IS and business change.

2.4 Management Consultancy Organisations

The management consultancies are another key stakeholder. This is certainly not a homogenous group. Consultancies can certainly see the value in engagement with the academic world, for example Accenture (Accenture Institute of Strategic Change). Consultancies also engage with research centres, for example Microsoft has been a member of the MIT CISR and Cranfield ISRC research centres for many years. This shows some recognition of the value of academic research. However, many of the consultancies, and also organisations such as Gartner and Forrester focus on doing their own research rather than engaging with academics.

2.5 Rankings and Accreditation

The criteria used by groups producing rankings of programmes (MBA, MA, Executive Education etc) such as the FT and Economist have a considerable impact on the strategy and behaviour of schools. The various accreditation bodies are also important (AMBA, EQUIS, AACSB).

2.6 Summary

Consideration of a number of important stakeholders helps develop an understanding of the context in which we are exploring the transformation of research into practice. A more comprehensive analysis is needed to address other stakeholders including funding bodies, publishers, professional bodies and of course different groups of students. This initial review of key stakeholders has revealed important aspects of the organisational context. Figure 1 adapts the framework developed by Melville et al. (2004) to summarise key factors. Firstly, demand from business is limited; in a sense they do not know what they are missing. Secondly, the wider academic environment at many levels provides significant barriers to changes that would help transform research into practice. Finally, and more positively, there are views that IS as a field is inherently linked with practice and there is a growing interest in, and ability to publish research, which is relevant to practice.

Linking IS to organisational performance

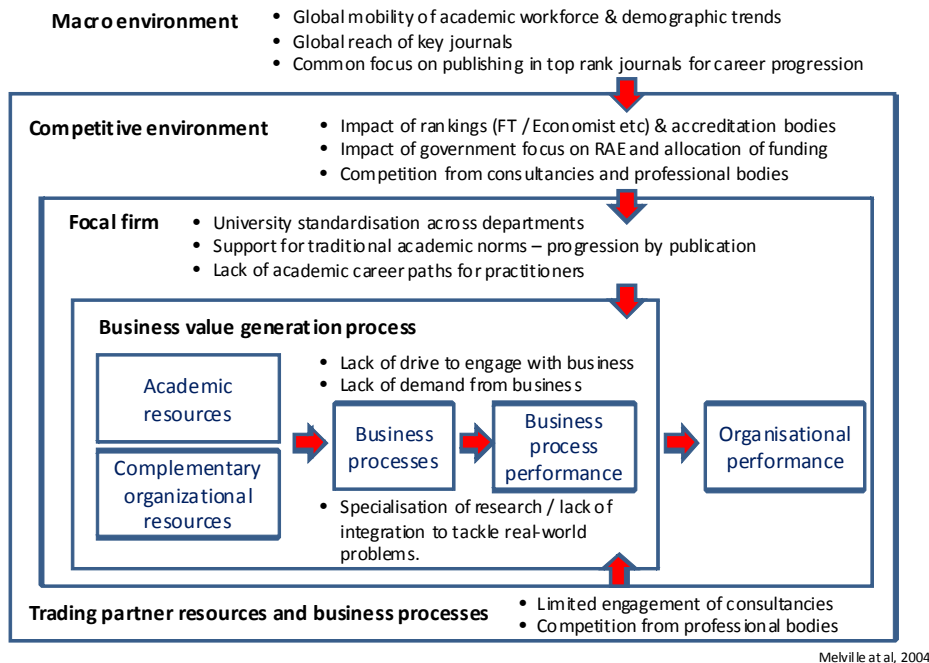


Figure 1: Key aspects of the context for transforming research into practice

3.0 Content: establishing a benefits-driven programme of change

At a local level, the School mission and aims indicate that there is a drive for relevance and for transforming research in to practice (See Investment Objectives in Figure 2). The aims show a clear vision for engagement with business leaders and ensuring the relevance of research and teaching, as well as making an impact on management practice. The challenge revealed by the consideration of other stakeholders is a lack of understanding of the potential contribution of business schools and the lack of alignment at all levels (university, government and wider academic community) to achieving these goals.

3.1 Benefits Dependency Network

The driver analysis highlights a range of significant challenges to be overcome if there is to be success in transforming research into practice. The purpose of a Benefits Dependency Network (BDN) is ‘to link the investment objectives and their resulting benefits in a structured way to the business, organizational and IS/IT changes required to realise the benefits’ (Ward and Daniel, 2006: p133). The focus of the BDN shown in Figure 2 is how to enable the School to continue to change to achieve its aims

related to transforming research into practice as effectively as possible. A BDN depends on the people involved in creating it. The network is created through interaction between the sponsor of the change programme and key stakeholders or their representatives. As a result there is no ‘right’ network – it represents the shared view of management about how to respond to the drivers. In this case, I have developed the BDN based on the results of the driver analysis. In this section I discuss a number of aspects of the network to outline some themes of general relevance.

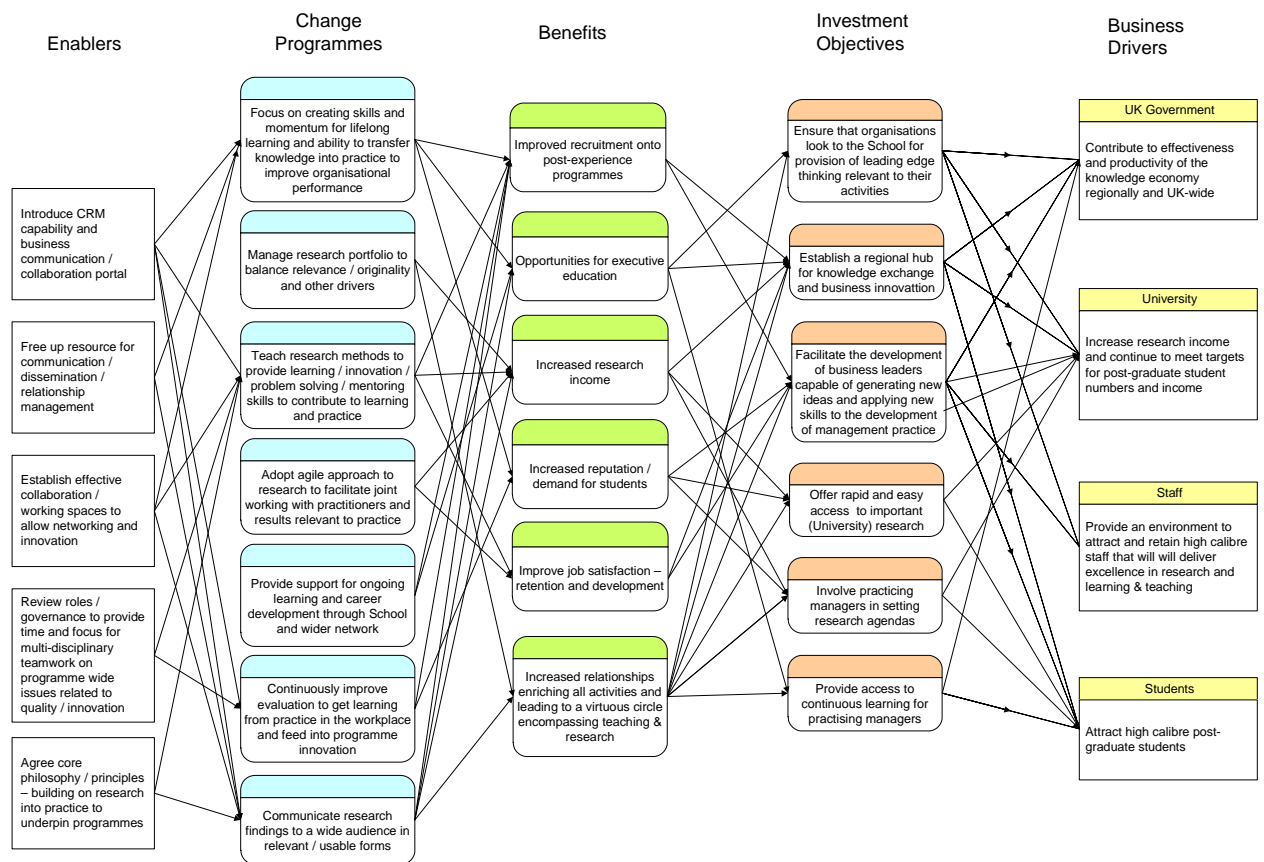


Figure 2: Benefits dependency network showing aspects of the change programme to contribute to transforming research into practice.

The process of research. The network tackles the *process* of research as well as the *content*, the subjects tackled. I have emphasised this for a number of reasons. It is a contribution to transforming research into improving practice and improving organisational performance if we can equip practitioners with practical research skills through our teaching. Not only does this help to equip practitioners to tackle their own problems, it builds a better understanding of what research is, where it might be

useful, and aids communication between researcher and practitioner. It is encouraging to see the developing body of work that supports the linkage between research skills and graduate attributes, which contributes to employability (for example Healey and Jenkins, 2009).

Sharing knowledge in a way that enables it to be shared further. Mintzberg (2004) refers to improvement in organisational performance as a goal of management education. It is important to consider how we equip managers to share what they learn from education and research with others, as this is a primary way in which they will have an impact, in a world where the role of the manager includes a strong element of coaching and facilitating. This is the focus on the ‘customers’ customer’ which is often important when we consider customer relationship management (CRM).

We are experimenting with the use of ‘patterns’ in management education (Jessop 2004) as a contribution to enabling people to share their learning with others. Patterns will be familiar to many from software design and architecture, they have now been used in sharing good practices related to software project teams (Coplein and Harrison, 2004) and there is interest in their wider use for sharing ideas. The value of patterns as a way of sharing knowledge about practice, what works, is that: they contain ‘just enough structure’; provide knowledge in useful ‘chunks’; maintain a link to the context in which the knowledge is useful; and provide a practical way to make explicit what is often left as tacit. While we recognise that there are limitations, our early work suggests that patterns are a useful way to think about the knowledge we are teaching and that the concept and use of patterns enables those we teach to share their knowledge with others more effectively.

Exploring relevance. In developing the BDN, I have taken a broad view of ‘relevance.’ As professional, academic researchers it is certainly not our role just to respond to what the ‘customer’ asks for. What if they are asking for the wrong thing – have not identified the real problem, or want help with a solution that we know is unlikely to work? Even a consultant, at least a good one, would not work on these terms. So I think we need a portfolio approach to what we research. Some aspects will be dealing with today's problems as presented by our ‘customers’. Research will also be about looking across a range of problems, seeing trends and underlying issues and

coming up with new answers and approaches. Some research (Neely et al. 2000 is a good example) will also focus largely on the challenges of translating ideas into practice.

Creating a virtuous circle. A further theme within the BDN is the opportunity to create a virtuous circle between: student learning and the student experience; linking research with practice; and improving School performance. The network addresses two main aspects of this. Firstly, enhancing evaluation processes so we get more feedback, over the long term, of how education has affected management practice, management effectiveness and organisational performance. Secondly, the closely related area of bringing this learning together into enhanced processes for programme design and innovation that also address the impact of research on the curriculum.

Creating demand. A final area addressed on the BDN is creating demand. Given the lack of ‘business-pull’ for research this is vital. We have tackled this through relationship building and improved communication from the School. This is a major area as the typical business is stuck in “we don’t know what we don’t know” mode and do not know how and where a relationship with the School could help. Underpinning this, and an area not sufficiently emphasised in the BDN, is the need for an increased customer focus. Much activity is around programmes (*MBA* guest speakers, *MBA* business projects, *undergraduate* placements etc), the challenge is to move from this product-centric organisation to establish a capability to develop relationships and address different stakeholders more holistically.

The BDN in Figure 2, although actually a simplified version, is complex and is hard to describe fully to those who were not involved in developing it. In the discussion I have just developed some aspects of the wider network. The work on the BDN would normally be followed by consideration of measures for the benefits, and ownership for the benefits and changes involved. A further stakeholder analysis is also required to explore the feasibility of the changes, how best to make them happen, and to help decide how to phase the change programme. These areas are not addressed here, partly for reasons of space, but also because they depend on the specific, local context. I have also left out of the BDN any consideration of wider changes outside

the School, for example working to change government policy or influence professional bodies.

3.2 Portfolio Perspective

As a further stage of consideration of the content of the change programme I have developed a portfolio view of possible change initiatives (Table 1- drawing on Ward and Peppard 2002). It is helpful to produce this portfolio view at an early stage to contribute to the assessment of priorities and feasibility. It would normally be revisited later once the detailed work on measurements, stakeholders and ownership had been completed. What the portfolio shows is that there is a lot we could do locally. Although there are considerable constraints and barriers provided by the wider environment, there are still many areas we could choose to tackle locally.

Strategic	High Potential
<p>Investments in IS/IT applications which are critical to sustaining future business strategy</p> <ul style="list-style-type: none"> • Establish a lifelong learning community developing active engagement with business • Develop portfolio view of research • Establish multi-disciplinary, team working to enable greater innovation 	<p>Investments in IS/IT applications which may be important in achieving future success</p> <ul style="list-style-type: none"> • Extend eLearning and web 2.0 pilots • Pilot new forms of evaluation & assessment • Continue pilots with <i>patterns</i> • Pilot ‘agile’ approach to research
Key Operational	Support
<p>Investments in IS/IT applications on which the organisation currently depends for success</p> <ul style="list-style-type: none"> • Develop business community relationships and work to develop research opportunities • Refine processes / governance to free up time for innovation / development • Review reward / recognition and career development to build capacity 	<p>Investments in IS/IT applications which are valuable but not critical to success</p> <ul style="list-style-type: none"> • Working smarter – exploit technology to free up time and work more effectively • Pilot new approaches to knowledge sharing to develop research / teaching practice

Table 1: Portfolio view of potential change initiatives

The ‘High Potential’ initiatives are particularly important. These are investments ‘which may be important in achieving future success’: they are opportunities to learn from small-scale, low cost initiatives which represent ‘R&D’ and enable capability development. Given the current lack of ‘business-pull’, i.e. the lack of a clear existing ‘market’ and a way of addressing it, these High Potential initiatives will be invaluable in exploring ‘what works’ and hopefully will provide a basis for future ‘Strategic’ initiatives. ‘Support’ and ‘Key Operational’ initiatives will also be essential. In addition to directly addressing transforming research into practice, they will make important contributions by helping to create time and motivation for other initiatives.

3.3 Process: adopting an agile approach to research projects

Agile Approach to Research

In this section I focus on the *process* of research and the extent to which the research *process* is well aligned to the goal of transforming research into practice. This was one area highlighted in the discussion of the BDN in the previous section. To a large extent I want to avoid the debate about research *methods* as the qualitative v quantitative and positivist v interpretive conflicts have been covered in much detail elsewhere. Following the theme of ‘eating our own dog food’, I intend to explore the relevance of an ‘*agile*’ approach to research projects. I am drawing on www.agilemanifesto.org, which provides an excellent summary of agile thinking. This is also developed in Agile Project Management (Highsmith 2004). The manifesto provides a stark contrast with the focus on “organisation and control” of PRINCE2 (www.prince2.com/prince2-structure.asp).

I first discovered agile approaches when I moved to Microsoft in 1998. The Microsoft Solutions Framework, while developed before many well-known agile approaches, embodied the key agile principles. It was a revelation how it provided an effective framework for consultants from around the world to rapidly form effective teams and to work together to deliver substantial solutions in short periods of time.

A range of specific practices can be adopted to implement an agile approach, these include:

- **Timeboxing**: often interpreted as using small teams to deliver to fixed deadlines.

- **Versioned release:** delivering an overall solution through a series of rapid, time-boxed projects ('Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale')
- **Succeeding through multi-disciplinary, collocated teams working together effectively.** Success through effective teamwork is covered by many of the agile principles for example: – 'Business people and developers must work together daily throughout the project'; 'Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done'; and "The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.'
- **Efficient processes focused on the end goals:** work is required to adapt the agile principles to the research context: 'Working software is the primary measure of progress' and 'Simplicity - the art of maximizing the amount of work not done - is essential.'
- **Learning lessons about effective working:** there is a strong emphasis on ongoing learning by the research team: 'At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.'

I have used two of my own research projects to explore the value of the agile principles for helping adjust our approach to research to increase the relevance to practice. Firstly, one of three in-depth case studies and secondly a much shorter project where I carried out a case study with a colleague to develop a paper for this conference. These projects are presented as brief 'vignettes' to illustrate the discussion.

Project 1: In-Depth Case Study Carried Out as Part of the Empirical Work for my PhD

The research was exploring the extent to which organisations have adopted benefits-driven practices when undertaking investments in IS/IT. This case study involved a city council. Semi-structured interviews, 12 in total, explored three specific projects and also the organisational context in which the projects were taking place.

I had two initial meetings with a senior manager who agreed to be the organizational sponsor of the research. This resulted in agreement on which projects to study, identified specific individuals to talk to, and communication of his support for the research to interviewees. Following Silverman (2000) I started analysing the results of the interviews from day one of the fieldwork. As a result, I was able to prepare a brief summary of the findings from the case study in the form of a set of PowerPoint slides to discuss with the sponsor at a meeting within a few days of the last interview. This meeting took place on 18 October 2005. This was an extremely valuable meeting and helped me understand more of *what* was happening and particularly *why* things were

happening. During late 2006, I wrote and had published several short pieces in Computer Weekly and other practitioner magazines that were based on my PhD, including the findings from the case study. I prepared a first draft of a dissertation chapter discussing the case within a few weeks of completing the field work but did not finalise the dissertation itself until Oct 2007 as I was working on it part time. It was at this point that I started writing for publication based on the dissertation and have since had a conference paper accepted based on the case (British Academy of Management, 2008).

In many respects the fieldwork was agile, with involvement of the sponsor at the beginning and end of the work. These meetings played an important role in the development of the overall PhD because of the amount of learning for me from engagement with this organisation. The long gap between completion of the fieldwork, and completion of the PhD has resulted in a lack of communication with the organisation. However, from a research perspective, the overall findings have evolved significantly because of the cross-case analysis and further reflection during the iterative process of writing up and further analysis.

Project 2: Developing the Information Systems Capability of the Organisation – a Case Study

The second research project followed on from the results of the PhD. Through a friend and colleague, and as a result of a presentation I had done on Benefits Management at a local IT Directors forum, I had the opportunity to carry out a case study of changes to an IT function as part of their project with the wider objective of developing the IS capability of the organisation. We carried out all aspects of the work together. Her background, in executive coaching and personal development, and her contacts in the organisation were invaluable.

An initial meeting with the IT manager, to discuss and agree the work, took place on the 13th of Feb 2008. The work was designed as a 'lessons learned review' to help the organisation identify what was going well, help establish the practice of reviewing lessons learned, and to encourage the sharing of successful practices. It was valuable to have the opportunity to explore the development of the IS capability of the

organisation from the perspective of multiple interviewees. With the IT Managers support we carried out a series of interviews on the 12th March and 3rd of April (12 in total). The core findings were written up within a few days and a draft paper (later submitted to this conference) was completed within four weeks. Due to holidays, and our mistake in not scheduling the meeting until the fieldwork was completed, we did not meet the IT Manager and HR Director to review our findings and complete the research with the organisation until 9th June.

With better scheduling, and holidays permitting, we could have had the final meeting in mid May rather than June. But in any case we had to schedule the work around other commitments, teaching in my case. The work was agile in a number of senses: it was focused on value for the customer; we were able to design it so that the customer was involved in the learning; and the interviews were structured as a ‘lessons learned’ review, and interviewees (individuals and small groups) commented how helpful it had been to take the time to reflect. In this case the multi-disciplinary research team was also valuable. Our individual perspectives, broadly characterised as a focus on organisational change and a focus on individual change, were both relevant and were needed to explore some complex aspects of the case. Without both these viewpoints, and our joint involvement throughout the project, both the feedback to the customer and the academic results of the case would have been impoverished.

Lessons Learned

I think the second project shows the value of a number of agile principles and practices for research projects. We certainly now have confidence that we can carry out a case study to produce worthwhile academic results and produce value to the organisation in timescales that are suited to the pace of activity in a modern organizational setting. We have also seen the value of multi-disciplinary teamwork in planning and carrying out the research. In addition, we have started to evolve an effective and repeatable way of working that we hope to refine further in a second case study. Meetings in a coffee shop near the organisation form a vital part of this, and provided the face-to-face conversations that form a key part of an agile approach. In both projects we had customer involvement, and particularly in the second project the research was designed to directly benefit the customer. A key learning point for us

is to explore the opportunity to involve the customer more directly throughout the process in design, evaluation and reporting. We can see that the results would have been developed further through a deeper process of shared learning, and also that our research approach could then have been embedded more deeply in the customer so that they could more effectively repeat the lessons learned process.

4.0 Reflections on the implications

I have already noted the limitation that I have not considered all relevant stakeholders and that I have used the Benefits Management ideas as a framework to guide my thinking and writing, rather than as a way to engage with my colleagues and build commitment to change. It will be interesting to report further on *how* successful I am, *if* I attempt to do this.

It was very interesting to note that I started off considering the issues of transforming research into practice, but as the analysis proceeded it became clear that customer relationship management, innovation and knowledge worker productivity, amongst others, are all relevant perspectives. These are all areas addressed in my teaching so I should not be too surprised. It would have been interesting to see what perspectives a multi-disciplinary team would have wanted to use.

I want to make three broad points in this section to draw out and develop themes that emerged earlier on. Firstly, *establishing a voice and making an impact*. As individuals who care about ‘making a better world with IT’ (Walsham 2001) we are scattered in ones and twos and in very small groups across many organisation. We have no single voice, and there is no agreed set of principles or body of ideas on which to base teaching or build research. To take a very different example, the automobile – it was invented over 100 years ago and has been the subject of continuous refinement and much improvement ever since. But it is still basically the same. Academic conventions make it difficult to follow the same approach of learning and improvement. It tends to be more beneficial to critique the ideas of others rather than to refine them, and make them work more effectively.

Secondly, *network for realising value*. We need to think more about the overall web of stakeholders through which research leads to new ideas, the ideas are communicated, and there is an impact on practice. I think we would see even more clearly that this is a multi-stakeholder issue and that there are some major gaps in the flow of ideas from research that undermine exploitation in practice.

Finally, *ownership*. Who is the sponsor of this change programme? Who owns the benefits and the changes? I could perhaps tackle this and gain ownership in my own School. But what about the bigger picture, about influencing government and the professional bodies, about working for change in the academic world. I suspect that many, like me perhaps, feel that life is too short for any of this and anyway it is far more fun being out learning from innovators in the real world rather than fighting an uphill battle to get the blind to see (that is not meant to be rude but it is a matter of a 'paradigm filter' (Johnson 1992)). It is quite possible that the 'relevant research is good research camp' is much bigger than it appears. It may just be that everyone is out working with practitioners, leaving the roles of editors and membership of committees to those who prefer a more positivist approach, which they can do from their office. We should recognise the major contribution of those who have invested time and effort to lead the progress that has already been made. How can we build on this? Do we let these 'pockets of good practice' continue, or is there scope for our community of practice to get enough coherence and strong enough leadership to have a more direct impact?

5.0 Conclusions

In concluding I go back to the beginning and also look to Geoff Walsham for advice: 'I take an interpretive study to mean that multiple perceptions are provided by participants, and thus that the interesting data from the study cannot be 'triangulated' to provide 'true' interpretations, since which truth would be chosen? The interpretive researcher filters participants' statements and actions through the lens of his or her own subjectivity, and then produces a 'story' about the events that have occurred and some reasons for them. The purpose of the story, again is not to tell 'the truth' about the case study but to tell 'a truth', namely the researcher's own thoughts and ideas concerning the phenomena at issue' (Walsham 2001: p7).

This paper provides a truth from my perspective. I think it has shown the value of Benefits Management (Ward and Daniels, 2006) as a framework of tools and ideas for exploring a situation and developing a change programme. It makes a contribution by providing evidence of the value of benefits-driven approaches and also insight into the challenges of transforming research into practice from the perspective of a programme of benefits-driven change. I hope that others may adopt a similar approach to contribute to change at their own School or at different levels of this complex scenario of different stakeholders.

The paper has also shown that there is potential value in adopting an agile approach to research projects. Further work is required to explore how these principles can be applied to a range of research scenarios. The contribution of this part of the discussion is to suggest that *how* we approach research is as important as *what* we choose research, if we want to transform research into practice and have an impact on the successful exploitation of ICT in organisations.

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