

Delivering Value from Information Systems and Technology Investments: Learning from success

A report of the results of an international survey of Benefits Management practices in 2006.

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Executive summary

Delivering value for money from Information Systems and Technology (IS/IT) investments is a serious issue for many organisations. There are many examples in the public domain of expensive failures, but there are fewer published examples of success. As part of a ten year research programme at the Information Systems Research Centre (ISRC) at Cranfield School of Management, a further research project was initiated in 2006 to understand how organisations can increase the value they realise from their IS/IT investments. The study reported here attempted to identify why some organisations are more successful than others in realising the benefits from their investments.

This report describes and analyses the results of a survey conducted by the ISRC in association with Vlerick Leuven Gent Management School in April 2006, which elicited over 100 responses from organisations in the UK and Benelux. The main purposes of the survey were to:

- understand the current state of management practices associated with delivering benefits from information systems and technology (IS/IT) investments
- identify which practices had the most influence on the success of IS/IT investments
- develop a maturity model to help organisations identify roadblocks to improvement and understand how to overcome them

Overall, 43% of respondents (who were equally split between business and IS/IT managers) reported that their organisations were getting the expected benefits from the majority of their IS/ IT investments. This meant that we could assess what factors differentiated that group from the others who were less successful. However 73% of the respondents said significant improvements were needed if their organisations are going to deliver satisfactory value from their IS/IT investments.

The responses suggest that most organisations are now putting in considerable effort to develop business cases for investment, although over 90% state the main purpose of the business case is to secure the project budget. However, 70% believe they are failing to identify and quantify the benefits adequately and 38% openly admit they often overstate the benefits in order to obtain funding! And 80% report that the review and evaluation of completed projects is also inadequate, due to the focus on whether the project achieved cost, time and quality objectives and not on whether the intended business benefits were realised.

The analysis seems to suggest that there is an over-reliance on project teams to deliver not only the technical aspects of IT projects successfully, but also the business changes required to achieve the benefits. The data also indicates that organisations have undue faith in the business cases and that the deployment of formal methodologies gives managers a false sense of security, and perhaps an excuse for not becoming sufficiently involved.

Whilst the majority plan in detail for the implementation of the technology, only a minority plan for the process and organisational changes required to deliver the main benefits enabled by IT (40% and 22% respectively) and planning for the delivery of business benefits themselves is extremely poor - only 31% do it and the majority believe this is the area where most improvement is needed.

The evidence suggests that it is the adoption of benefit orientated practices across the whole investment life-cycle that differentiates the most successful organisations from the others. In particular, the following conclusions can be drawn from the survey about the aspects of benefit management practices that are likely to lead to greater success in delivering value.

- the more successful organisations select projects on the basis of desirability and their capability to deliver them, not just desirability
- having methodologies is not important, but business managers and specialists using them together on all projects is
- developing realistic and robust business cases, which include benefits for (if possible) all the investment stakeholders
- managing the benefits over the whole investment life-cycle through consistently applied practices and processes
- integrated planning of benefit delivery with organisational, process and technology changes
- business ownership and accountability for the benefits and changes
- systematic review of the results of investments in terms of benefits realised or not realised
- transferring the lessons learned from successful and unsuccessful projects to others.

By analysing the organisations in terms of their relative levels of success at realising benefits and the practices they have in place to manage the investments, four distinct levels of maturity can be identified. The characteristics of these four levels can be aligned to some standard maturity models and how to progress from the lower to the higher levels. Most such models emphasise the need for increased formality in the early stages to ensure known best practices are adopted and consistently applied. Once these have become normal practice and can be relied on, the organisation can become more ambitious and perhaps take more risks, based on judgement rather than methodology. The levels suggested below are 'cumulative' – the higher levels assume that lower level practices etc are in place. Starting at the lowest level:

Level 1 – the majority of projects fail to achieve cost, quality and benefit targets

To be more successful at this level it is necessary to manage the supply-side activities consistently and professionally. Achieving this is the priority at low maturity levels, which means adopting and using sound methodologies so that the IS/IT supply side can cope better with the range of demands from the business. To improve performance at this level organisations need to:

- ensure they can deliver most projects to time, cost and quality targets
- adopt and use proven project management and other methodologies
- and review how successfully they achieve the TCQ estimates
- improve the approach to costing to include more of the actual costs that will be incurred, not just direct expenses

All this can be summed up by saying that before it can move to the next level the organisation must improve its **project delivery**.

Level 2 - the majority of projects fail to deliver the expected benefits

Once the organisation has achieved a high level of supply competence and is delivering projects successfully in terms of TCQ, there is a risk of thinking that further improving supply management will achieve more success. However the focus has to change to become more responsive and improve the assessment of different demands, within the capability to deliver the consequent projects successfully. Consistency of investment decision making is a key aspect of this stage of development. To improve performance at this level organisations need to:

- introduce a comprehensive portfolio management approach that takes into account both demand-side and supply-side factors when selecting which investments to make
- develop more rigorous business cases, which are more realistic in terms of achievable benefits
- change how IT and the business work together, involving the business more in portfolio management and identifying the benefits and costs in the business case
- extend the review process to include the benefits and changes

Again, this could be restated as the need to improve **project selection** in order to move to the next level

Level 3 – inconsistent levels of success across the investment portfolio

Having improved the processes of project selection and investment decision making the emphasis should move on to improving the implementation processes that realise the benefits. This again increases the involvement of the business throughout the investment life-cycle, rather than just in the pre-implementation decisions. The temptation is to assume that the improved business cases will actually be delivered by following proven methodologies. To improve performance at this level organisations need to:

- develop process and organisational changes plans that are integrated with the technology delivery plans
- extend the range of benefit types that are included in the business cases, to increase the business commitment to achieving investment success
- develop benefit delivery plans with accountability for each benefit assigned to business managers

- increase the scope of the review process to consider not only benefits realised, but also the changes that were required to achieve them and ensure lessons from all completed projects are passed on to future projects

This could be expressed as a need to introduce effective processes for **benefit delivery** in order to move to the next level.

Level 4 – delivering the majority of the value expected from the investment portfolio

Achieving ongoing success in terms of both benefits realised and management satisfaction implies not only delivering to the business cases of the selected projects, but also responding objectively to all types of management demands for new investments. Being willing to undertake more risky projects and that management understand that some of these might fail, is a sign of a mature organisation. This relies as much on the degree of confidence the business managers have in their specialist colleagues as the presence of comprehensive practices. It is at this level that obtaining the involvement of business managers throughout the investment life-cycle and using experience from previous projects enables the best practices that are in place to be complemented by using collective judgement to overcome the limitations of those practices.

To sustain this level of performance, comprehensive practices, strong working relationships and the ability to learn from previous investments are essential to ensuring **business value** drives the investment programme.

These generic maturity stages are based on previous maturity models and the 'average' evidence from the organisations which took part in this study. A diagnostic tool has been developed that enables an individual organisation to assess its current level of maturity, both overall and with respect to particular practices. From that diagnosis the organisation can identify how it can increase the business value achieved from its IS/IT investments, in both the immediate future and over the longer term.