



The CEO's Guide  
to IT Value@Risk

“ A Gartner study indicated that 20% of investments in IT, amounting globally to a staggering USD 500 billion, is wasted each year.”

Nick Huber, *ComputerWeekly*, March 2002

## The Board's Responsibility for IT

### How can you be sure your company is not suffering similar value erosion...

- Nike's difficulties in installing supply chain software cost it an estimated US \$200 million.
- Interstate Bakeries' admittance of a virtual collapse of its financial reporting system reduced its market value by one-third in a single day.
- Failures in IT-enabled logistics systems at MFI and Sainsbury led to multimillion GBP write-offs, profit warnings and share price falls.
- An operational meltdown after the Southern Pacific-Union Pacific merger was traced largely to the inability to co-ordinate their IT systems.

### ...or missing out on these benefits?

- Southwest Airlines' supply chain transformation improved the forecast of demand, reduced procurement costs and increased service levels while costs fell.
- IBM saved US \$12 billion over two years by linking up disparate pieces of its supply chain, thereby reducing inventory levels.
- Extensive IT synergies form a significant part of the financial success of Great-West Life's several acquisitions.

In today's highly competitive business environment, effective and imaginative use of information technology has the potential to transform enterprises and contribute to enhanced and sustainable stakeholder value. Equally, badly chosen or poorly implemented IT investments will lead to value erosion and competitive disadvantage.

Effective IT governance is just one of many board priorities, but if your company has not suitably addressed the subject, you could be missing significant opportunities to enhance shareholder value and improve market capitalisation, whilst at the same time exposing your business to significant financial and reputational risks.

The guidance herein is intended to help CEOs, boards and senior management respond to these challenges.

Driven by assertive stakeholders, aggressive competition and emerging regulations, there are many issues that occupy a CEO's time and affect overall enterprise governance.<sup>1</sup> However, IT issues are often the least understood and given correspondingly lower priorities, despite the increasing reliance placed on IT.

Within many companies, IT costs<sup>2</sup> can be the second highest expenditure after staffing, yet how that money is spent and what value is actually delivered can be uncertain. While complexity and pervasiveness make it difficult to track costs and value, it should not take management's focus away from what could be one of the most significant value drivers within an enterprise.

<sup>1</sup> Investors, too, realise the importance of governance because they are willing to pay more than 20 percent premium for enterprises shown to have good governance practices in place (McKinsey Investors Opinion Survey, June 2000).

<sup>2</sup> IT project costs, while usually less than 50 percent of the IT total, typically are the most visible so can colour perception.

## Ensuring IT Value

Providing strategic direction and establishing control over the execution of the business strategy are fundamental governance responsibilities. They must include the structured oversight of IT investments.

While the need for demonstrating the value of IT is vital, measuring and evaluating the true business significance of IT remain a challenge. When deciding on IT investment priorities, fundamental questions, including the intangible nature of many of the expected returns, need to be addressed before applying return on investment (ROI) techniques.

Before 'crunching the numbers' on major IT investments, ask yourself whether the:

- Initiative fits strategically
- Initiative supports business functional requirements
- Initiative includes opportunities for process improvement or synergies across the business

## What?



- Underlying technology fits the enterprise infrastructure
- Resources and skills exist so as to maximise the chances of success

Only when the answers satisfy your expectations of the final result (What?), should you consider the ROI calculations, focussing on expenditures, risk-adjusted value and returned benefits (How?). It is important to ensure that the figures:

- Are based on reasonable assumptions, and
- Express intangible returns in a verifiable manner.

Boards and executives need to provide the strategic direction to establish strategic fit and obtain assurance that value reporting is reliable. The business and IT need to agree on the measures to be used to verify that business benefits are returned and jointly accept responsibility for results.

## Mitigating IT Risk

IT introduces risks that must be managed for business success. Hence, CEO and board-level direction and oversight are indispensable.

This requires focus to initiate IT governance structures with the right level of executive involvement and commitment, clarity about the enterprise's risk appetite, and defined responsibilities for risk management, including measurements and monitoring. This does much to ensure that 'IT value at risk' is correctly and transparently managed.

Beyond protecting and enhancing shareholder value, such a structure significantly contributes to providing the external assurance required by the relevant regulatory regimes. Sarbanes-Oxley, for enterprises quoted on US exchanges, and Basel II, for the financial industry, are two prominent examples.

## IT Governance Domains

The key domains of effective and practical IT governance are discussed in full in *Board Briefing on IT Governance, 2<sup>nd</sup> Edition*, a distinct, more detailed companion publication available free from the IT Governance Institute® ([www.itgi.org](http://www.itgi.org)).

- **Strategic Alignment** focuses on ensuring the linkage of business and IT plans, on defining, maintaining and validating the IT value proposition, and on aligning IT operations with enterprise operations.
- **Value Delivery** is about executing the value proposition throughout the delivery cycle, ensuring that IT delivers the promised benefits against the strategy, concentrating on optimising costs and proving the intrinsic value of IT.
- **Resource Management** is about the optimal investment in, and the proper management of, critical IT resources: processes, people, applications,

infrastructure and information. Key issues relate to the optimisation of knowledge and infrastructure.

- **Risk Management** requires risk awareness by senior corporate officers, a clear understanding of the enterprise's appetite for risk, transparency about the significant risks to the enterprise and embedding of risk management responsibilities into the organisation.
- **Performance Measurement** tracks and monitors strategy implementation, project completion, resource usage, process performance and service delivery, using, for example, balanced scorecards that translate strategy into action to achieve goals measurable beyond conventional accounting.



## Planning for Success

Successful enterprises understand IT issues and exploit the associated benefits whilst managing the risks, expenditures and constraints by:

- Aligning IT with business strategy
- Cascading IT strategy and goals across the enterprise
- Providing structures to facilitate the implementation of strategy and goals
- Creating constructive relationships and effective communications between the business and IT as well as with customers and external partners
- Insisting that an IT control framework be adopted and implemented
- Measuring and enhancing IT performance

Whilst corporate governance developments have primarily been driven by the desire for transparency and to protect stakeholder value, the pervasiveness of IT has created a degree of dependency that calls for a specific focus on IT governance. It is an imperative for today's businesses and can be achieved in a practical way

without having to be bureaucratic or cumbersome.

IT governance is not an isolated task, but rather an integral part of overall enterprise governance. The need to integrate the two is similar to recognising IT as an essential part of the enterprise rather than something practised in isolation and seclusion

## Making It Happen

Key actions for executive management to take include:

- Integrate IT governance within enterprise governance.
- Define IT governance roles and responsibilities.
- Develop an IT governance implementation plan.

More detailed information on how to do this can be found in *Board Briefing on IT Governance, 2<sup>nd</sup> Edition*, including this suggested implementation road map:

- 1) Set up an IT governance organisational framework.
- 2) Ensure that IT goals enable and support business goals.
- 3) Understand/define the risks.
- 4) Define target areas for improvement.
- 5) Analyse current capability and identify gaps.
- 6) Develop improvement strategies.
- 7) Measure results.
- 8) Repeat steps 2 through 7 on a continuous basis.

## Required Board Skills

Of course, in order to exercise effective IT governance it is essential that boards possess, or have access to, the proper skills. These skills will enable the right questions to be asked, the answers to be perfectly understood (and challenged as appropriate), the precise actions to be formulated and the results to be monitored.

This can be achieved through a combination of:

- The CIO serving on the board (likely to be appropriate in highly IT-dependent entities)
- A board member to whom the CIO reports having appropriate IT-related business skills
- An IT steering committee chaired by an IT-savvy board member
- Formal IT-related business education of all board members
- Appointment of a non-executive director with the appropriate skills



## Conclusion

Attaining good IT governance does not happen by accident, or by telling the CIO to 'make it so'. It needs to be prepared, properly implemented and monitored, if value destruction is to be avoided and value creation achieved. The tone has to be set at the top. CEOs and boards must appreciate the risks and the opportunities inherent to the acquisition and deployment of IT. Without this knowledge—and the positive leadership to ensure that success and value are achieved—IT governance simply cannot be effective.



# Getting Started

A good place to start is for the CEO and the board to ask themselves some basic questions about IT within their enterprise. These questions are designed to uncover existing IT issues, identify present IT management practices and self-assess current IT governance practices.

## Uncovering IT Issues

- How often do IT projects fail to deliver what was expected?
- Are end users surveyed about the quality of the IT service and, if so, what were their responses?
- Is IT regarded as an enabler or as an inhibitor of change?
- Are sufficient IT resources, infrastructure and competencies available to meet strategic objectives?
- What has been the average overrun of IT operational budgets? How often and by how much do IT projects go over budget? How does this impact the achieved vs. expected ROI?
- Do IT-related investments meet the ROI criteria of the enterprise?
- How much of the IT effort goes towards systems maintenance and fire fighting, and how much to enabling business improvements? Is the ratio acceptable and representative for your industry?

## Finding Out How Management Addresses IT Issues

- How and how well are enterprise and IT objectives aligned with each other?
- How is the value delivered by IT being measured? Are the assumptions reasonable and are intangible benefits verified?
- What strategic initiatives has executive management taken to manage IT's criticality relative to maintenance and growth of the enterprise, and are they appropriate?
- Is the enterprise clear on its position relative to technology: pioneer, early adopter, follower or laggard? Is it clear on risk appetite: risk avoidance or risk taking?
- Is there an up-to-date IT risk register relevant to the enterprise? What has been done to address those risks?

## Assessing the Board's IT Governance Practices

- Is IT a regular item on the board's agenda and, if so, is it addressed in a structured manner?
- Does the board articulate and communicate the business objectives for IT alignment?
- Does the board review, and possibly approve, the IT strategy?
- Does the board have a clear view on the total IT investment portfolio from a risk and return perspective? Does the board receive regular progress reports on major IT projects?
- Is the board regularly briefed on those IT risks to which the enterprise is exposed?
- Is the board getting independent assurance on the achievement of IT objectives and the containment of IT risks?



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The IT Governance Institute® (ITGI) ([www.itgi.org](http://www.itgi.org)) was established in 1998 to advance international thinking and standards in directing and controlling an enterprise's information technology. Effective IT governance helps ensure that IT supports business goals, optimises business investment in IT, and appropriately manages IT-related risks and opportunities. The IT Governance Institute offers symposia, original research and case studies to assist enterprise leaders and boards of directors in their IT governance responsibilities. ITGI's flagship publication is *Control Objectives for Information and related Technology (COBIT®) 3<sup>rd</sup> Edition®*. This six-volume work contains an IT governance guideline, management guidelines, and additional components that enable control and governance over IT. COBIT-related products include an online version, *COBIT® Quickstart™* and *COBIT® Security Baseline™*. Other ITGI publications include *Board Briefing on IT Governance, 2<sup>nd</sup> Edition*, *Information Security Governance: Guidance for Boards of Directors and Executive Management*, *IT Governance Global Status Report* and *IT Control Objectives for Sarbanes-Oxley*.

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