

# Achieving Real IT Benefits

*A Framework for Maximizing the Value from Your IT Spend*

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## The Issues

The purpose of this Advisory Note is to identify the key requirements for achieving business value from your IT investments. Traditional approaches have not worked and need to be replaced by a framework which recognizes the transformational role of IT in today's organization. After reading this paper, you should:

- Understand why current approaches will not deliver real value
- Be better positioned to identify those projects with the highest potential business returns
- Be able to put harder numbers on intangible benefits
- Understand how to reconcile and integrate individual IT projects with other projects (both business and IT)
- Understand how to respond when a project gets overtaken by changes in the business or technology environments

## Key Recommendations

- Recognize that basing investment decisions on the achievement of direct benefits alone will lead to unsatisfactory outcomes
- Manage benefits as an ongoing process, from the initial acquisition through to eventual disposal
- Allocate clear and measurable accountabilities for benefits realization
- Work on developing meaningful metrics for all proposed benefits
- Continually validate the underlying investment assumptions throughout the lifetime of the project

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## Context

Investment appraisal and benefits realization are amongst the most intractable problems in IT today. In many ways the challenges have become more intractable given the complexity of the technology environment and the embedding of IT into almost every aspect of an organization's operations. In earlier times investments in IT could be viewed in a more discrete way, for example a standalone payroll system. But those days are long gone, superseded by enterprise-wide applications such as ERP and CRM, which in turn have been partially supplanted by concepts such as software-as-a-service and cloud-based computing.

Despite this radically changed environment, and the ever-increasing spend on IT, techniques for investing in IT resources, and for reaping the anticipated business benefits, still remain inadequate. Such techniques continue to be largely based on standalone projects with heavy emphasis on finance-based criteria, while only a small minority of organizations operates an active benefits realization policy.

Some reasons for prevailing inadequacies:

- **Industrial Age Legacy:** Justification for investment in IT is sought by trying to apply traditional finance-based cost / benefit analysis techniques. These are fine for proposals involving, for example a new fleet of trucks or for factory automation. As we will see, such techniques are not only inadequate but can be counter-productive for strategic IT investments.
- **Financial Accounting Emphasis:** Accounting and financial reporting processes are largely the result of legislative requirements to provide auditable record of transactions. These were designed to measure inputs, outputs and cash flows, and are poorly positioned to measure overheads and services-based activities. Yet in advanced economies such activities form 75% of economic activity. There is also strong emphasis on showing the financial impact of what *happened* rather than the causes
- A general weakness on the part of business executives to understand the real cost / benefit dynamics of achieving IT value
- A lack of understanding of what benefits new technology can bring to an organization in terms of improving business processes and models.
- Many CxO's have stated that they feel that some of their investment in IT is wasted but it is very difficult to identify which bits without a concrete and proven framework.

## Typical Issues for Managers

The reasons above are why senior managers today find it difficult to construct a convincing case for investments in IT and take largely on trust that the projected benefits will be achieved. Their concerns are often expressed as:

- How can we identify those projects with the highest potential business returns?
- How do we best convince top executives or shareholders that we have a practical approach to achieving business benefits from IT investments?
- Are there any techniques that help put harder numbers on intangible benefits?
- Can we be sure that the anticipated benefits will be realized?
- How do we reconcile and integrate individual IT projects with other projects (both business and IT)?
- What should we do if an IT project looks unlikely to meet the original objectives?

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- What happens to the original justification when a project gets overtaken by changes in the business or technology environments?
- How can we anticipate and measure the risks before we start a project rather than have them surprise us during the implementation?

## The Requirement

We see that the circumstances discussed in the previous section call for the following:

1. A standard approach to evaluating IT investments. This is needed because using multiple approaches means losing a standard basis for comparison and for determining overall business value. Too many proposals are swept along as the 'flavor of the month' or at the insistence of a senior executive. A consistent approach will enable users to assess and compare future investments in a common format. It will also minimize the need to 'reinvent the wheel' in future assignments
2. A practical framework for ranking proposals and for realizing the benefits from those investments
3. Although there should be a standard approach, this should enable maximum flexibility consistent with the common approach

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## The Proposed Framework

Our framework, which has proven to be highly successful in a range of organizations, proposes moving beyond traditional financial cost-benefit techniques which focus on what is deemed to be direct payback. This refers to the most common forms of investment justification, such as lower transaction costs, fewer staff, faster processing and so on.

We recognize that the financial cost-benefit perspective remains highly important – probably the most important for many organizations. However other key perspectives, which are seldom effectively taken into account, must also be evaluated in a structured way. In other words financial payback acts as the baseline but cannot be the sole criteria on which projects should be accepted or rejected.

The other perspectives which must be used to fully evaluate the benefits of an IT project are Strategic Alignment, Architecture, Business Process Impact and Risk.

To illustrate their necessity we will assume that a proposed IT initiative has been justified in terms of direct benefits and place that against the impact of the other perspectives.

## The Other Four Perspectives

### 1. Strategic Alignment

It is possible to buy an economical solution which will do the job today, but will not accommodate future growth or changes in the business environment such as merger, acquisition, new product lines, and geographical expansion. If this happens, the 'cheap' system will have to be replaced, writing off the investment and the whole implementation process will have to be gone through again.

Typical factors to consider:

- Will the solution support significant growth in the company over the coming years?
- Will it support the entry to new markets and/or the introduction of new products?
- To what extent does it support planned moves to new distribution channels (e.g. distributors, direct sales)?
- Does the vendor have the right vision to develop the solution to meet the future needs of the company?

### 2. Architecture

The price of enterprise applications (e.g. ERP, CRM) can vary hugely between vendors, even when the functionality appears similar. The cheapest option might appear to provide maximum return on investment (ROI) by providing 'the same for less'. However in reality the cheap option could be based on a 'stovepipe' architecture, lack resilience, have weak integration capability or lack scalability. Sooner or later the business impact of these limitations will be felt, eliminating the original perceived ROI.

Typical factors to consider:

- Is the system consistent with existing/planned databases, operating systems, programming languages?

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- Can it cater for the projected increase in business volumes?
- Can it be easily integrated with the systems of supply chain partners?
- Does it have a service oriented architecture to expose the functionality provided to alternative delivery channels?

## 3. Business Process Impact

A solution can generate great labor savings and provide other benefits, but could mean your processes become inextricably embedded in the software, or on the other hand, the software might have to be customized to accommodate existing processes. Customizing software has major ramifications, not least in terms of version control and consistency with base application. Such process-based issues have potentially enormous business impact.

Typical factors to consider:

- Does the solution facilitate or impede work-practice flexibility?
- Are our business processes liable to, or in need of, change?
- Does it facilitate a process approach to business operations?
- Is the organization willing to change and adapt to the business processes which are contained in the software (most organizations say yes before the implementation but the reality of the implementation can differ significantly leading to increased development and risk)?

## 4. Risk

An application might promise major payback, but could be subject to unacceptable levels of risk. For example, the suppliers/developers might be financially insecure, the system might be based on new and relatively untried technologies, it might be excessively complex to implement and run - the list of potential risks is huge, many of which are not generally formally considered during the investment process. For this reason we recommend that each proposal be evaluated against a set of predefined risk factors which must be addressed or alternatively deemed to be non-applicable.

Typical factors to consider:

- Has the vendor a solid track record?
- Is the vendor financially strong?
- Is the solution based on new or untried technology?
- Is there likely to be staff resistance to the system?
- Is a high level of customization needed to achieve a good fit for the business requirements?

## Realizing the Benefits

Even when the right investment decision has been made, this in itself does not guarantee that the anticipated benefits will be realized. For instance, we have seen instances where major systems have been implemented on time and within budget, only for the business to virtually grind to a halt. In other words "the operation was a success, but the patient died". To achieve the benefits, a governance program must be implemented which incorporates the following elements outlined in the following sections.

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## Governance to Realize the Benefits

### Assumptions

It is common practice for IT projects to continue to the 'bitter end' even when some of the key underlying assumptions on which they were originally justified no longer apply. Very often these assumptions are not explicitly defined, but they should be. These could include the benefits and risks on which the project was justified, industry and general economic prospects, technology directions, competitor actions, staff and resource availability, staff attitudes etc.

It is notable that the company may control only a small proportion of such assumptions, and that many are liable to change during the course of the project. They thus need to be revisited at each Stage Assessment (see below) to assess the extent to which they still apply. This implies that the project may need to have its scope revised, or in extreme cases to be abandoned.

### Portfolio Impact

With the pervasiveness of IT in every organization today, no IT project can be treated in isolation. To deliver benefits, IT initiatives must become part of a broader portfolio of measures, some of which may need to be introduced directly to support the proposed project, others which may be ongoing.

Take the example of a company introducing a new Web site to expand its market presence. The benefits of the project are deemed to outweigh the costs associated with the project, such as developing the site itself, purchasing a server and server software. However, for business benefits to be achieved, many other complementary measures will need to be successfully introduced.

These could include the need to manage and placate existing distribution channels, redesign internal sales order processing (SOP) processes, introduce new credit control measures, implement an interface to existing transaction processing systems, and possibly upgrade the internal network to cater for increased volumes. 'Soft' issues related to people management might also be important, such as reassuring sales staff on the impact of the Web site, adjusting reward systems, and managing realignment of the unofficial 'pecking order' which may occur.

To realize the benefits from this initiative requires that complementary measures be defined, scoped, and project managed in a co-ordinated way. This can be challenging, particularly in relation to the Realistic Definition of Benefits as follows.

### Realistic Definition of Benefits

Many of the 'benefits' attributed to support investment decisions do not in fact represent business benefits, rather the *'potential'* to provide benefits. More, better or faster information, or greater flexibility do not in themselves provide business benefit. Research shows that where benefits are defined in such terms, staff may continue to operate in basically the same way as before (possibly with more time on their hands), and company performance remains unaffected. Real benefits accrue when this potential is translated into more sales calls, more successful sales calls, faster order turnaround time, fewer errors etc.

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Research suggests that the incorporation in investment proposals of potential rather than real benefits is a major factor in the poor return on IT investments. It is therefore essential that measures be put in place to ensure that system enhancements get translated into practical business benefits.

## Metrics

Despite Peter Drucker's dictum 'what gets measured gets managed', few IT investment initiatives incorporate adequate measurement or quantification. The failure to incorporate meaningful measurement systems is likely to stem from the perceived difficulties of measuring what are seen as intangible benefits, and the lack of suitable metrics data from existing computer systems.

The first is largely a mistaken perception. It is possible, particularly with the help of a skilled consultant, to drill down and establish quantifiable metrics for the claimed benefits. For instance, an intangible concept such as 'customer satisfaction' can be evaluated by factors such as stock availability, order turnaround time, number of mistaken shipments, customer surveys, and a range of other metrics. There is also the possibility, having gone through this process, that no metrics can be quantified, in which case the business value of the proposed investment must be questioned, i.e. if there is no way of measuring it, can it really be classified as having business value? It should not be overlooked that difficulty can derive from the fact that most systems today (although this is changing) are departmentally rather than process based, while measurement is more effective with a process approach.

The process approach is particularly important in relation to achieving a *balanced* set of metrics. To take a simple example, a logistics manager might be charged with achieving a 30% reduction in inventory carrying costs as the part of the benefits justification for a new ERP system. This target could be met, but perhaps at the expense of a sharp increase in the number of short shipments or 'depot denials'. As with any reward system, staff will invariably learn to 'play the system' in terms of benefits realization unless the benefits are carefully balanced.

It is also important that there be an existing/historical set of metrics (Anchor Measures) against which to compare the impact of the new system. It may be necessary to gather a proportion of these manually, but the effort will be worthwhile. Beginning the metrics gathering process during or at the beginning of the implementation greatly reduces the value of subsequent measurements.

## Benefits Realization Time Factor

Benefits will be realized over a wide time frame subsequent to systems implementation. In fact in the immediate pre and post implementation phases, productivity invariably declines for a period. This is the phase where staff are learning the new system while perhaps keeping the old one operational, followed by a period of mastering the new system, and perhaps also a parallel run. There may also be a time lag associated with the integration of complementary measures, i.e. waiting for the full portfolio to combine to produce the desired results. Analysis of benefits realization must take this into account.

## Accountabilities

The concept of making individuals accountable for benefits realization is essential. Benefits will not accrue otherwise. The following factors need to be taken into account when assigning accountabilities:

- The benefits for which the individual is accountable must be clearly defined, avoiding vague aspirations such as 'successfully deliver'. Objectives should be defined on the basis of recommendations referred to in *Metrics* and *Realistic Definition of Benefits* earlier.

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- Accountabilities should be decided and agreed at the investment appraisal stage, not after the system is implemented.
- The accountable manager must be provided with adequate resources and authority to deliver the benefits. The benefits realization process usually transcends departmental boundaries, and a manager will be placed in an impossible position if authority is confined to his own department.
- There should also be a clearly defined escalation procedure with the Governance mechanisms in the event of disputes or misunderstandings, which again should be defined at the outset.
- There must be a clear distinction between IT and business accountabilities. IT will be accountable for successfully delivering the appropriate technologies, infrastructure and technical support, but are *not* accountable for delivering business benefits. This is the responsibility of the relevant business managers, or the Benefits Realization Manager / Group if such an entity exists.
- A change management procedure should be put in place. It is inevitable that a project and / or elements of the investment portfolio and complementary measures will change as time progresses. In addition, some management and staff will leave and others reassigned to new duties. This could significantly alter the conditions on which the original accountabilities were defined.
- The management mindset must be changed. The concept of thinking through the full realization process, quantifying metrics, putting in place a practical system of accountabilities, *and sticking with it throughout the program lifespan* will not come easily to most senior managers. It is common practice for the initial support for the process to wane over time. However, if accountabilities initially assigned to individuals remain, those accountable are placed in an impossible position.
- There may be value, depending on circumstances, in establishing a Benefits Realization Group or appointing a Benefits Realization Manager. This would *inter alia* address realization as a cross-departmental process rather than through individual departmental managers.

## Risk Management

The investment appraisal exercise will identify the risks inherent in the project and the complementary measures to be introduced, and if the project is going ahead it is assumed that these risks have been deemed acceptable. Every project will have risks, and the key point is to manage them. There are various techniques available for managing risk, particularly for those within the control of the organization, and for putting fallback measures in place. New risks will arise and existing risks might change during the lifetime of the project. The Stage Assessment process should be geared to identify and manage these changes.

## Stage Assessments

Changes in the business and technology arenas are almost inevitable during the course of every project, and clearly the scale of potential change is far greater when complementary measures are taken into account as well. These changes, either individually or in combination, can fundamentally alter the basis on which the project and / or portfolio was justified in the first place. Despite this, research indicates that, in general, once a project is approved, it is pursued until it is delivered, even when no longer meeting the original justification criteria. In order to achieve the benefits and minimize risk, it is essential that each project in the portfolio be assessed at periodic stages throughout the lifecycle.

The Stage Assessment should review the following:

- Assumptions (see above) - are they still valid?



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- Are the benefits on which the project was originally justified still relevant, or are changes needed?
- Risks, as per the investment appraisal review and the Risk Management Strategy. Does the organization still have the risk appetite?
- Schedule as per the project plan - is slippage evident?
- Portfolio Impact / complementary measures - are any of these falling behind or failing to deliver in line with projections?

From the initial investment approval phases onwards, resources should be only committed in accordance with Staged Assessments. Funds may need to be increased, curtailed, or even in extreme cases the project discontinued if the Assessment so indicates. This seldom happens in reality, as project 'success' is perceived in terms of keeping within budgeted time scales and costs rather than on benefits realization.

## Senior Management Commitment

Implementing an investment appraisal and benefits realization process along the lines proposed calls for a fundamental shift in thinking on the part of senior management. The difficulties of getting buy-in and particularly in maintaining their active support on an ongoing basis to such a concept should not be under-estimated, yet it is a prerequisite for success.

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## Other Considerations

'Who feels the pain feels the gain'. With modern systems - especially those based on the process paradigm - the benefits can accrue to individuals or departments, while much of the work associated with gaining these benefits resides with another department. There is a well-known example in the telecommunications sector where sales staff were provided with an automated SOP systems. By tightening up on specifications at point of sale this system greatly helped design and production staff, but as far as sales staff were concerned it only gave them extra work. The system fell into disuse. The point being that in such circumstances, the human factor, either by using reward systems or whatever, must be managed from the outset.

## In Brief

Despite the many failures and disappointments, real value can be achieved by any organization that applies the correct principles to the IT investment process. And it *is* a process, one that begins at the evaluation stage and continues throughout the life of the asset(s).