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Benefits-Led IT: Building the Organisational Capability

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Abstract

We are engaged in an action research project to develop university senior managers as leaders of IT-enabled transformation. The project aims to produce practical resources to help individuals and organisations as they seek to develop their transformation capability in an increasingly financially aware business environment.

At this mid-point in the project we want to highlight three things:

- *Firstly, the time is right for a focus on benefits realization. The general economic environment and the challenge to do more with less is an important factor. At Newcastle the foundation of good systems, skills and processes provides the basis for looking beyond technology delivery to benefits realization.*
- *Secondly, the agile and benefits-driven approach adopted by this research has been valuable.*
- *Finally, we have seen the value of people from different areas of the organisation working together using simple, but powerful tools.*

Keywords: Benefits realisation capability; benefits competence; practices

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1.0 Introduction

Exploitation of Information Technology (IT) is a priority issue for the Higher Education (HE) sector. As Sir Ron Cooke noted in his contribution on behalf of JISC (www.jisc.ac.uk) to the debate on the future of HE, "UK higher education enjoys a world class ICT infrastructure; this should be maintained. But more effective *leadership*, at all levels, is required to exploit this infrastructure." This view is consistent with the (2004) report by the British Computer Society and the Royal Academy of Engineering suggesting that the success rate of IT projects in the UK is only 16% and reported estimates of wastage due to IT project failures as $140 billion in Europe. Higher Education is a particularly challenging area for benefits realisation from IT for a range of reasons, including the federal nature of HE institutions (HEI) and the importance of non-financial benefits, such as improvements to research quality or the student experience. The general economic climate and the specific pressure on HE funding only increase the importance of exploiting existing assets and getting value from new investments.

A focus on benefits realisation through leadership of organisational change is a major contributor to the success of an investment in IT. People know that benefits-driven approaches exist, but are they being used? The lack of improvement in project success rates suggests that they have had limited impact on the way many organisations approach IT investments in practice. Organisations have not yet succeeded in

adopting these successful benefits-driven approaches. This project starts to tackle these issues at Newcastle University.

This paper sets out important foundations for the research: bringing together an academic perspective of how the work will contribute to an understanding of the challenges of establishing a benefits realisation capability; with a practice perspective and the issues being faced by a successful IT function in an HEI, as the new director works with the IT team and the University to develop the strategic contribution of IT.

The remainder of the paper is structured as follows: firstly, we provide some context for the work and the research approach by outlining relevant aspects of good practice based on academic research and practitioner experience. Then we set out the approach to the research and introduce the context for the work at Newcastle University. This is followed by a brief outline of findings to date and then a discussion of a number of learning points for us at Newcastle and other HEIs. Finally, we set out our conclusions from the work to date and outline the implications for later stages of the research.

2.0 Insights from previous research

2.1 The organisational competences required to realise benefits from IT

The information systems literature has started to address the area of competences and capabilities and to explore the contribution of a resource-based view of the firm. This is seen as an important area for further research (Peppard and Ward, 2004; Wade and Hulland, 2004).

A ‘fourth era’ of IT is proposed (Ward and Peppard, 2002) based on the concept of an IS capability being the enabler of competitive advantage from IT: i.e. sustained competitive advantage does not come from any one project or solution, but from the ability continually to deliver solutions that provide a stream of temporary sources of advantage. Empirical studies (e.g. Santhanaman and Hartono, 2003) have indicated a strong link between IT capability and firm performance, and suggest that there is an opportunity to get a sustained advantage.

The idea of an IT capability or 'benefits realisation capability' is particularly relevant to the challenge of benefits realisation from investments in IT, as it facilitates exploration of the organisation as a whole and not just the IT function. In this project we are making use of the model of the organisational competences that contribute to this benefits realisation capability developed by Ashurst et al. (2008) which in turn builds on previous work in this area (Ward and Peppard, 2004; Feeny and Willcocks, 1998).

The benefits realisation capability of an organisation comprises four distinct, yet highly inter-related, competences (Ashurst et al., 2008):

- **Benefits Planning**: benefits do not simply emerge, as if by magic, from the introduction of a new technology, their realization needs to be carefully planned and managed from the very beginning of thinking about any investment in change. Benefits Planning includes a strategic perspective, as well as benefits-focused planning of individual projects.
- **Benefits Delivery**: benefits primarily arise from the organisational change that accompanies an IT implementation. The benefits and related changes need to be the focus of activity.
- **Benefits Review**: organisations must monitor and evaluate results on an on-going basis. This will improve the results of individual projects, and ensure that the organisation's ability to deliver business value improves over time.
- **Benefits Exploitation**: the quest to leverage benefits from business software should not cease as soon as it has been implemented. Continued focus is required over the life of the investment.

Competences have both explicit and tacit elements and can be hard for managers to deal with. One way of adding granularity to a benefits realisation competence is through adoption of a *toolkit* of *practices* (Ashurst et al., 2008), each of which can be tailored to the needs and circumstances of a specific organisation. The concept of practice is a way to capture and communicate 'what works'- how to get things done. Practices appear to be a good fit with how people work, and they provide a good basis for sharing knowledge. This alignment with how people actually work suggests that

the competences and practices perspective taken for this project has the potential to make an impact on what actually happens in organisations.

2.2 Dominance of technology-driven approaches

Case studies reported by Ashurst et al. (2008) covering organisations in a wide range of sectors and locations revealed a very substantial gap between what we know about the value of adopting a strong benefits focus when managing information systems projects, and what happens in practice, where the focus is overwhelmingly on delivery of a technical solution. The vast majority of the projects investigated focused on the design and delivery of an IT solution, with only limited consideration of wider issues. There was no example of explicit adoption of a well-integrated portfolio of practices for benefits realisation, which could truthfully be labelled a *benefits-driven* approach. It was also very interesting to see that organisations seemed happy with the current situation.

3.0 Action research provides a foundation for the project

The project is seeking to gain insights into how organisations can develop the competences required to succeed in realising the potential of investments in IT to deliver benefits to stakeholders and improve organisational performance. In contrast with prior work, the project (1) focuses on the development of organisational competences for benefits realisation rather than the adoption of a specific method; (2) involves participatory action research to explore how the competences required for benefits realisation can be developed; (3) examines what is required to help organisations to develop the required competences themselves.

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: p20) and to "produce knowledge about how to intervene in the world and change it in order to satisfy real-world needs" (Lee, 1999b: p29). 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. The participatory paradigm links well with the fourth dimension of MIS that is put forward by Lee (1999a; p9) "MIS researchers seek to *contribute* to the documentation, innovation, or illumination of better ways in which people in

organisational contexts use, manage and maintain (in short 'instantiate') information technology…. MIS researchers *want* Hawthorne effects – we want our observations and theories to make a difference". To implement this participative philosophy an action research approach has been adopted. This is now well supported as an important technique for IS research (Baskerville and Myers, 2004) partly because of the potential to make research practically relevant. 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; p137). This applies equally to the focus of this research on developing competences.

Organisational competences for benefits realisation are considered at three levels. Firstly, the practices adopted on specific projects and the success of the projects in benefits realisation. Secondly, the management of the entire portfolio of IS projects including: deciding which projects to invest in; sharing learning from project to project; and resource planning and development. Finally, both projects and the overall portfolio will be considered in the overall organisational context: for example, the impact of organisational structures, performance measures, management education and career development. Opportunities for intervention at all three levels are being considered as part of the action research programme.

4.0 Outline of the research project to date

In outline, the stages of the project are as follows:

4.1 Phase 1: Engage - preliminary activity

The preliminary activity took place over an extended period, from Steve Williams taking over as Director of ISS in June 2008, through a chance meeting with Stephanie Marshall and Kath Thompson of Leadership Foundation for Higher Education (LFHE) resulting in the idea for a proposal, through to confirmation of approval of the project (October 2009). As a result of this stage of work the core of the project team was established. This preliminary stage also involved assessment of the current level of competences for benefits realisation and consideration of priorities for improvement. A preliminary view of benefits, and measures of success for the project was also established and refined as part of the development and approval of the proposal for funding.

Steve's initial assessment that there was a strong foundation of integrated systems and a sound IT infrastructure was supported by further experience during this period. Table 1 sets out specific opportunities for improvement identified during this period and how they relate to the project.

	Challenge	**Approach in this project**
1	Project process and adherence to good practices.	A separate project is seeking to establish more consistent approaches to projects across the university. As part of engagement with the five pilot IT projects there will be some opportunities to explore wider aspects of project practice. At a later stage in this project, we will address incorporation of specific benefits practices into the overall project framework.
2	Setting priorities and taking into account learning.	Priority setting is one aspect of management of the overall IT portfolio that will be considered as part of one of the exploratory projects.
3	Post implementation reviews.	Reviews have taken place successfully on a number of projects, but the practice has not been consistently applied, and the related feedback loop established. This is incorporated within the 'benefits review' workshop, which forms a core part of the 'toolkit.'
4	Having a 'seat at the table'.	Specific challenges include: • the need for the capacity to engage at top level, given that – 'IT is related to virtually every strategic issue.' • the ability to communicate / deal with unfashionable issues at senior management level (security, etc). Relationship building is a key element of the Benefits Workshop programme.
5	Exploitation.	Exploitation of existing systems, services and information is addressed by one of the exploratory projects.
6	Delivery capacity.	Change delivery capacity (i.e. how the existing resources can be used most effectively to tackle IT-enabled change) is addressed indirectly through the Benefits Workshops. More importantly work on setting priorities (as part of the exploratory project on portfolio management) will help to make the most of the available capacity.

Table 1: Initial view of challenges affecting benefits realisation

4.2 Phase 2: Explore - initial assessment and building engagement

The priority at this stage was to extend the core team at Newcastle to the senior IT management team as a whole. A workshop was held with the IT senior management

team as the first activity to broaden engagement in the project. This session explored the opportunities and challenges of benefits realisation from IT at Newcastle. It resulted in good support for the assumption underpinning the project proposal, that it was a good time to shift focus from technology delivery to benefits realisation. The discussion also provided useful insights into challenges and opportunities that will be valuable as the project progresses.

A further workshop session was held at the suggestion of one of the IT management team to explore 'what does success look like' and to discuss the intended benefits of the project and how to achieve them. It was very valuable to share in this thinking as a team and to build on the work done on benefits for the proposal. As the work took place on ISS strategy and planning it became increasingly clear that the adoption of a benefits-driven way of working was an important enabler of a range of strategic objectives. It was encouraging to note the adoption of a benefits-driven way of working has become a major priority for 2010/11

4.3 Phase 3: Evolve

This is the core of the project and involves a number of strands of activity (Table 2).

Strand	**Outline**
Benefits Workshops	Five one-day workshops introducing key elements of the benefits toolkit and applying them to participants' projects. Also a major emphasis on development relationship and engagement skills.
Engagement with core ISS projects	Project teams apply elements the toolkit to five important projects from different areas of ISS.
Exploratory projects	Projects exploring specific areas where good practice is not well established. We are tackling three areas: senior management engagement with IT (e.g. Huff et al., 2006); exploitation of existing systems and information; and benefits-driven management of the IT portfolio.

Table 2: Projects within the overall programme

This phase of the work was also broken down into a number of 'versions', each with distinct deliverables. These versions became the main focus for managing the project. Existing practices for a benefits-driven approach to projects (based for example on Peppard et al., (2006)) were brought into the research as a 'benefits toolkit'. This

toolkit was a key element of the Benefits Workshops and the engagement with projects.

Core activities in Version 1 included: running the first two Benefits Workshops; launching the external project web site; launching an internal collaboration site for the project team and participants in the workshops; and an update and review session with the Registrar. During Version 1, the IT senior management team was also engaged in considerable work to plan and launch a new structure for the department. This will continue through Versions 2 and 3 as individuals take on new roles, and relevant moves take place to establish working spaces for new teams.

As a result of Version 1, approximately 30 people have been introduced to the benefits-driven approach and key elements of the benefits toolkit. They have also had opportunities to try out applying elements of the toolkit to the five pilot IT projects during the workshop sessions.

This report reflects the situation as the project moves onto Version 2.

4.4 Phase 4: Evaluate

Capturing of evidence, reflection, evaluation and learning are ongoing elements of the programme. For example, notes of discussions have been taken at every project meeting and workshop. Learning has been facilitated as part of core team meetings, meetings of the Steering Group and at the Benefits Workshops. This is an example of something which is good practice, and outlined as such in many methodologies, but is often not done: '90% of projects do not have a comprehensive post-implementation review'. The aim is to change the culture so that this type of reflection is simply designed into projects. The project framework adopted for the research provides excellent opportunities for periodic review and reflection.

This paper has been produced by four of the project team members as part of the ongoing reflection and review. It reflects the situation after five months of a twelve-month project. We have focused specifically on the lessons learned arising from this review, which will feed into later stages of the research.

4.5 Looking ahead

The evolutionary approach being taken to the project is proving successful. The main objectives and main strands of activity are clear. Detailed plans will continue to be evolved version-by-version, as the project proceeds, enabling learning and innovation, as well as taking advantage of unexpected opportunities. At this early stage of the overall project, we feel that the learning to date in a number of areas is worth discussing further and communicating to a wider audience. We have considered (1) learning about IT projects and ways of working; (2) wider issues of building the benefits realisation capability; and (3) learning about the approach to this research project. These learning points feed into further cycles of the action research.

5.0 Learning about IT projects and ways of working

5.1 Clarity of IT project objectives and scope

There seems to be some fuzziness about the goals of the various IT projects. For example, where a project includes the Estates department, Human Resources, IT and an academic department, do all the players have the same understanding of the vision, objectives and scope? Is there a governance structure to bring together all the different projects and activities contributing to the overall goal? It will be important to check out if this fuzziness is a communication issue or the scope, objectives and/or roles are not clear at a detailed level. Is there an effective way of translating the senior management vision into appropriate programme objectives, roles and structures?

5.2 Common language and way of working – project framework

A second aspect of fuzziness affecting the scope and objectives of the projects is an apparent lack of a common language or set of concepts. For example, some of the ‘projects’ seem to be tackling a programme of various individual projects as well as management of an ongoing service. The split between programme, project and service management is not clearly defined with relevant goals, roles, governance, etc. There would probably be considerable value in greater clarity.

How can the benefits toolkit be linked with the planned new project framework in order to embed the benefits ideas and ensure that the project framework is addressing the common issues affecting benefits realisation?

5.3 Consulting and teamwork skills development

Although much of IT work is about projects, the participants in Benefits Workshops 1 and 2 apparently had limited experience of creative and collaborative approaches to team working. This seems an increasingly important element of the benefits toolkit and will be emphasised in later workshops. There also seem to be limited day-to-day opportunities for people to spend time working together outside their teams' silos, for example, to share learning. Is there a way that it can become business as usual to collaborate and share?

6.0 Developing the benefits realisation capability of the organisation

6.1 Skills to engage with and influence more senior managers

Many of the issues of benefits realisation come clear as we consider the big picture – what is the real scope of a project, how does it align with the University and IT strategies, how does the role of the sponsor align with the goals of the project? Many of these things are big issues and often are closely linked with people at one or more levels higher in the hierarchy than the people involved in the projects on a day-to-day basis. Individuals tend to tackle the job they have been given to do (scope and objectives) and do not have the time, access, confidence, communication skills and management support to explore or challenge the bigger picture. For example, if the scope of the project appears poorly defined, there are gaps in the governance framework and how it is working, then it may be vital to engage senior management and convince them to take action. There is a premium placed on courage and communication skills if some of the bigger issues are to be raised and tackled. There is also a need for senior management to listen and to create an environment that is open to reflection, learning and challenge.

Many of the challenges identified relate to dealing with people – for example, communication with senior stakeholders, reflecting and learning lessons. It is vital to

focus on these skills and how people go about project activities rather than just what process they follow and what tools they use.

6.2 Linkages with other initiatives

It will be interesting to see how progress on the project is affected by other activities – for example, the restructure of the department. This must certainly have distracted the ISS senior management team at a fairly crucial stage after Workshop 2, when the priority was to follow through and relate the toolkit to the five major ISS projects. The restructure also provides an opportunity as it becomes clear that the benefits approach is a crucial enabler of a new way of working, allowing the restructured organisation to work more effectively and, in particular, to engage with wider stakeholders in the university.

6.3 The complexity of the project

Since we wrote the initial proposal, the project has developed to be seen as a strategic initiative for ISS. While this is very positive, it also brings into focus the complexity of the project and the linkages with other strategic projects particularly: the restructuring of IT; staff development; introduction of relationship management roles; the evolving project management framework; and considerations of the role and scope of IT, for example, in response to changing expectations as 'digital natives' become students and staff.

The benefits-driven, evolutionary approach being taken to the research appears a good fit for this complex environment. It also suggests a comparison with the challenges of leadership in developing excellence in teaching, where the recent LFHE report suggested that at least five years is required to make a difference (Gibbs et al., 2009).

6.4 Capability development as a benefits-driven programme of change

The project has approached developing the benefits realisation capability of Newcastle University as a benefits-driven programme of change. The approach has emphasised key benefits practices: the active leadership of the ISS Director; extensive engagement with the ISS senior management team to build shared understanding of the goals and engagement in the project; and engagement with an initial core group of stakeholders from ISS and other areas of the University. This focus on engagement

has taken time and effort – but so far seems to have been valuable. The need for this focus on stakeholder engagement and participation will continue as the project reaches out more broadly in the organisation.

The picture will become increasingly complex, as we need to build, maintain, and develop engagement, adoption, learning and feedback across different groups. There is a sense in which ideas 'cascade' from the ISS senior management and core team, but equally important are the opportunities for feedback, learning and evolution as the ideas are put into practice and established as 'business as usual'.

7.0 The approach to the research

7.1 Value of an agile approach to the research

The plan for this project has deliberately been left flexible and we have evolved the approach based on the various streams of project activity and a number of major 'versions'. This has allowed a number of innovations that were not explicit in the original plan: for example, the linkage of the initial benefits workshops into a 5-day leadership programme and linkage of exploratory project work with other partners (a regional IT Directors Forum). This agile approach has worked very well and has allowed us to remain broadly in line with the outline plan in the original proposal.

It has also been very encouraging to see participants bringing forward suggestions for aspects of the approach that had not yet been made explicit or discussed with participants. For example, the workshop with senior IT managers (4 Dec 2009) provided the suggestion that we must adopt a benefits-driven approach to adopting benefits-driven ways of working – which is, of course, a core principle, but had not been discussed at all at that stage. The suggestion resulted in a further session at which we discussed 'what does success looks like', along with the target benefits for the project. Participants in the first two benefits workshops also raised the need to get broader engagement from outside ISS, which again is part of the longer-term plan but had not been discussed at that stage.

There is also some evidence here about the value of different approaches to communication, sharing of ideas and gaining engagement – e.g. although the original

proposal had been circulated to the IT senior management team, it was only through engagement in a series of workshops that understanding and engagement was built. This is learning that we can take back to the five ISS projects and is also an area where we need to develop the benefits toolkit. It reinforces the major focus on communication and engagement that is required as part of any project or change programme.

7.2 Value of the toolkit and benefits workshop approach

The two initial Benefits Workshops were designed around the benefits toolkit and the concept of a number of 'workshops', each of which demonstrated how the elements of the toolkit could be put into action on a project. We need to reflect on the design of the two days and the extent to which we have succeeded in presenting the ideas as workshops that the participants can take and apply (perhaps initially with some support) to their projects. We will continue to assess what resources are most valuable to the participants – both initially, and then over time, as they try to adopt (and adapt) the ideas on their own projects.

Experience so far suggests that there is a lot of value in the current workshop process where the ideas can be communicated person-to-person, and there is an immediate opportunity to try them out with colleagues, whilst working on real world projects.

7.3 Value of the participant oriented action research

The participative action research approach has worked well and provided a bridge between participants and researchers, supporting the view (Lee, 1999a) that we are one community and that there is a linkage between the research process, skills and tools, and what it takes to be effective in practice. A challenge we need to explore further is getting feedback from participants alongside everything else that is going on. The key to doing this in a way that adds value to participants is the direct link with 'reflective practice' so that this does not become an activity that is only of value to the external researchers.

8.0 Conclusions

The contribution of this project will be to provide new knowledge about how to tackle the 70-80% failure rate of IS/IT projects and reduce the wasted expenditure reported at around $140 billion per annum across Europe (BCS, 2004). This is a significant problem for organisations and although some previous research has explored this area, there has been limited impact on practice. The project intends to produce resources aimed at practitioners to help organisations develop the required capabilities for benefits realization. It will also provide the foundation for further research, based on the approach of Neely et al. (2000), that tests out the resources as part of a wider process to enable practitioners to take action to enhance competences for benefits realisation with limited support. This would then provide the basis for much wider action to develop these important competences.

Conundrum

A key challenge is how to plan a benefits-driven approach to developing a benefits realisation capability, when the plan has to be owned and led by the local team. Complications arise from the fact that the local team does not (yet) have a detailed understanding of the benefits approach and toolkit at the start of the project. There was certainly a shared view of the high level vision, but not of any detailed aspects of the 'tools' and process involved. A key success factor is the strong relationship between the external advisors and the internal team. The iterative approach is also proving particularly valuable.

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