



# Benefits-led IT at Newcastle

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## Final Report

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## Executive Summary

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

The resources include a management 'toolkit' for IT-enabled transformation, case studies and a web site. The project draws on existing good practices and focuses on testing out a practical, workshop-based process for enabling individuals and teams to use the tools.

Newcastle University led the project, working in collaboration with a small group of partner HEIs over a period of 1 year, with the aim of building each organisation's capability to realise the transformational power of IT for higher education.

We want to highlight four things:

- Firstly, the time is right for a focus on benefits realisation. The general economic environment and the challenge to do more with less is an important factor. In addition, at Newcastle the foundation of good systems, skills and processes provides the basis for looking beyond technology delivery and management to benefits realisation.
- Secondly, the agile and benefits-driven approach adopted by this project has been valuable. There is a balance between a clear vision and flexibility to develop and adapt the detail as the project progresses.
- We have seen the value of people from different areas of the organisation working together using simple, but powerful tools. The focus is increasingly on the skills of individuals and teams to work with and influence others to gain benefits from IT-enabled innovation and change.
- Finally, other organisations can learn from the approach we have taken and build on the resources we have produced.

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## Drivers for the project

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In the knowledge economy of the 21st century, every aspect of the University's work is touched by information technology. It is impossible to conceive of teaching, conducting research or promoting the University and the North East region without making use of technological tools.

A range of trends is creating pressure for radical change. For example: the impact of the recession, requiring an increased focus on value for money; the globalisation of education through the mobility of staff and students and the role of technology; the increasing numbers of new and alternative providers being granted degree awarding powers; employer focus on skills and preferences for professional qualifications; the demand for life-long learning; knowledge becoming an increasingly cheap and readily accessible commodity in a web-enabled, 'open source' world. Technology has an important part to play in enabling creative and innovative responses to these drivers to place the University at the hub of a learning community of scholars and practitioners.

Exploitation of IT is a priority issue for the HEI (Higher Education Institution) sector. As Sir Ron Cooke noted in his contribution on behalf of JISC to the DIUS 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 reporting estimates of wastage due to IT project failures as \$150 billion per annum in the US and \$140 billion in Europe. This is also in line with many studies over the last 30 years, which have reported failure rates of 70-90%. Higher Education is a particularly challenging area for benefits realisation from IT for a range of reasons, including the federal nature of HEIs 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 IS/IT. People know that these 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 IS/IT investments in practice. Organisations have not yet succeeded in adopting successful benefits-driven approaches. This project starts by tackling these issues at Newcastle University, and then involves a number of collaborative partner HEIs. It will also provide resources to contribute to the success of IT-enabled change and transformation in the wider HEI sector.

This paper sets out important foundations for the project. It brings together an academic perspective of how the work will contribute to understanding the challenges of establishing a benefits realization capability; with a practice perspective, in 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. From a practice perspective, IT in the HEI is relatively successful with integrated, reliable systems, high levels of student satisfaction and generally good relationships with other areas of the organisation.

In terms of the benefits realization capability, the project is focused on how this capability can be developed. After all: “If you want to truly understand something, try to change it” (Kurt Lewin).

**Note on ‘benefits realization:** we use the following *definitions*:

**Benefits realization:** delivering value to customers and other stakeholders and improving organisational performance through benefits-driven programmes and projects of IT-enabled change.

**Benefits realization capability:** the organisation-wide capability to consistently realize value from investments in IT-enabled change and transformation.

It is vital to note that benefits often arise as a result of use of systems and management action over a period of years following completion of an investment project.

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Although this is related to the idea of ‘transformational leadership’, our focus is more on the organisation and on the tools leaders use for IT-enabled change, rather than the general competences of leaders.

**Table 1: Definitions**

## Structure of the paper

The remainder of the paper is structured as follows:

- Firstly, we provide some context for the work and the approach by outlining relevant aspects of good practice based on academic research and practitioner experience.
- Then we set out the approach to the project and introduce the context for the work at Newcastle University.
- This is followed by a brief outline of findings 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 further work.

# Existing good practice

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## Insights from previous research

### The organisational competences required to realise benefits from IS/IT

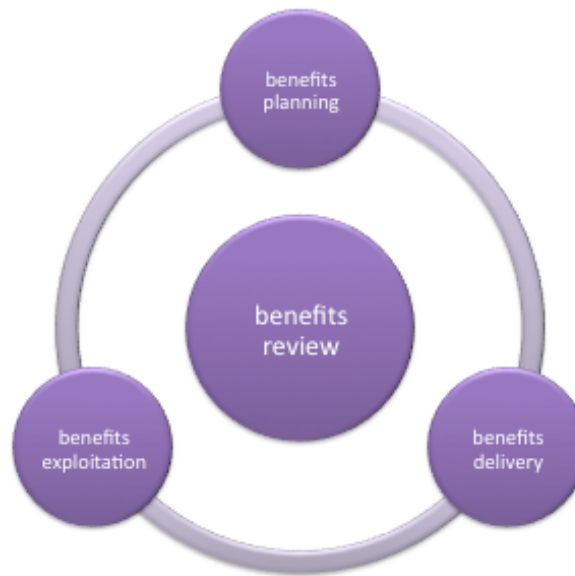
A 'fourth era' of IS/IT is proposed (Ward and Peppard, 2002) based on the concept of an IS capability being the enabler of competitive advantage from IS/IT; i.e. sustained competitive advantage does not come from any one project or solution but from the ability continually to deliver solutions that provide a stream of temporary sources of advantage. Empirical studies (e.g. Santhanaman and Hartono, 2003) have indicated a strong link between 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' is particularly relevant to the challenge of benefits realisation from investments in IS/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 (Figure 1) 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 realization capability of an organisation comprises four distinct, yet highly inter-related, competences:

- **Benefits Planning:** benefits do not simply emerge, as if by magic, from the introduction of a new technology, their realisation needs to be carefully planned and managed from the very beginning of thinking about any investment in change. Benefits Planning includes a strategic perspective, enabling innovation and deciding which projects to undertake, as well as benefits-focused planning of individual projects.
- **Benefits Delivery:** benefits primarily arise from the organisational change that accompanies an IT implementation, rather than directly from the technology itself. 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.

## Benefits realization competences



**Figure 1: Organisational competences for benefits realisation**

Competences have both explicit and tacit elements and can be hard for managers to deal with. It can be valuable to adopt a *toolkit of practices*, 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 actually 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. Recent research by Ward et al. (2007) provides evidence of the importance of practices and their link with IS project success.

A further important element of the overall benefits realisation capability is the ‘mindset’ and associated language. For example, do people think and talk about benefits for stakeholders as opposed to technology features.

‘I knew this was working when people started talking about ‘driving out the benefits’ in project meetings.....’

Steve Williams, November 2010

## 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 IS/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. One project manager noted that the solution was delivered to time, cost and quality goals, and that *“the customer was deeply moved when they saw that IT projects can be done like this”*. Overall, delivery of an IS/IT solution was seen as success, and project roles did not clearly address benefits realisation.

## Reasons for the lack of adoption of benefits-driven approaches to business transformation through IS/IT

The research revealed a number of reasons for the lack of adoption of benefits-driven approaches. Firstly, there is a very limited *awareness* of benefits related approaches, and this is a significant factor in the lack of adoption. This is strongly reinforced by the power of the current ‘paradigm’ that project success is seen as delivery on time and on budget. Secondly, in a small number of cases, senior managers stated that a project was focused on benefits when in fact, although there were clear *targets* for benefits, the project *activity* was still focused on the delivery of a technology solution. In many respects, this focus on technology is surprising as benefits are covered in approaches such as PRINCE 2 and Managing Successful Programmes.

Our research did not cover reasons why this is the case. A hypothesis may be that, in the daily pressure to deliver concrete milestones, ‘something has to give’ – and this is often a consideration of benefits. Further, remember that the delivery of benefits usually extends well after the delivery of the system. One of the senior managers in Newcastle commented that ‘once we have delivered the system, there is always pressure to move onto the next one, and nobody makes enough time for a post-implementation review, let alone proper benefits management.’

Note that we are not stating that delivering the technical part of projects on time and to budget is unimportant – indeed, without these achievements, the delivery from the IT department has little credibility. It is necessary... but it is not sufficient.

## Practices that contribute to benefits realisation

Aspects of good practice contributing to benefits realisation from investments in IT include:

- Benefits Management: a business-driven approach to investments in IT (Professor John Ward, Cranfield).
- Managing Successful Programmes (Office of Government Commerce).
- Agile approaches to projects (various sources, largely practitioner).



- Business-driven approaches to IS strategy and portfolio management (for example based on work by Professor Michael Earl, Professor John Ward and Professor Joe Peppard, Cranfield).
- IT governance (Professor Peter Weill, MIT and Professor Joe Peppard, Cranfield).
- Developing the business transformation capability of the organisation (Professors Joe Peppard and John Ward (Cranfield), Professor Neil Doherty (Loughborough) and Dr Colin Ashurst (Durham)).

The continued high failure rate of investments in IT, as well as research into current practice, suggests that these good practices have not been widely or successfully adopted. There is a gap between what we know and what organisations do in practice. This partly relates to a senior management 'IT attention deficit' (Huff, 2006) and a mindset where IT is seen as the Chief Information Officer's issue, without recognition that realising benefits from IT-enabled organisational transformation is an issue for the entire management team of the HEI. One of the focus areas of this project is therefore to explore how to overcome this gap and ensure successful adoption of good practices.

The concept of a '**benefits realisation capability**' brings together practitioner responses to the historically high failure rate of investments in IT, with the idea of dynamic capabilities, which is a major stream of current strategic management research and the importance of developing transformational leadership competences at every level of the organisation.

Very briefly, key ideas include:

- Senior managers need to be effective leaders of IT-enabled transformation – and this requires expertise in a toolkit of practices.
- Organisations need to evolve a flexible, practical toolkit for transformation enabling skills development and shared experience – not a rigid methodology.
- The development of the benefits realisation capability enables innovation to realise the strategic potential of IT.
- There is a need for a particular focus on exploitation of information, systems, etc over the lifetime of the investments.
- Benefits realisation is an organisation wide capability – the IT function has a critical role to play, but is only one part of the team. This will require adoption of practices at many levels of the organisation; for example, managing portfolios of change initiatives locally, at Faculty and at University level. This requires expertise and leadership at every level supported by the shared language and toolkit.
- Developing the benefits realisation capability is a strategic change programme, which involves changing attitudes and behaviour – not just developing knowledge. It is vital to address the lack of adoption of existing good practices.
- Leadership for development of the benefits realisation capability is vital.

Our approach is to tackle the development of the transformation capability through the phased adoption of a management 'toolkit' of practices – as part of a strategic change programme.

# Approach to the project

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## Action research provides a foundation for the project

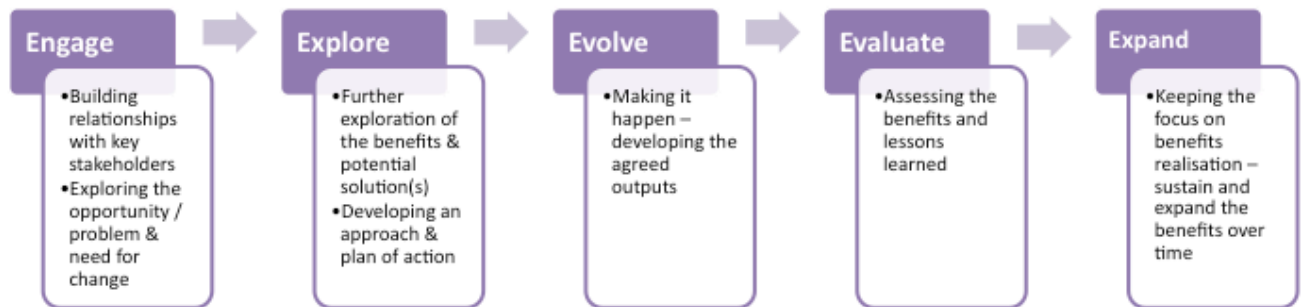
The project is seeking to gain insights into how organisations can develop the competences required to succeed in realising the potential of investments in IS/IT to deliver benefits to stakeholders and improve organisational performance. In contrast with prior work the project will (1) focus on the development of organisational competences for benefits realisation rather than the adoption of a specific method; (2) involve participatory action research to explore how the competences required for benefits realisation can be developed; (3) test out the possibility of sharing practices between organisations to contribute to the development of the required competences; and (4) examine what is required to help organisations to develop the required competences themselves. The research will learn from the approach of Neely et al. (2000) and seek to develop resources to enable practitioners within organisations to be more effective in developing a benefits realisation capability.

Organisational competences for benefits realisation will be 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 will be considered as part of the project. It is likely that organisations will want to consider action at a range of levels; for example, by considering roles and structures, performance measures, processes, leadership, and behaviour.

## Approach to the programme

The key challenge we are tackling in this project is putting knowledge into action to develop the transformation capability of HEIs. In the design and delivery of the project, we are applying good practices for benefits-driven project planning and delivery. This approach of 'practicing what we preach' is very important for us. In particular, we have adopted the  $e^{4+1}$  project framework to provide a flexible (agile) foundation for the project that enables innovation and learning.

# e<sup>4+1</sup> project framework



**Figure 2: A framework for an agile project (developed by the authors)**

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

## Phase 1: Engage.

Initial work on the project took place over a period of 18 months and involved developing the proposal for funding and working with the Leadership Foundation for Higher Education (LFHE) to refine the proposal and gain approval.

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.

## Phase 2: Explore.

The priority at this stage was to extend the core team at Newcastle to the senior IT management team as a whole. The team was briefed on the project and then two workshop sessions were held. Firstly, to develop a shared assessment of benefits realisation competences at Newcastle and then to consider ‘what does success look like’, the target benefits for the project and to develop a shared view of how to take the rest of the project forward.

## Phase 3: Evolve.

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

<b>(Sub) Project</b>	<b>Outline</b>
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 of relationship and engagement skills.
Engagement with core ISS projects	Project teams apply elements of 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: <ul style="list-style-type: none"> <li>• Senior management engagement with IT.</li> <li>• Exploitation of existing systems and information.</li> <li>• Benefits-driven management of the IT portfolio.</li> </ul>
Wider engagement	Working with wider stakeholders to gain input to the work and share the findings (groups specifically: North East IT Directors Forum; Russell Group IT Directors – RUGIT; SOCITM executive team (Society of IT Managers))

**Table 2: Projects within the overall programme**

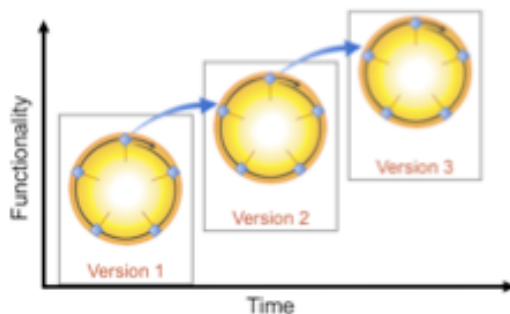
We have split Evolve into a number of versions.

<b>Version</b>	<b>Dates</b>	<b>Core deliverables</b>
Version 1	Feb-Mar 2010	Communicate about the project and recruit attendees to the Benefits Workshops. Benefits Workshops 1 and 2. Test out ideas on core projects within the workshops.
Version 2	Apr-Jul 2010	Benefits Workshops 3 and 4. Engagement with core projects. Preliminary work on exploratory projects.
Version 3	Aug-Oct 2010	Benefits Workshop 5. Further work on exploratory projects. Develop toolkit materials to reflect experience.

**Table 3: Versions within the Evolve stage of the programme**

# versioned releases:

incremental delivery of changes and benefits



Minimize risks by breaking large projects into multiple versions

### Version 1

- Extend project to include full IT management team
- Assessment of current benefits capability
- Engage wider members of IS and key business colleagues
- Design and run first two workshops from the benefits workshop programme
- Build skills in using the toolkit by applying to core ISS projects in the workshop

**Figure 3: Within the Evolve phase of the programme there are a number of different 'versions'**

### Benefits Workshops

The initial priority was to extend the engagement within IT and other areas of the University. As an output from Explore we had identified individuals who we would like to involve during Evolve. These individuals were invited to a briefing session. A wider invitation was also made to provide others with an opportunity to participate in the programme.

The one-hour session provided an overview of the objectives and approach to the programme and ended with a call for volunteers to attend five one-day Benefits Workshops to introduce the benefits approach and allow participants to start to learn to apply it.

#### Overview of the Benefits Workshops

Participants in the programme will be able to make a greater contribution to realising benefits from IT at Newcastle University. The programme addresses both the principles underpinning a successful approach to IT-enabled transformation and the practices that provide you with the know-how you need to make a difference. In the programme we create an environment where you learn by doing – applying new ideas to projects and issues from the workplace, and you can share your insights and learn from your colleagues.

It provides you with a toolkit of ideas that you can use to help share your learning with others and to make a direct impact on the projects you are working on.

**Table 4: Overview of the Benefits Workshops**

There was an excellent response to the invitation to attend the Benefits Workshops and 28 people signed up to attend. At this stage the group was primarily from IT, with a small number of other participants to start to explore wider engagement at a later stage.

<b>Engage Day 1</b>	<b>Explore Day 2</b>	<b>Evolve Day 3</b>	<b>Evolve Day 4</b>	<b>Evaluate Day 5</b>
<p>Introduction to the benefits approach.</p> <p>Patterns and practices as a framework for capturing lessons learned and knowledge sharing.</p> <p>Benefits review.</p> <p>Introducing the investment portfolio.</p>	<p>Benefits planning: benefits principles / overview of the framework and introduction to driver analysis.</p> <p>Stakeholder engagement and analysis: developing a rich stakeholder map for key projects.</p>	<p>Review of key projects from a benefits perspective.</p> <p>Consulting skills: exploring approaches to engage with key stakeholders.</p>	<p>Benefits delivery: a range of practices related to benefits delivery including benefits measurement as a driver of change.</p> <p>Adapting the approach to different projects: exploring agile approaches and the implications of the investment portfolio to enable innovation.</p>	<p>Review of key projects and planning further action for benefit realisation.</p> <p>Review of the programme – lessons learned and reinforcement of key messages and skills.</p> <p>Looking ahead to make a benefits approach business as usual.</p>
Feb	March	May	July	Oct

**Table 5: Outline of the five workshops**

The first workshop introduced the benefits-driven approach and the idea of the toolkit. It also introduced ‘patterns’ (the format for documentation of practices in the toolkit) and provided participants with an opportunity to write a pattern as part of an action learning framework and lessons-learned process that will underpin the project. This provided the basis for capturing, refining and sharing effective practices (the benefits realisation toolkit) that will be an important output from the project. Workshop 2 focused on benefits planning and a major part of this was stakeholder analysis and exploring stakeholder engagement.

### **Pilot IT projects**

We identified five existing University IT projects to work with to test out the value of the benefits-driven approach and toolkit. These were selected by the IT senior management team during Engage, based on the following criteria: ability to make an impact (by getting involved early in the project; the project is a manageable size; there is involvement from outside the IT function; and there is an opportunity to learn.

Participants in the Benefits Workshops worked with members of the core team to relate the benefits toolkit and ideas to each project. The intervention in each IT project was based on the evolving toolkit and workshop activities that put the toolkit into action. This tests out the effectiveness of the toolkit and how to develop expertise in using it, which effectively pilots a process of dissemination to other HEIs.

### **Exploratory projects**

Three projects were undertaken on crosscutting issues. The aim is to start to explore a number of areas where there is little existing good practice to refer to. During the initial planning work (Engage) a number of possible areas were identified. As part of Explore, the priorities were refined based on further assessment of the priorities at Newcastle, as well as emerging opportunities to engage with the wider IT management community.

Work was carried out in the following areas:

- Overcoming the 'IT attention deficit': successfully engaging senior management as leaders of transformation and equipping them with a language, people skills and toolkit to play this role effectively.
- Practices related to the management of the portfolio of IT projects and services.
- Exploitation of existing IT systems and services.

In each of these areas, we are seeking to explore and evolve good practices based on research and engagement with a range of stakeholders.

#### **Wider engagement**

One element of wider engagement involves the Russell Group IT Directors forum (RUGIT). We outlined the project at a RUGIT meeting in February 2010. An update and further discussion also took place at the RUGIT meeting in June. Based on these sessions we ran a half-day workshop in October to explore practices for portfolio management.

A second strand of engagement is with the North East IT Directors Forum, which includes a broad range of heads of IT in the North East including IT Directors from Durham and Northumbria Universities. Members of the forum are contributing to the three exploratory projects.

#### **Ongoing communication**

An important element of knowledge created in the project was captured in revised / enhanced versions of the benefits toolkit and workshops which are made available within Newcastle and other HEIs through the project web site.

The design of the project made very efficient use of the funding. IT senior managers and the participants in the Benefits Workshops effectively work as part of the team on a number of projects increasing the learning and outputs, as well as providing strong foundations for sustainability.

## **Phase 4: Evaluate**

Reflection, evaluation and learning are ongoing elements of the programme. It was facilitated as part of core team meetings, meetings of the Steering Group and a final project conference. A wide range of collaborators / partners, including partner universities, were invited to the final conference. The action-learning framework provides a strong foundation. This is a marvellous 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 provides excellent opportunities for periodic review and reflection.

## **Phase 5: Expand**

The final stage is recognition that the completion of the project is the starting point for benefits realization. During the work on the Expand stage, we have followed up the five workshops, the engagement with the ISS projects and the exploratory project by planning ahead. Future activity will continue to embed the benefits-led approach in ISS and its relationships across the University. Line responsibility for this work has been given to a member of the CIO's senior management team, the Assistant Director (Governance.)

## Findings from the project to date

This section provides a brief outline of what we have learnt from the different project activities.

### 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 (LFHE) and Kath Thompson (HEFCE) resulting in the idea for a proposal through to confirmation of approval of the project (October 2009). 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 6 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.	<p>A separate project is seeking to establish more consistent approaches to projects across the university.</p> <p>As part of engagement with the five pilot IT projects there will be some opportunities to explore wider aspects of project practice.</p> <p>At a later stage in this project, we will address incorporation of specific benefits practices into the overall project framework.</p>
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 and the related feedback loop.	Reviews have taken place successfully on a number of projects but the practice has not been consistently applied. This is incorporated within the 'benefits review' workshop, which forms a core part of the 'toolkit.'
4	Having a 'seat at the table'.	<p>Specific challenges include:</p> <ul style="list-style-type: none"> <li>the need for capacity to engage at top level given that – 'IT is related to virtually every strategic issue.'</li> <li>the ability to communicate / deal with unfashionable issues at senior management level (ITIL, security, etc).</li> </ul> <p>Relationship building is a key element of the Benefits Workshop programme.</p> <p>This area is also an important part of the 'attention deficit' exploratory project.</p>
5	Exploitation of existing systems, services and information.	Exploitation is addressed by one of the planned exploratory projects.



	<b>Challenge</b>	<b>Approach in this project</b>
6	Delivery capacity (i.e. how the existing resources can be used most effectively to tackle IT-enabled change).	Change delivery capacity is addressed indirectly through the Benefits Workshop to build skills.  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 6: Initial view of challenges affecting benefits realisation**

## Phase 2: Explore - initial assessment and building engagement

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 (Figure 4). 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 was a major priority for 2010 and to see the role of this project in responding to a number of the identified risks.

## What does success look like?

- Develop a straightforward, common language across different layers of the organisation (in and out of ISS)
- Common, embedded approach: transferable across all projects
- Clear, documented, easy to translate across all audiences
- Transparent, blame-free approach to post project reviews
- Include lessons for all business perspectives (not just ISS centric)
- Transparency around project planning (benefits planning)
- Getting more from what we have
- Set of common criteria applicable across the board for projects / programmes to enable decisions for resource allocation
- Benefits not Features as language of project initiation
- AGILE model: 'incremental development' – sensible bite-sized chunks going forward (this project and all ISS projects)
- Value in 'no-go' decisions as well as committing to get involved
- People involved have an increased sense of moral and feel more motivated
- Actively learn by using the process. How we use this to feedback and learn

**Figure 4: Extracts from a brainstorm session with the ISS management team on 'what does success look like' (Dec 2009)**

## Phase 3: Evolve

### Version 1: building the capability of the team

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.

A number of factors noted during the workshops and a lessons-learned session held to reflect on progress during Version 2 are explored further in the Discussion section of this report.

### Version 2: applying to toolkit

As a result of Version 1, approximately 30 people were 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.

Version 2 centred on:

- Working with the project teams to apply elements of the benefits toolkit to the five projects.

- Developing skills further by running Benefits Workshop 3 and 4.
- Progressing wider engagement (within Newcastle University and with other participants) and, specifically, making plans for more in-depth activity within Version 3.
- Initial work on two of the exploratory projects (Benefits from the IT Portfolio and Knowledge Worker Productivity).
- Working with the IT senior management team to apply the benefits toolkit to develop the benefits realisation plan for this project.
- Continuing to build collaboration and shared ownership of the project.

### Version 3: benefits focus on key projects

Version 3 included completion of the work on the two exploratory projects. The primary focus however was on workshop 5 and working with each of the core projects to reflect on progress with the benefits-led approach and to plan the next steps.

## Phase 4: Evaluate

Reflection and ongoing learning was embedded into the project as a whole. We had review sessions within the workshops, and had two series of 1:1 meetings with participants in the workshops. The second of these review sessions was just before workshop 5. We had a number of planning sessions with the ISS senior management team and a review and forward planning session just before workshop 5. This process was invaluable in enabling us to evolve the approach and focus of the work.

The evolutionary / versioned release approach taken to the project proved successful. The main objectives and main strands of activity (sub-projects) were clear. Detailed plans were evolved version by version as the project proceeded, to enabling learning and innovation, as well as taking advantage of unexpected opportunities (see Table 7).

#### Innovations during the project

Piloting the workshops as a coherent five-day leadership development programme rather than as individual activities.

Taking a benefits-driven approach to the project itself – as suggested by one of the IT senior management team.

Extending the Benefits Workshops outside IT – as suggested by a workshop participant.

The extent of focus on ‘consulting skills’ during the workshops.

Not overloading the workshops with theory, instead using the time and participants’ skills to reinforce learning by direct application of the ideas to live projects.

**Table 7: Innovations in the approach to the project**

## Phase 5: Expand

The final stage of the project was to plan for the work to be taken forward. We established plans for the year ahead to take the next steps towards a benefits-led approach becoming 'business as usual' within ISS and its work across the University. Linkages with other development activities have been defined and there is clear ownership for the next steps in the ISS senior management team.

# Findings from engagement with ISS projects

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## Pilot adoption of the benefits-led approach

Key members of each of the project teams attended the 5 one-day workshops run as part of the Benefits-led IT project. At each workshop, we introduced part of the benefits toolkit and participants had the opportunity to apply the ideas to their projects with input and feedback from their colleagues. At workshops 2 and 5 each project team provided an update on their project including progress, challenges and the contribution of the benefits toolkit. We also had feedback sessions with individuals to get their views on the benefits-led project and to explore their progress in adopting the toolkit. These sessions took place after workshops 2 and 4.

The initial projects were chosen to reflect different sizes and degrees of complexity, and different stages in the project lifecycle.

We had:

- Implementation of a business process re-engineering project (P2P)
- Moving from experiment to live, production service (ReCap)
- Integration of a 'non-central' system (NESS)
- A technology project (testing disaster recovery)
- An international project where IT is one of many risky 'planks' (NuMed)

## ReCap

The vision for the ReCap project was clear from the start: to enhance student learning, in particular, to provide a resource to help international students; to enable students to think about concepts during lectures without having to worry about taking notes; to support revision; and to enhance support for different learning styles. The system is now in place in 50 lecture theatres (Summer 2010) to provide automatic recording of lectures and is being widely adopted.

A Benefits Review session takes the form of a lively workshop exploring the actual benefits realised through a project, both expected and unexpected, along with project practices, assessing what worked and where improvements could be made. It's about taking time to reflect, learn and enable further benefits to be realized and further innovations to take place. We ran a Benefits Review session with the RECAP steering group and the learning was shared at workshop 5.

For ReCap, a key opportunity is to get more staff recording lectures and more students using the recordings. The main action is to market the existing capabilities to new users by sharing some of the staff and student stories of the benefits they have gained from the system. There is also work to do to emphasise the benefits to new groups of staff and students as the system is deployed to other departments. The team has also been aware of the need to avoid raising expectations too high, particularly prior to full university-wide deployment. We hope the pilot users will continue to provide ideas and encouragement to others as ReCap moves from an exploratory pilot to a university-wide capability.

What is clear from the feedback we've actually had, is that ReCap provides a new capability for the university; the precise benefits only emerge as people start to *use* the technology. The unexpected benefits come as staff and students start to use the technology to work in different ways. Also new ways of getting benefits are emerging as the users' experience and confidence develops. ReCap is now evolving into a programme of activity as the scope is extended to include desktop video capture, which will open up a wide range of new opportunities.

ReCap provides a good example of the importance of what we refer to as Benefits Exploitation. The quest to leverage benefits from software should not cease as soon as it has been implemented. Continued focus is required over the life of the investment. It also shows the importance of a wide range of stakeholders – benefits realisation from IT is not just about management of the IT function. ReCap had strong academic leadership throughout; working very closely with ISS and this was an important factor in the success to date.

The team found many aspects of the benefits toolkit helpful: the stakeholder analysis and focus on stakeholder engagement; consideration of non-financial benefits; and the links of benefits with change. The project is a good example of the need for business leadership and a focus on benefits, in this case for staff and students. Following the Benefits Review session with the steering committee there is a sense that the project as a whole is thinking in benefits terms: adopting a benefits 'mindset'.

## NESS

NESS has been developed outside ISS, by a team in the Computer Science department. It has evolved to play a key role in the student assessment process across half the University and is gradually being integrated with other core systems. NESS supports marking assessment and exam board activities: taking the marks from the academic markers through external examiners to final classification. Significant savings in effort and elapsed time have been realised in the Schools that have adopted the system (17 at the time of the review). In addition, there have been quality benefits, as the time saved allows more time for checking and review, and because summarised and exception data (e.g. the spread of marks on a question or module) is available from the beginning of the process.

The NESS team adopted key aspects of the toolkit developing a benefits realisation plan and stakeholder analysis. They have found that the “benefits approach is very clear” and that as a result “people are thinking differently”. “Its’ a very clear language that is helping communication with people and contributed to better working relationships”.

Key learning points include the value of allowing opportunities to emerge. The success of the early stages of NESS has revealed significant unexpected benefits, which were then used as a basis for further developments. NESS also illustrates the need for management of change at a local level as more Schools have taken on the system – encouraged by the success of early adopters. For ISS a portfolio perspective is critical. NESS might have been seen as a maverick, but with communication and co-operation, it has been allowed to play an important role and is being integrated with wider systems.

## P2P

Procure to Pay (P2P) is sponsored by the Finance Director with the goals of achieving more effective procurement and more efficient processes. There are opportunities for significant cost savings from rationalising spend across different suppliers and being able to take early payment discounts. The process will be more flexible for users offering a ‘click to buy’ purchasing experience and enabling better use of time.

The project is challenging as it affects the jobs of a large number of people across the university. During the benefits-led project, initial work on P2P has formed a steering group, a project team and progressed system selection.

The P2P team have adopted many of the benefits-led ideas and found the work on stakeholder mapping extremely valuable. This contributed to the overall project structure, for example with clear roles for HR and the departments affected. In addition, there has been a major emphasis on communication with early union briefings and a ‘road show’ to affected departments. The team commented: *“change management tools can never be implemented too soon”*

Key learning points from the project include: the challenges of actually ‘banking’ benefits even in an apparently clear-cut situation. P2P will save a lot of time, but this is spread across an element of the job of many people. There will be a lot of work to establish how these time savings are translating into a range of benefits. The organisation-wide impacts also require input from many areas to deliver (HR, Procurement, a joint ISS / Finance project team, Schools and Departments). The benefits-led approach is helping these different groups work together to deliver the changes and there has been significant early

effort to build stakeholder engagement. Success will depend on continued engagement and the willingness and ability of the different Schools and Departments to manage the changes locally in order to realise important aspects of the overall benefits.

## NuMed

NuMed is a major University initiative to set up a new medical school on a campus in Malaysia in new buildings. It involves a range of stakeholders in both countries, for example the contractors responsible for the new building. The curriculum is directly linked to the well-established medical school at Newcastle. The ISS element is a critical, but limited, part of the overall project. Teaching on the new campus will depend on getting the right IT capabilities in place and having good links with Newcastle.

A number of learning points have emerged. Firstly the value of the stakeholder mapping exercise, which quickly revealed that action was required to draw together the different strands of activity (HR, Estates, ISS, Medicine, UK, Malaysia) and establish more integrated programme management with sponsorship related to the overall benefits and strategic goals rather than specific components (the new campus). There is an opportunity for ISS to take on a more general programme management role, which they tend to play by default, as they have an awareness of the issues and the skills required. NuMed also highlighted the importance of non-financial benefits. Although clearly strategic for the University, the direct financial impact is relatively small because of the financing arrangements, so the project has not triggered the enhanced focus reserved for 'large' projects. From a portfolio perspective, the project has absorbed considerable senior management time and highlights that this is a key issue in terms of capacity for change. These impacts on a small number of senior individuals are often underestimated. The Benefits Review process has also helped crystallise learning from NuMed, which is now being applied to another major international project.

## Testing Disaster Recovery

The aim of the Testing Disaster Recovery project was to respond to Audit Committee and carry out a test of existing contingency arrangements. This was seen as the start for a longer-term programme of work to develop enhanced backup and recovery capabilities.

A key challenge for the project was to bring together different stakeholders and establish a shared understanding of the goals. Although apparently clear, it revealed, as with other projects, the major challenges of getting a good, shared understanding of the goals. The benefits approach plays an important role because of the emphasis on stakeholders working together in well-designed workshop sessions, which help to bring out into the open different assumptions and understandings. In this case, the tension was between carrying out a test that would prove the recovery capabilities (the requirement as perceived by the project manager) and carrying out a test in a reasonable timeframe and with limited resources as a first step (the requirement as perceived by Audit Committee members in the workshops).

## General learning points

A number of general points emerged from the work with the specific ISS projects.

- Firstly, the benefits-led approach resulted in a significant shift in thinking and focus. Stakeholder engagement and organisational change were emphasised. The benefits perspective brought people together and provided valuable insights into how different elements of the projects fitted together.
- The approach required, and encouraged, more collaborative working based on an understanding of the benefits and the cross-department team effort required to realise the. Perhaps more importantly in the longer term, the interactive approach helped build relationships between people, teams and departments and encouraged people to have fun. This is a very promising start for an increasing focus on innovation enabled by IT.
- In many cases, there were important unexpected benefits, which were a major driver of value in new phases of work.
- There was strong support for the Benefits Review activity – which provided space to think. The sessions were an important enabler of new insights and shared learning.
- In several cases benefits realisation was an ongoing process of learning, as people worked with the systems and discovered opportunities. A key challenge, and opportunity, is to facilitate this learning across the organisation, for example as individual lecturers or programme teams find ways to use ReCap to enhance student learning and experience.
- Finally, many of the projects, even an apparently transactional project such as P2P, required considerable learning and change at a local level in Schools and Departments. This highlights benefits realisation as an organisation-wide capability.

## Findings from the exploratory projects

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### The contribution of the exploratory projects

We included three exploratory projects within the scope of the work. These projects allowed us to consider areas where practices are less well established with a wide range of participants.

The first project explored practices for the realisation of benefits from the IT portfolio. We ran workshops exploring practices for IT portfolio management with the local IT Directors forum and the Russell Group IT Directors Forum. Across the two sessions, there were approximately 50 participants.

The second project explored knowledge worker productivity, an important aspect of Benefits Exploitation. Our view is that much of the work of academics and other professionals within a University is knowledge work. The person doing the work has a great deal of control over *what* is done and *how* it is done. Historically IT has been used in transactional settings (payroll and financial processing for example) where the system



defines the process – *how* the work is done. The aim of the project was to explore how the challenges of benefits realisation from IT differ in knowledge work settings.

The final project (discussed later in the report), explored the role of senior management in realising benefits from IT.

## **Benefits realisation from the IT portfolio**

IT portfolio management is a crucial element in the overall benefits-led IT approach and makes contributions in a number of areas including: agreeing priorities for investment; adapting the approach to individual projects; and maintaining control over the full portfolio of investments in IT-enabled change.

The separate report on this area outlines a number of important practices for IT portfolio management that contribute to benefits realisation.

## **Knowledge worker productivity**

In preparation for the workshop on knowledge worker productivity we carried out an informal survey of managers. We had 42 responses from groups of Durham Executive MBA students in the UK, Germany and Barbados. There was a clear pattern of using Microsoft Office (Word, Excel, PowerPoint) for about 20 hours a week and spending another 10-20 hours using email. We think these results are fairly representative of a large number of managerial and professional workers. An important implication is that we need to explore how to improve productivity in these major elements of the working week.

The workshop included participants from a wide range of organisations (HE, legal, manufacturing, consulting). We explored how IT is being used to enhance knowledge worker productivity and what else can be done.

Our general conclusion is that this area is neglected by most organisations. Investments are made in technology but there is little support for users to make the most of it to improve efficiency and effectiveness. We identified a number of practices that could make a difference for individuals, groups and teams, and organisations as a whole.

A separate paper provides more information on the work and outlines suggestions for action. Given the current lack of focus on this area there is considerable work to do to get greater insight into what works and to evolve further guidance for organisations.

## **Learning from wider engagement**

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One strand of the work was to engage with RUGIT and other external participants. Table 8 provides some typical comments from the RUGIT meeting on 24 June 2010, which support the need for this project and indicate some of the challenges. A session with the Council of Local Government CIOs also provided useful feedback on the work. A more in-depth session with RUGIT (19 Oct 2010) made an important contribution to the exploratory work on the IT portfolio, which is available as a separate report.

This wider engagement has provided interesting insights into how the project can be developed in the longer term and the intensity of the engagement required to start, and

then support, the process of benefits realisation capability development. The toolkit / workshop resources are only a part of a wider process for communication, education and development.

Implications of the work to date for other HEIs and IT management practice in general include:

1. The importance of the initial assessment to confirm that the time is right – that relevant foundations are in place for a focus on benefits and business change.
2. The need for sponsorship at a top level and a high level of commitment from the sponsor in terms of time and energy.
3. The importance of taking an agile, phased, benefits-driven approach to the project (with all that implies).
4. That, if conditions are right (see 1 above), the changes are likely to be welcomed by IT and business participants in enhancing their role and enabling them to make a more effective contribution to the organisation.

An important barrier to the adoption of a benefits-led approach is the perception that ‘we do all this anyway’. From our wider research we know this very unlikely to be the case and that very few organisations are yet at the stage of having an well developed, organisation-wide benefits realisation capability. It is a mistake to equate having a business case to a benefits-led approach. A robust business case is important, however all too often it will focus on financial benefits rather than the wider picture and on what the benefits are rather than *how* they will be realised. The real value of the benefits-led approach has been in building engagement, collaboration and creativity in the groups working to bring about the potential benefits.

It’s about the exploitation of the technology, not the technology itself.

Sometimes IT can and should tell people what should be done – we have specific key skills. And the issue here is about building credibility, using influence, evidence and proven wins.

The problem is that benefits are rarely measured accurately, and over time as things change, it is really hard to work out whether things have been delivered at all! Incremental change is the norm, and people miss the consideration of ‘standing back’ and looking at the benefits from a step change.

A business area or academic department has to identify what the benefits are – and it is really hard to get some areas (particularly academic departments) then to understand how to articulate the business improvements for their area.

The benefits depend on business process change – benefits have to be got by the business with the help of ICT. Note – exploitation is key, and you shouldn’t embark on the project if there is not real business sponsorship.

Most benefits are actually realised much later than the completion date of the project – ongoing exploitation over several years is the issue. Work in this area, therefore, needs to major on how to inculcate concentration on exploitation.

Benefits may or may not be causal – how will we know that THIS action had THIS benefit? Answer – we won’t know completely – but by identifying and tracking benefits, we can get much closer to a causal understanding. It’s similar to risk management – one can’t be certain that action X has mitigated risk Y but one can gain better understanding. Another advantage is that this works well for qualitative as well as quantitative benefits.

**Table 8: Comments from Russell Group IT Directors**

# Learning from the project

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The learning from the project in a number of areas is worth discussing further and communicating to a wider audience.

## Learning about IT projects and ways of working

### **Clarity of IT project objectives and scope**

There seems to be some fuzziness about the goals of the various 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 is 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?

### **Common language and way of working – project framework**

A second aspect of fuzziness affecting the scope and objectives of 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.

There is also an opportunity to link the benefits toolkit with the planned new project framework in order to embed some of the benefits ideas and ensure that the project framework is addressing some of the common issues affecting benefits realisation.

### **Consulting / team work 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 toolkit. There also seem to be limited 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?

### **Exploitation (of existing systems, services and information)**

We identified *exploitation* as a potential focus area for exploratory work in the proposal for the project. This is helpful and supports the original decision to keep the precise scope of the project flexible, particularly as opportunities for wider collaboration in this area have also emerged during the project. It is also challenging, as this is an area where good practices are not well established.

## Developing the benefits realisation capability

### **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 this 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, etc? 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've 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's 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.

### **Impact / 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 / mindset 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. The CIO was careful to limit the number of new initiatives – 'it's pretty much the reorganisation, benefits-led IT and business as usual for 2010.'

### **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 the changing expectations as 'digital natives' become students and staff.

The benefits-driven, evolutionary approach being taken to the project 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).

### **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 organisation. 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. The approach is relevant in terms of setting an example, modelling how to take the ideas further; the toolkit and workshop process, and the related resources will support this. 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’.

The concept of a ‘fractal’ (a fractal is a rough or fragmented geometric shape that can be split into parts, each of which is (at least approximately) a reduced-size copy of the whole) is useful to help to explore the ideas and ways of working that become established in different projects, departments and levels of the organisation.

As part of the later stages of the work we have identified the need to focus on what further activities are required to make a benefits-driven approach ‘business as usual’ and to ensure that development of the benefits realization capability continues.

### **Creating space to learn**

The introduction of the benefits-driven approach is a considerable shift in mindset and involves a different way of working. It requires space and time to reflect and learn. The Benefits Workshops help to provide this space.

## **The approach to the project**

### **Value of an agile approach to the project**

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 / milestones. This has allowed a number of innovations that were not explicit in the original plan: for example, the linkage of the initial workshops into a coherent leadership programme and linkage of exploratory project work with other partners (ITDF) and to take advantage of other resources (MBA / PhD students). This agile / flexible 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. 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 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. 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 toolkit. It reinforces the major focus on communication and engagement that is required as part of any project or change programme.

#### **Value of the toolkit / workshop model and the resources required**

The Benefits Workshops were designed around the benefits toolkit and the concept of a number of 'workshops' to apply the ideas to a project. Resources to help run the workshops were provided through the internal collaboration environment. As the project progressed we continued to reflect on the design of the Benefits Workshops and the extent to which we succeeded in presenting the ideas as workshops / tools that the participants could take and apply (perhaps initially with some support) to their projects. Following official completion of the project 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 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 learning-by-doing whilst working on real world projects.

#### **Value of human centered / participant oriented action research**

The approach to the project has worked well and provided a bridge between participants and researchers supporting the view 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.

## Implications for practice in other HEIs

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### Tackling the attention deficit

In parallel with the work on benefits-led IT we carried out a study on the 'IT attention deficit'. Our starting point was a study of US firms which asked the question: "How much attention does your board give to a range of IT-related issues, specifically, the CIO's IT vision for the company, the IT strategic plan, major IT application decisions, IT leadership, IT functional structure, IT function effectiveness, IT risk and exposure, and whether or not IT applications provide competitive advantage?" The researchers interviewed the Chief Information Officers (CIOs) at 17 firms about their view of what their boards ought to be considering.

The research found an "IT attention deficit" in these boards. The CIOs were nearly unanimous that boards should pay attention to: the IT vision, the IT strategic plan, IT

competitive advantage, IT effectiveness, IT risk, and very large application development decisions and projects. All 17 boards were unanimous only on paying attention to IT risk. One-half of the boards of the financial services firms had discussed the other topics. But none of the boards of the primary resource firms (energy, mining, forestry, agricultural products, and oil exploration and extraction) had discussed the other topics. (Sid Huff & Michael Maher, MIS Quarterly Executive Vol 5. No. 2 / June 2006)

We used this study as a basis for a survey of senior management at organisations in the North East of England and a workshop with the IT Directors Forum. The findings are available in a separate report via the project web site. Key findings were that Information Technology (IT) is critical to day-to-day operations and is a key contributor to current and future sources of competitive advantage (a total of 94% of 117 respondents). IT also makes an important contribution to cost reduction and improving efficiency (70% were satisfied or very satisfied). There are a number of opportunities for action: only 29% agreed or strongly agreed that senior business and IT managers speak the same language and action is required to help align business and IT visions. This will require establishing a common language so there is more effective engagement in realizing the strategic potential of IT. In addition, only 26% agreed that leadership development activities currently address business manager engagement in IT strategy and project sponsorship: this seems to be a major gap.

The ability of the organisation to exploit current systems and information is the area where there is the greatest need for a stronger focus on benefits realisation. Only 44% were satisfied with this area, considerably lower than the responses for reliability and benefits realisation in general. This reflects the economic environment, but benefits exploitation is also an area that has been neglected in many organisations.

Our work on benefits-led IT makes a number of contributions to tackling the 'IT attention deficit':

- The benefits-led approach provides a common language around which business and IT managers can engage and collaborate with a shared focus on strategic objectives and benefits for stakeholders rather than the technology itself.
- The benefits-led approach provides a framework and toolkit for business engagement in IT strategy and projects. It provides a much better starting point than a focus on specific project methods, which do not provide the best starting point for top management engagement.
- In the benefits-led work our focus on knowledge worker productivity has tackled an important element of benefits exploitation that was identified as a key area to be given greater attention.

## **Building the benefits realisation capability: a programme of organisational change**

In the project, we have approached building the benefits realisation capability of the organisation as a programme of organisational change. It is not simply adopting a new approach to projects. The approach we have adopted (working with the ISS senior management team, the 5 workshops, work with pilot projects) has been successful. Key elements of the changes that are now evolving include:

- New ways of thinking and working, for example so that the first question when approaching a new situation is "what are the potential benefits for students and staff

(and other stakeholders)” rather than “what are the (technology) requirements”? This is the evolving benefit ‘mindset.’ In addition, there is a greater emphasis on creating opportunities for collaboration and creative ways of working.

- Gradual adoption of the benefits toolkit including benefits review, benefits planning, and stakeholder analysis.
- The role of the ISS management team in leading management of the IT portfolio and a range of organisational development projects that will contribute to the continued development of the benefits realisation capability.

For other organisations, a key starting point for the change programme to develop ‘benefits-led IT’ will to start in the right place – an initial assessment of the current benefits realisation capability provides an important foundation for planning changes.

At the core of ‘benefits-led IT’ is improving the organisational change capability. In many organisations, there is no overall co-ordination of priorities or approach with different initiatives being led by different departments. This is a threat and an opportunity for the Chief Information Officer: the role can evolve so that the CIO takes on a wider role as facilitator of innovation and change and specifically contributes to the development of an organisational change capability.

A second implication of the organisation-wide dimension of benefits-led IT is the need for ‘IT savvy’ organisational leaders. This is not about using or understanding technology, it is about engaging in realising the strategic potential of IT for the organisation and its stakeholders. The benefits-led approach provides a major contribution to the development of IT savvy business leadership (Table 9) and a business savvy IT function.

<b>IT Savvy leaders</b>
1. Develop a holistic and integrated approach to change.
2. Understand and exploit the strategic potential of information systems.
3. Plan and lead significant change programmes.
4. Build the organisations capability to deliver change in an effective and lasting way.
5. Create opportunities for innovation and learning.

**Table 9: Being IT Savvy**

## Conundrum: adopting a benefits-led approach

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 toolkit at the start of the project. We began with a shared view of the high level vision but not of any detailed aspects of the ‘tools’ and process involved.

By the end of the project, as we were working on forward plans as part of Evaluate and Expand, it was interesting that we were working together using key elements of the benefits toolkit to help explore priorities and confirm plans. In particular we developed a



‘Benefits Dependency Network’ that provided a rich picture of the different initiatives related to taking forward the benefits-led work and the wider development of the ISS function.

A key success factor in being able to adopt this approach was the strong relationship between the external advisors and the internal team. The iterative approach was also particularly valuable.

## Moving forward: enabling innovation

We knew from the beginning that this one-year project was the start of a longer process. Gibbs et al. (2009) have reported that significant developments in teaching capabilities happen over at least 5-year periods. The changes we are working on are no less complex. Benefits-led IT has provided a good start and momentum for the next steps. The challenge for us at Newcastle is to build on the foundations we have established. It will help in our efforts if we are able to continue to work with others in HE and elsewhere who are on the same journey.

Looking ahead a new emphasis on the next stage of the journey is innovation. A natural next step is to increase the focus on realising the potential of IT as an enabler of innovation. This will be a new strand of the next phase of work.

### **Benefits-led approach and PRINCE**

PRINCE2 is a widely used approach to projects. It addresses benefits through the business case and project initiation document. The benefits-led approach is consistent with PRINCE2 and can be applied with this or other approaches to projects.

The key starting point is to focus on benefits as the key outcome of the project and to make use of the benefits-toolkit to help build engagement in a project.

**Table 10: Benefits-led approach and PRINCE**

## Conclusions

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The contribution of this project is 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 \$140billion 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 little impact on practice. The project will produce resources aimed at practitioners to help organisations develop the required capabilities for business transformation. 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.

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## Resources

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See the project web site at:

<http://research.ncl.ac.uk/transform/>

The web site provides a number of resources including copies of the reports produced from the exploratory work and the resources for the three toolkit workshops:

- Benefits review.
- Benefits assessment (initial review of the opportunity for a project).
- Benefits and change assessment (development of the benefits realisation plan).