Realising the benefits from Information Technology: making common sense, common practice

Reflect, learn and innovate....

Why undertake a benefits review?

We are about to carry out a benefits review of ReCap, a lecture and event-recording service that has been in pilot at Newcastle University. The feedback we are hoping for might sound something like this...

"It just works, press the button at the start, forget about the camera, press the button at the end. Why would you not use it?" (senior lecturer)

"From our perspective it is creating a lot of large data files and a lot of network traffic as students use the resources. So far there are no issues – we just need to monitor capacity and usage as deployment continues." (IT support manager)

"It was great for revision before my exams" (student)

"I can now worry less about keeping up in lectures – I know I can listen again." (student)

"I'm trying to do a mind map during each lecture, then I listen again and take some additional notes" (student)

"I had to miss a lecture for an interview — I could just listen to it later and catch up, it was great"

"I'm watching the lectures again with two friends – we can pause it and talk about key points or anything we don't understand" (student)

"We haven't seen a noticeable impact on attendance" (Chair of school learning & teaching committee)

"Next year I'm going to try and use the recordings from this year as pre-work for one or two lectures and then see if I can do a case study based on the material in the actual lecture. I'll see how it goes" (lecturer)

ReCap was approached as an exploratory project. A core team of IT specialists, representatives from pilot academic departments and students, were brought together to work through the challenges and bring the programme to life. This approach worked well given the potential opportunities and the relatively limited costs involved. The Benefits Review session had been planned to examine usage and explore the benefits being realized; to consider how to exploit the existing capabilities, including wider deployment, and to consider using ReCap for other functions.

A Benefits Review session takes the form of a lively workshop exploring the actual benefits realized 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.

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 vision was clear, but space was also left for learning as usage developed and opportunities were identified.

The ReCap system itself has been designed to provide information on usage, so it is relatively easy to get data on how many lectures had been recorded versus the total lectures taking place in ReCap enabled rooms. It is also possible to track usage of the recordings. Analysing this by year group and programme gives a good starting point for learning. The project team has also carried out interviews with staff and students who have used the system.

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.

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. We will also work to emphasis the benefits to new groups of staff and students as the system is deployed to other departments. 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.

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.

The strategic contribution of IT

In the knowledge economy of the 21st century, every aspect of a University's work is touched by information technology. It is impossible to conceive of teaching, conducting research or promoting the University and the 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 webenabled, '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 sector. As Sir Ron Cooke (JISC) noted: "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." Given the dark clouds on the financial horizon and the highly competitive international environment, value for money and continued innovation to deliver value to students and other stakeholders are both essential.

Benefits-led IT at Newcastle

The recent THE article by Darell Ince, 'The Matrix Recoded' made the point that computing and software engineering degree programmes need to address the causes of IT project failure. We are tackling similar issues at an ongoing project at Newcastle University. The starting point for our project is the realization that benefits from IT do not come from the technology itself but from how it enables people to do things differently. It follows naturally from this that the starting point for any IT initiative should be a focus on benefits for people, for students, staff and other stakeholders. Benefits come from IT-enabled change and require multi-disciplinary teamwork, and leadership from across an organization. In many scenarios, particularly in an HEI, investments create new possibilities and the full potential of a new technology only emerges over time as people learn how to use it in support of teaching, research, business engagement and other activities. A process of learning, innovating and sharing ideas is required. Much of this is common sense. It's certainly not common practice, as the failure rate of IT investments, often reported as 70%+, indicates.

The Leadership Foundation for Higher Education is funding the 'Benefits-led IT at Newcastle' project we're working on as part of their capacity building activity. We were delighted that they identified the leadership issues of realizing the strategic potential of IT within HEIs as a priority for senior leadership development. The idea for the project came together because the area of maximising the benefits from projects represents Colin Ashurst's research interest, and Steve Williams' 'day job.' The project is running over 12 months with a focus on Newcastle and with wider participation including Russell Group IT Directors (RUGIT) and the North East IT Directors Forum (ITDF). John Hogan, the Registrar at Newcastle, sponsors the project and Steve Williams, Director of Information Systems and Services, is the day-to-day lead.

IT at Newcastle is relatively successful, with reliable, integrated systems and positive feedback from students. It was a natural next step to build on these foundations to get a greater focus on benefits and on enabling innovation. The project is starting with a core group of staff from ISS including the director and leadership team, as well as a number of representatives from other areas including academic and support departments. Participants were selected based on their role, their ability to influence others and their engagement in one of five important projects currently in progress.

At the core of the project is a series of five one-day workshops to gradually introduce the benefits principles and elements of a benefits toolkit to the core group of twenty-five participants. The workshops draw on the developing body of academic work about the delivery of benefits from IT projects. This project applies that work, in the very practical context of a complex University IT department.' We've run three workshops so far and the sessions have allowed the participants to apply the ideas in real-time to their projects. The approach has provided an excellent opportunity for participants to work together and collaborate more broadly than is possible day-to-day.

It has been valuable to apply the benefits 'toolkit' to real projects from the beginning. In addition, it has been valuable to have a number of opinion leaders from outside IT to get a broader view of the value of the ideas. It is encouraging to see the language of benefits becoming part of the common language. Perhaps most importantly the workshops are introducing new ways of working and focusing on skills to engage effectively in multi-disciplinary teams that will be a vital part in successful, innovative use of IT.

Call to action

Our proposition is that the successful exploitation of IT to contribute to the achievement of strategic objectives is critical for any HEI. This includes: a greater focus on the exploitation of previous investments; better priority setting; a greater ability to innovate and explore new opportunities; and the ability to succeed with benefits-driven programmes of IT-enabled change within specific departments and across the institution. A knee-jerk reaction to the financial situation that simply slashes spending is the wrong response. Leadership is required from the IT function and senior management team to continue to realise benefits in challenging times.

The HEI context provides many challenges: the funding climate, the increasing competition from new providers, new business models, and international competitors. Perhaps more importantly the pervasive impact of IT, the changing expectations of students and other stakeholders; the highly skilled professional workforce and the federal structure of an HEI mean that classic approaches to managing IT which were developed for automating transactional processes such as payroll and accounts payable are not a good fit.

Ultimately benefits realization from IT is an organization-wide responsibility, as people in different roles and at different levels seek to exploit IT capabilities to realize value for students and other stakeholders. We are seeking to develop a common language and ways of working that focus attention on benefits for stakeholders rather than the technology itself. You can see this as making common sense, common practice – but that doesn't mean it is easy.

A key foundation is systems that work day-to-day and good relationships between IT leadership and other areas of the University. With these conditions in place, there is a good basis for shifting the focus to benefits realization. Each organization will need to determine a relevant starting point and adapt benefits-driven practices to their specific needs and current capabilities. It is possible to make a start in an individual school or department, or perhaps on a pilot for the university as a whole. For example, a benefits-driven approach can be adopted on a pilot IT project. Benefits reviews of completed projects provide valuable learning. At a higher level, the benefits approach can be applied to the portfolio of investments in IT-enabled change and will help to provide a clearer view of priorities and help to ensure that the IT strategy meets the academic and organizational needs of the university.

Key learning points

Focusing on benefits seems obvious in projects but is rarely done well.

It's not about the IT, it's about successful academic and business outcomes.

In challenging financial times, can the sector afford NOT to do this?

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