

A New Era of IT Governance: Optimising Value from IT Investments whilst enhancing regulatory compliance

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Tokyo

November 8th, 2007



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Agenda

- Update on ISACA/ITGI Progress and Strategy
- IT governance – current drivers and inhibitors
- The quest for value – can IT deliver its return on investment?
- The ING Case Study – demonstrating Val IT-like behaviours
- Val IT – what it is and how should it be used
- Thoughts on J-SOX, including relevance of Val IT

ISACA/ITGI Progress and Strategy

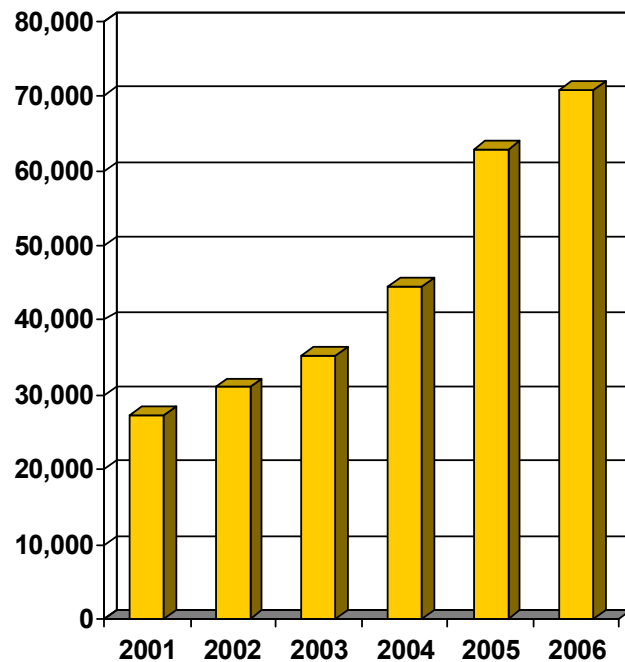


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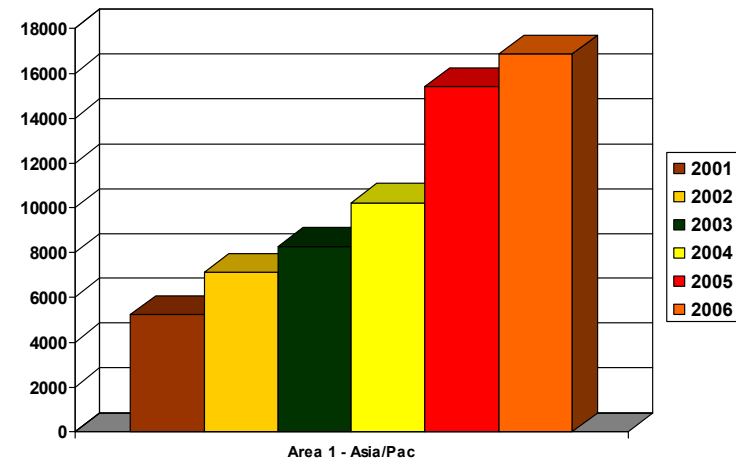
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ISACA Membership



2006 year-end: 70,869
2005 year-end: 62,853
2004 year-end: 44,499
2003 year-end: 35,238
2002 year-end: 31,064
2001 year-end: 27,250

2007 Membership 81,000



Certification

CISA

- 2006 registrations: 23,700+ (June and December)
- More than 100,000+ CISA certified by June 2007
- 50,000+ CISA certified by June 2007

CISM

- 2006 registrations: 3,200+ (June and December)
- More than 10,000+ CISM certified by June 2007
- 5,000+ CISM certified by June 2007



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- Both CISA and CISM are ISO 15504 Standard compliant
- CISA and CISM are recognized by the US Department of Defense as a result of being recognized as two of only 13 certifications the department is requiring of its and its vendors' information assurance personnel.



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Requirements for CGEIT Certification Under the Grandfathering Provision

Until 31 October 2008, highly experienced professionals who have had a significant management, advisory and/or assurance role relating to the governance of IT, can apply for certification as a CGEIT without being required to pass the CGEIT examination. To earn the CGEIT designation during this period, applicants are required to:

1. Submit evidence of appropriate work
2. Agree to adhere to the [ISACA Code of Professional Ethics](#)
3. Agree to comply with the [CGEIT Continuing Professional Education Policy](#)

Work Experience

In order to qualify for the CGEIT certification under the grandfathering provision an applicant must provide evidence of management, advisory or oversight experience associated with the governance of the IT-related contribution to an enterprise. Eight (8) years of such experience is required and is defined and described specifically by the CGEIT job practice domains and task statements.

Specifically, an applicant must have:

- a minimum of one year experience relating to the development and/or maintenance of an IT governance framework (CGEIT domain one (1)) and:

Education Around the World



Implementing IT Governance
Using COBIT and Val IT Course



COBIT Foundation Course
and Certificate



Research Publications

Books

- COBIT 4.1 and CobiT Security Baseline 2nd edition
- COBIT *Quickstart*
- IT Governance Implementation Guide: Using COBIT and Val IT
- IT Assurance Guide: Using COBIT
- COBIT Control Practices
- IT Control Objectives for Basel II
- Val IT series
 - *Enterprise Value: Governance of IT Frameworks—The Val IT Framework*
 - *Enterprise Value: Governance of IT Frameworks—The Business Case*
 - *Enterprise Value: Governance of IT Frameworks—The ING Case Study*
- *Information Security Governance: Guidance for Boards of Directors and Executive Management, 2nd Edition*
- *Security Audit and Control Features SAP R/3, 2nd Edition*
- *Security, Audit and Control Features PeopleSoft®: A Technical and Risk Management Reference Guide, 2nd Edition*
- *Security, Audit and Control Features Oracle® E-Business Suite: A Technical and Risk Management Reference Guide, 2nd Edition*
- *IT Control Objectives for Sarbanes-Oxley, 2nd Edition*

- *COBIT Mapping Overview of International IT Guidance, 2nd Edition*
- *COBIT Mapping: Mapping of ISO/IEC 17799 With COBIT , 2nd Edition*
- *COBIT Mapping: Mapping of PMBOK® With COBIT*
- *COBIT Mapping: Mapping of SEI's CMM for Software With COBIT 4.0*
- *COBIT® Mapping: Mapping of ISO/IEC 17799:2005 With COBIT*

Papers for
download
from site

ITGI Strategic Issues

- Open collaboration and Web 2.0
- Engaging the CIO and wider C-Suite community
- ‘Governance on a Page’ initiative – defining our space
- Focus on ‘enterprise governance of IT’
- Develop model for working with other entities

Future Product Plans

- CobiT – Release 4.1 is 2007 release. Probable no new full release for some time
- Val IT – Release 2.0 planned for end Q1 2008. This will comprise a revised framework and a Quickstart guide
- ERM IT – Project now approved and budgeted. Probable first release late 2008
- CIO Baseline for Enterprise Governance of IT – Q1 2008

IT Governance

Current Drivers and Inhibitors



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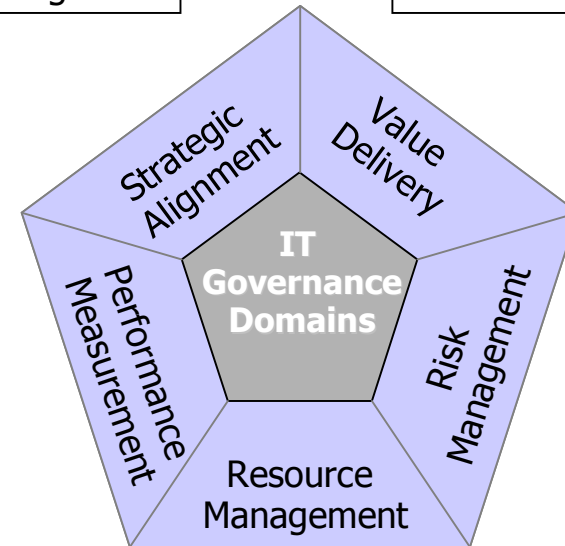
IT Governance – The Five Domains

DOMAINS

- 1. Strategic Alignment**
aligning with the business and providing collaborative solutions
- 2. Value Delivery**
focus on IT costs and proof of value
- 3. Resource Management**
IT assets, knowledge, infrastructure and partners
- 4. Risk Management**
safeguarding assets, business continuity and compliance
- 5. Performance Measurement**
metrics, IT Scorecards and dashboards



Are we doing the right things? Are we getting the benefits?



Are we doing them the right way? Are we getting them done well?

The Good News

Enterprises that actively design their top-level IT governance arrangements make and implement better IT-related decisions

Gartner

Effective IT Governance is the single most important predictor of the value an organization generates from IT

Firms with focused strategies and above average IT Governance had more than 20% higher profits than other firms following the same strategies

Peter Weill and Jeannie W. Ross, *IT Governance*

However.....

In the higher echelons of corporate and IT management, the need for effective governance is apparently accepted but in practice it is often accepted in much the same way as ‘corporate social responsibility’something that needs attention, but by someone else and perhaps not now.

Computing Editorial 13 June 2006

Indicators of good IT governance

- The Board is engaged in key IT decision making
- CIO has strong reporting lines to Board
- Metrics for IT performance based on IT dashboard or balanced scorecard – based on value delivered and not just cost
- Low incidence of project overruns on budget or time
- Active IT investment portfolio management
- Active tracking of benefits from IT related investments
- Clear accountability for performance of IT related investments
- IT seen clearly as an enabler of business strategy
- Effective use of frameworks such as CobiT and Val IT
- Efficient and effective SOX compliance – value adding and not a chore

IT GOVERNANCE PROBLEM INDICATORS INCLUDE.....

- IT not on Board Room agenda
- IT not directly represented at Board level
- IT and Business strategy not concurrently prepared and aligned
- IT managed by technology rather than by business focus
- History of late or failed business system implementations
- IT seen as a cost rather than as a provider of value
- External or internal perception that organisation is not making the most of technology
- Inadequate or non-existent IT related metrics
- Technology investments justified on cost savings rather than on revenue enhancement
- Inefficient and non-sustaining compliance including SOX

CURRENT IT GOVERNANCE INHIBITORS

- IT still seen within many entities as a 'black art'
- Unwillingness or inability of Board and senior business management to engage in IT related issues
- Lack of clear sponsorship/ownership/leadership
- Seen as bureaucratic and not value adding
- Always something more important on the agenda
- Not knowing where to start
- Perceived lack of guidance or methodologies
- Lack of defined metrics to measure success

The Fundamental Question – the Val IT Proposition

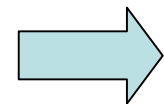
Are we maximizing the value of our investments in IT-enabled change such that:

- we are getting **optimal benefits**;
- at an **affordable cost**; and
- with an **acceptable level of risk**

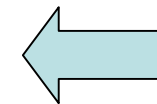
.....linked to a proper compliance (eg SOX) framework?

**Over the full economic life-cycle
of the investment**

A New Perspective



**Investments in
IT-enabled Change**





Inspiring Val IT

The ING Case Study



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- **About 112,000 employees more than 50 countries**
15,000 IT FTE's - 2004 IT Spend € 2.5 billion

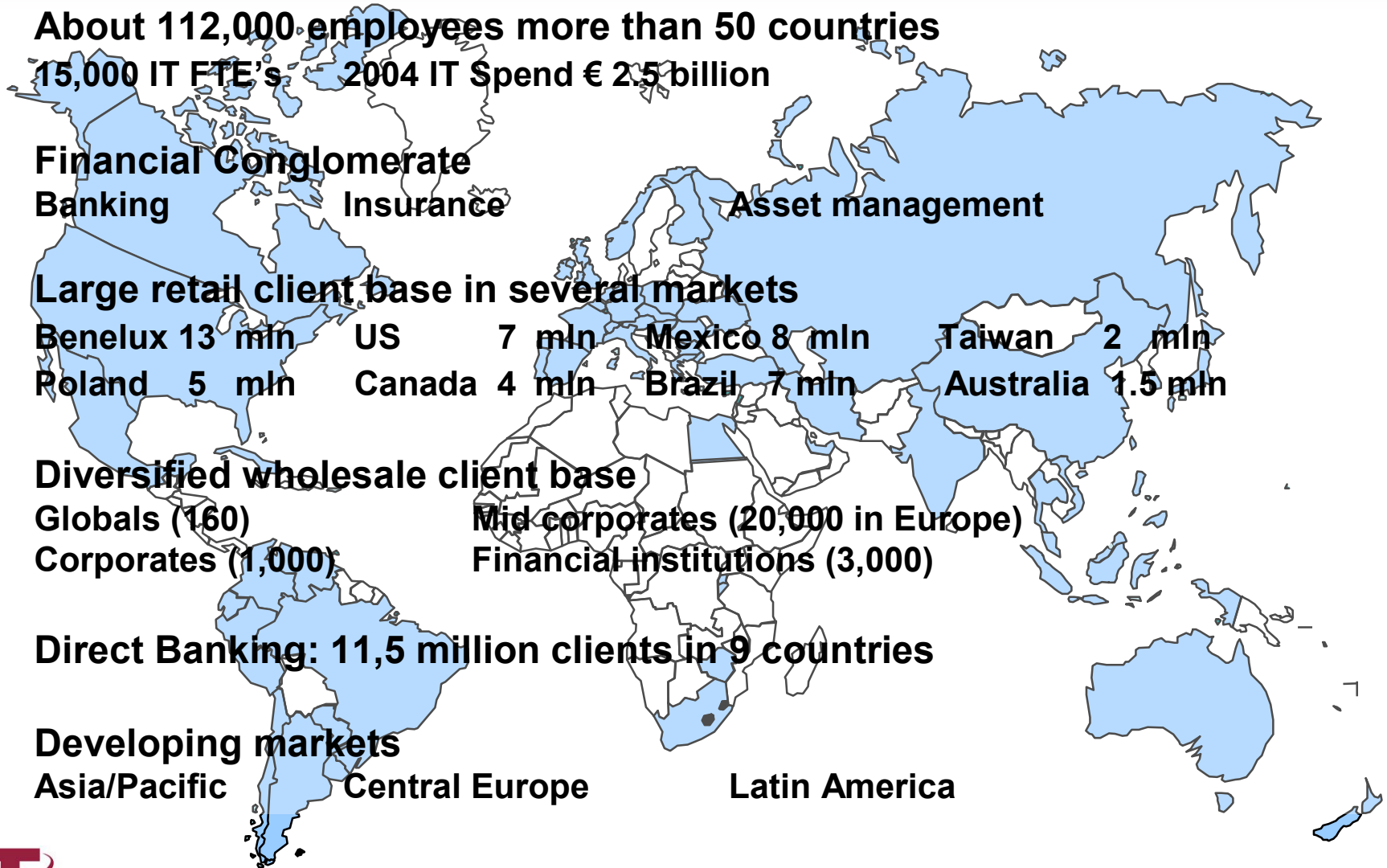
- **Financial Conglomerate**
Banking Insurance Asset management

- **Large retail client base in several markets**
Benelux 13 mln US 7 mln Mexico 8 mln Taiwan 2 mln
Poland 5 mln Canada 4 mln Brazil 7 mln Australia 1.5 mln

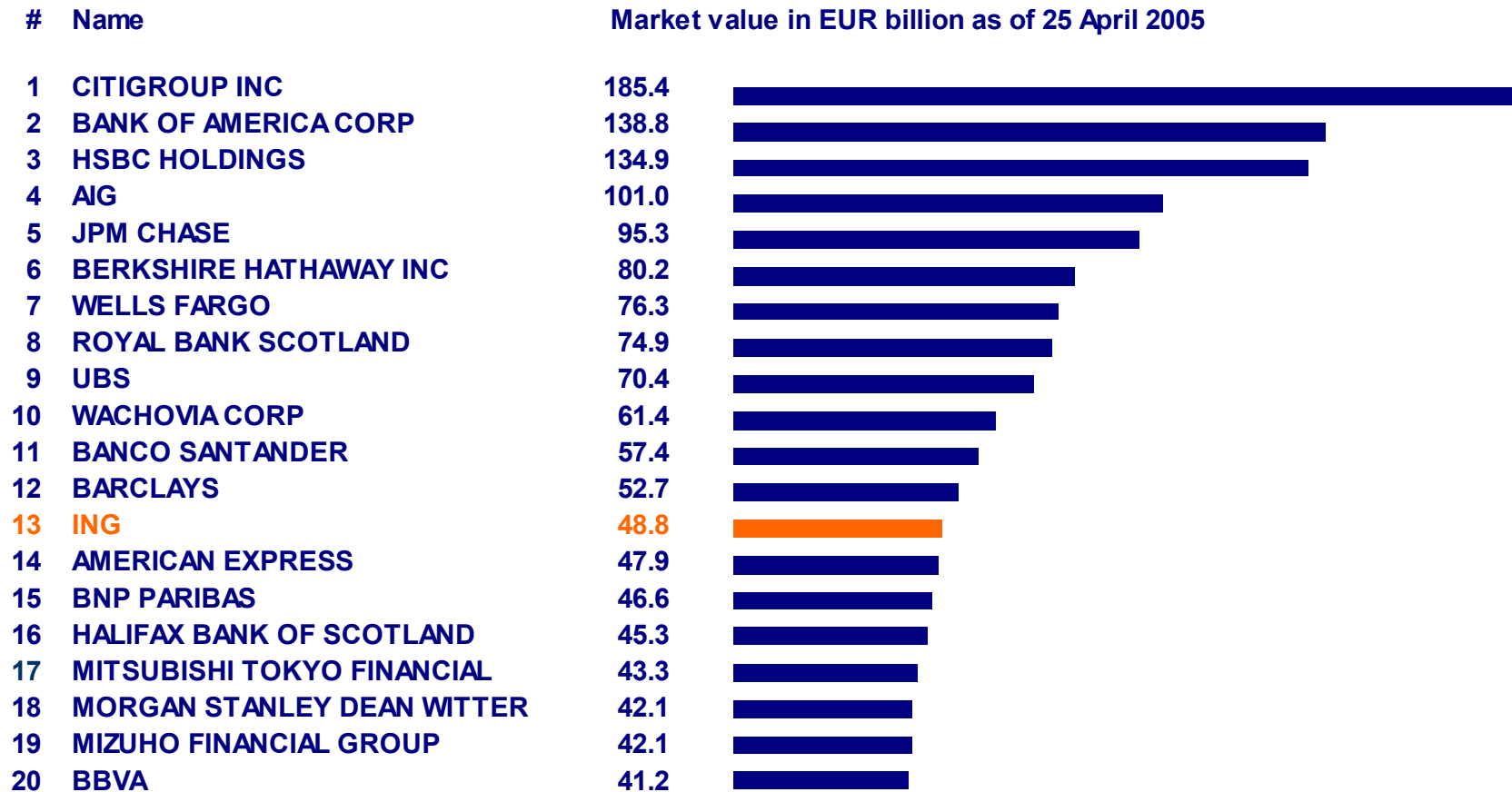
- **Diversified wholesale client base**
Globals (160) Mid corporates (20,000 in Europe)
Corporates (1,000) Financial institutions (3,000)

- **Direct Banking: 11,5 million clients in 9 countries**

- **Developing markets**
Asia/Pacific Central Europe Latin America

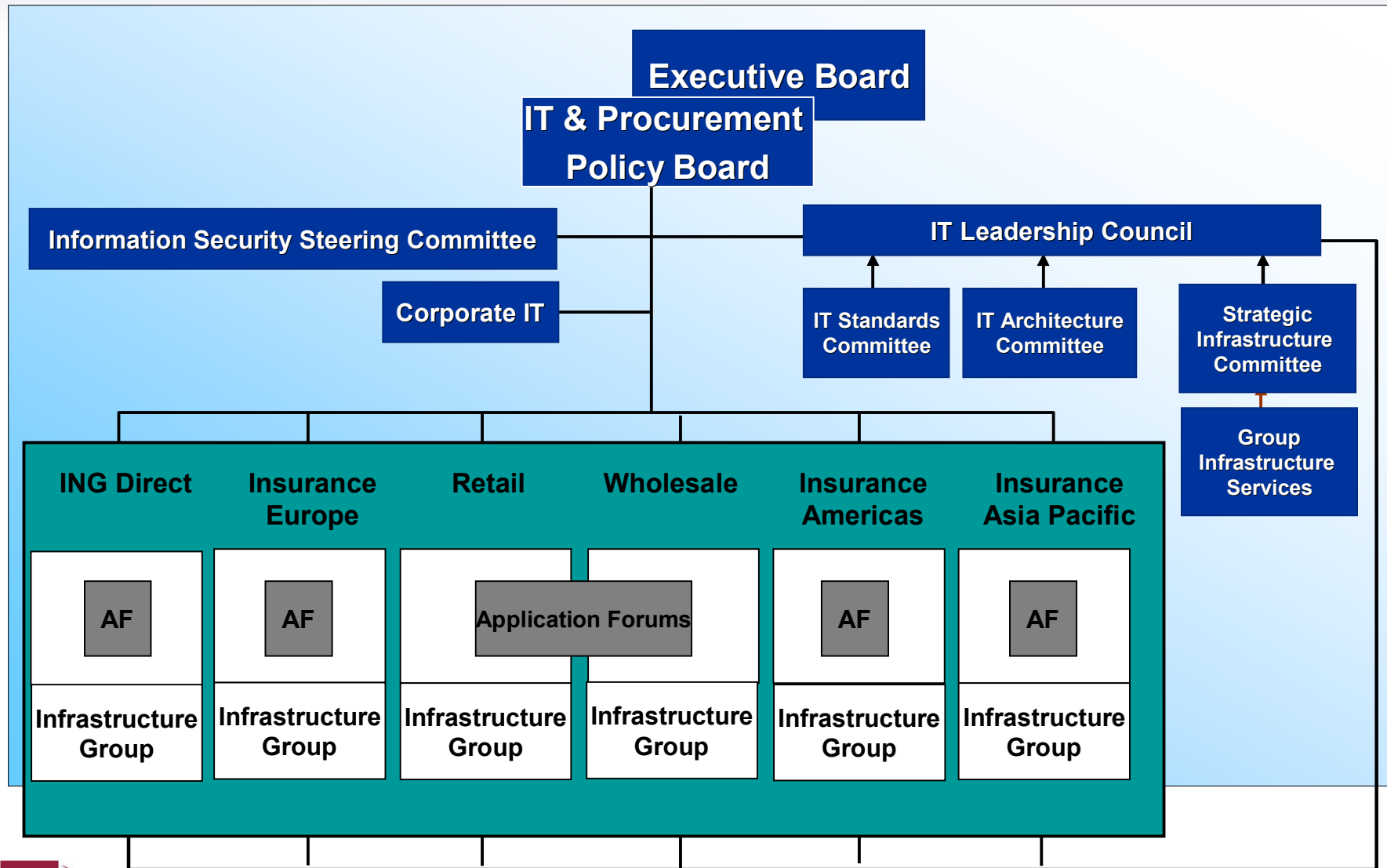


Top 20 global financial institutions



Source : Bloomberg

IT Governance structure



EXISTING GOVERNANCE PROCESSES INCLUDED.....

- IT policy and strategy determined through fully representative IT Policy Committee – three Board members are active members of this Committee
- Main Board Director chairs Policy Committee
- Central small HQ unit reporting to main Board director charged with defining and reporting on relevant IT metrics
- Annual 'IT dashboard' process with full analysis and actions
- Central monitoring of IT investment portfolio
- Commitment to IT value reporting including how IT spend impacts shareholder value

METRICS INCLUDED

- IT costs by category and by activity
- IT Staff numbers and costs analysed by activity
- Fulltime versus contract IT staff
- Outsourcing ratios
- Workstation costs
- IT intensity
- Cost/efficiency ratios
- IT related operational risk incidents (number & value)
- IT security incidents (number & value)
- Various IT project portfolio metrics
- IT investment management CMM level (current and projected)
- Benchmarking against specific peer groups

THE ING EXPERIENCE 1999 - 2007

FINANCIAL BENEFITS

€ 38m direct savings in one year

20% of one year's annualised IT costs avoided over 3 years

Up to 20% of IT investment portfolio costs potentially could be saved

STRATEGIC BENEFITS

Shareholder Return ↑

Corporate Governance ↑

Best in Class Pedigree ↑

Sector Peer Group Benchmarks

Investment Driven Metrics

OPERATIONAL BENEFITS

Project Execution & Delivery ↑

Portfolio Optimisation ↑

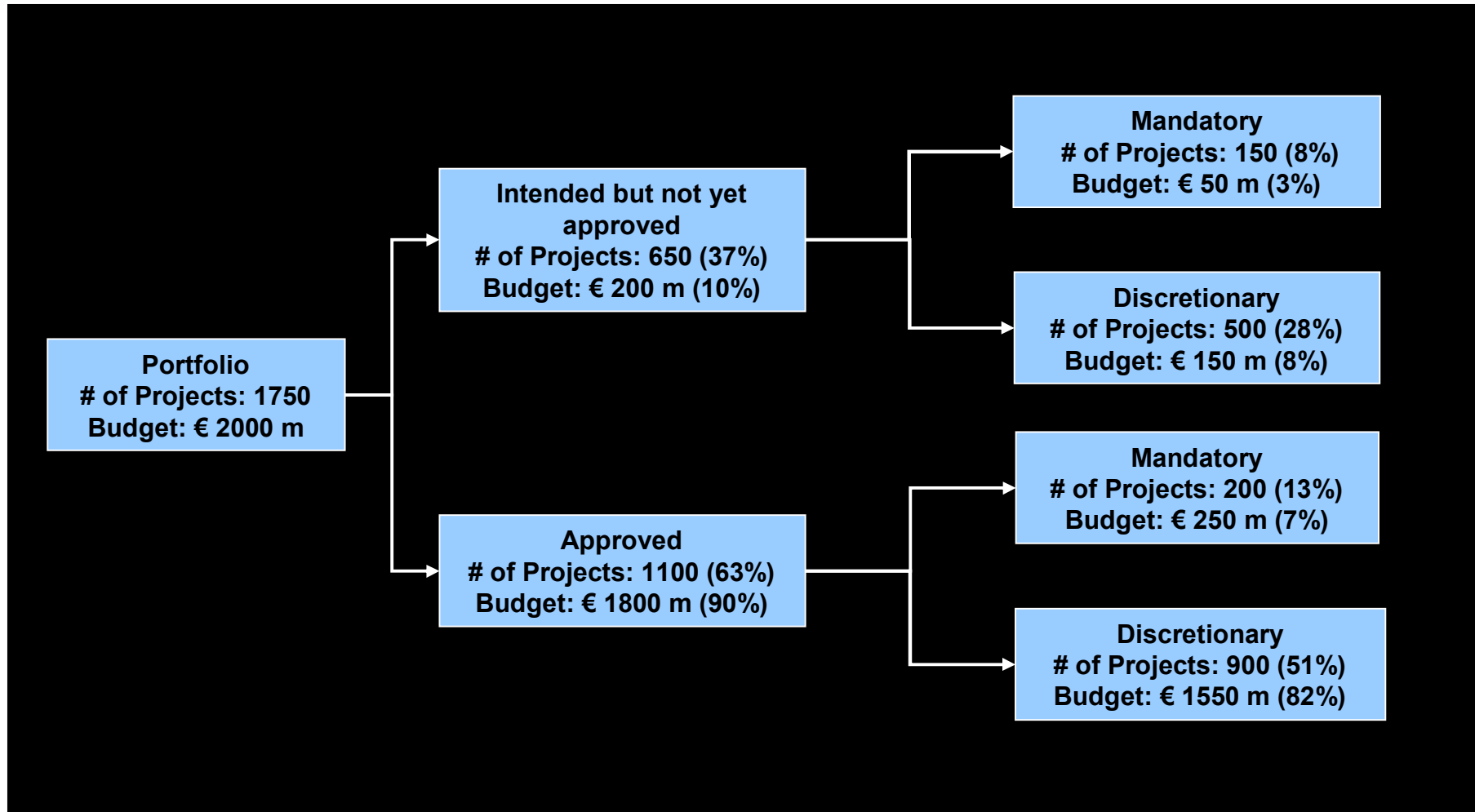
Quality (CMM 3) ↑

SOX/Basel compliance ↑

IT Project Hurdle Rates
PMO Structure

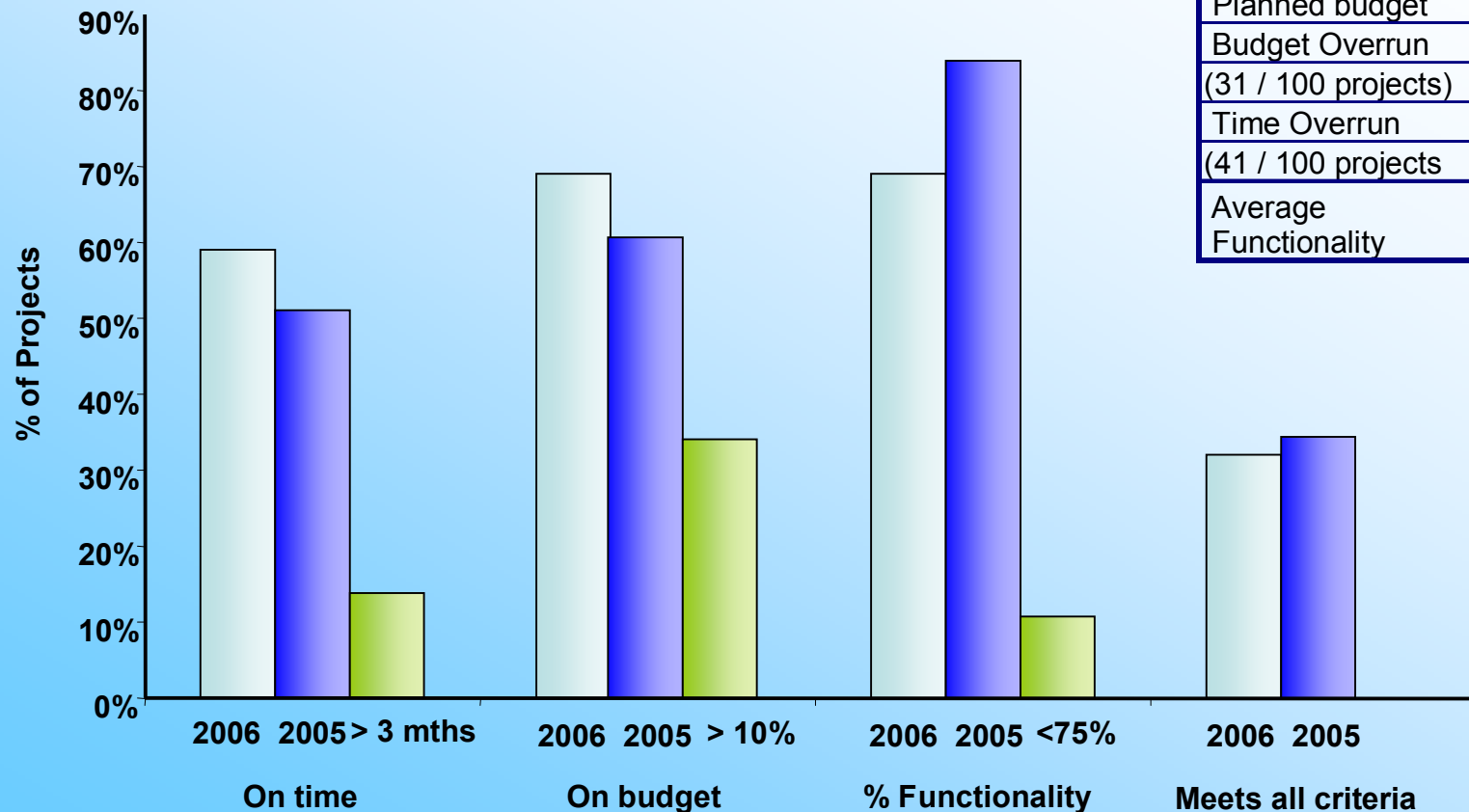
From an investment = 0.1% per annum of the IT budget

Do we know the size and shape of our IT investment portfolio?



How good are we at delivering projects?

Solution Delivery performance



Planned vs Actual Variance	
Planned budget	€ 155 m
Budget Overrun	€ 19 m
(31 / 100 projects)	(31%)
Time Overrun	162 mths
(41 / 100 projects)	(41%)
Average Functionality	69%

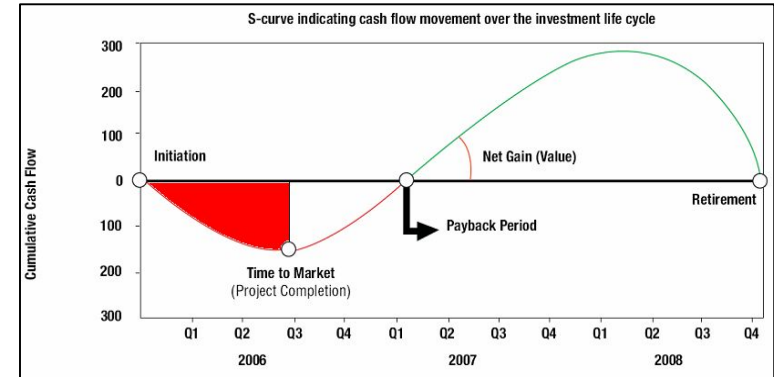
ROI Effect of poor solutions delivery performance

ROI as expected in the Business Case

Expected Benefits

$$\text{Budgeted ROI} = \frac{\text{€ 114 m} - \text{€ 100 m}}{\text{€ 100 m}} = + 14\%$$

Expected Budget



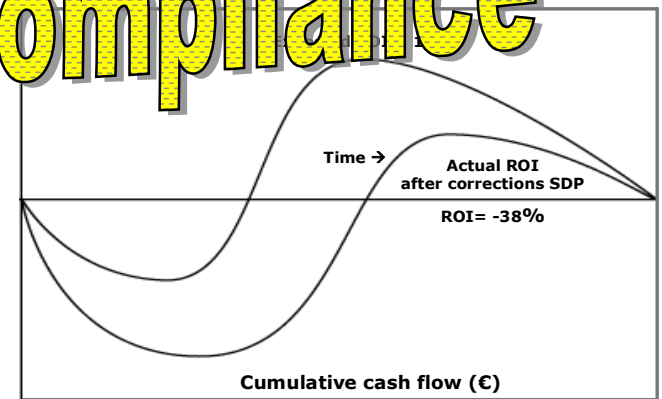
Actual ROI allowing for typical solution delivery performance

Very relevant to SOX compliance

Approximately two years to market

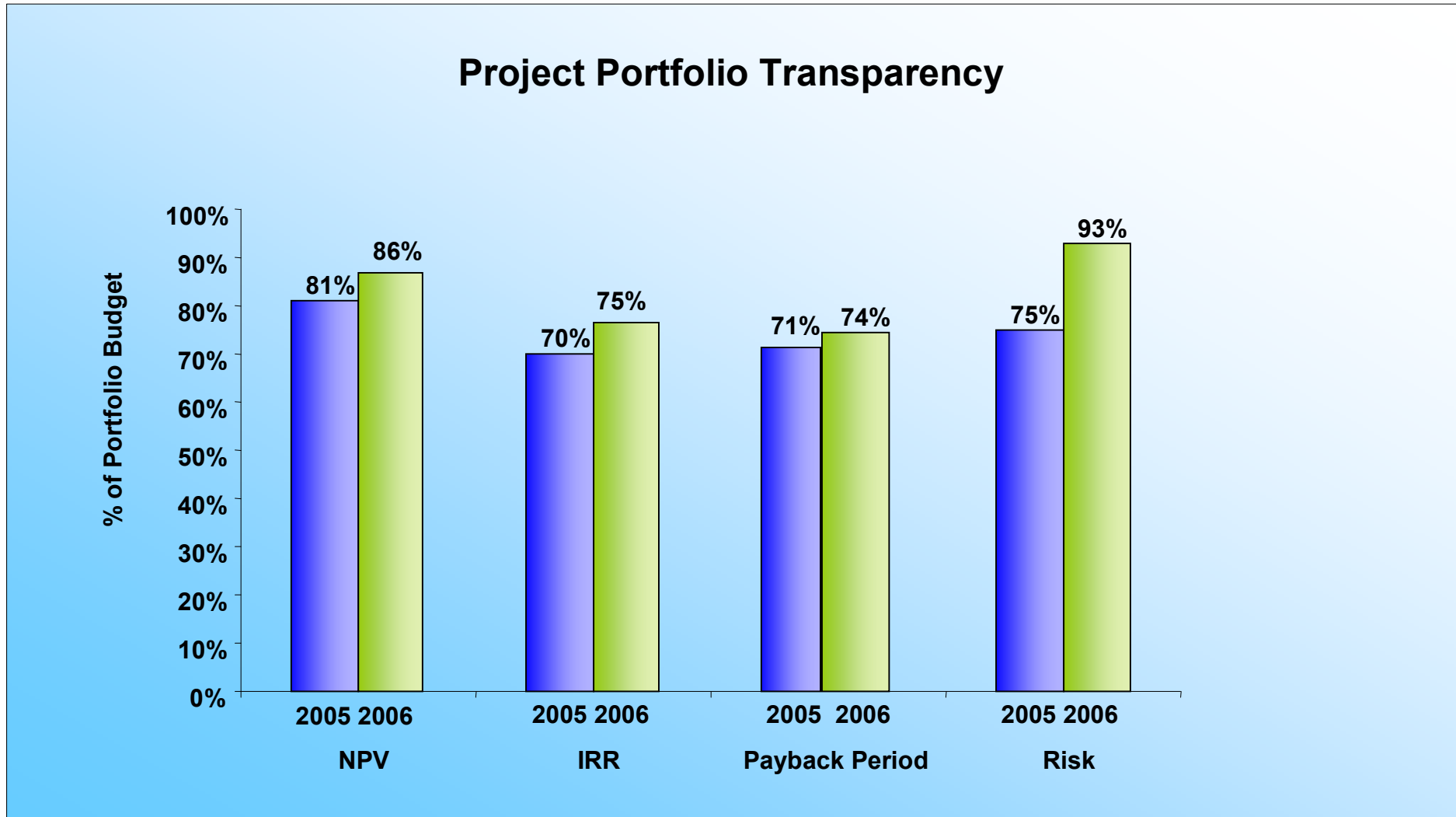
$$\text{Actual ROI} = \frac{\text{€ 114 m} \times 84\% \times \left(\frac{1}{1.12}\right)^2 - \text{€ 100 m} \times 124\%}{\text{€ 100 m} \times 124\%} = - 38\%$$

Budget Overrun
+24%

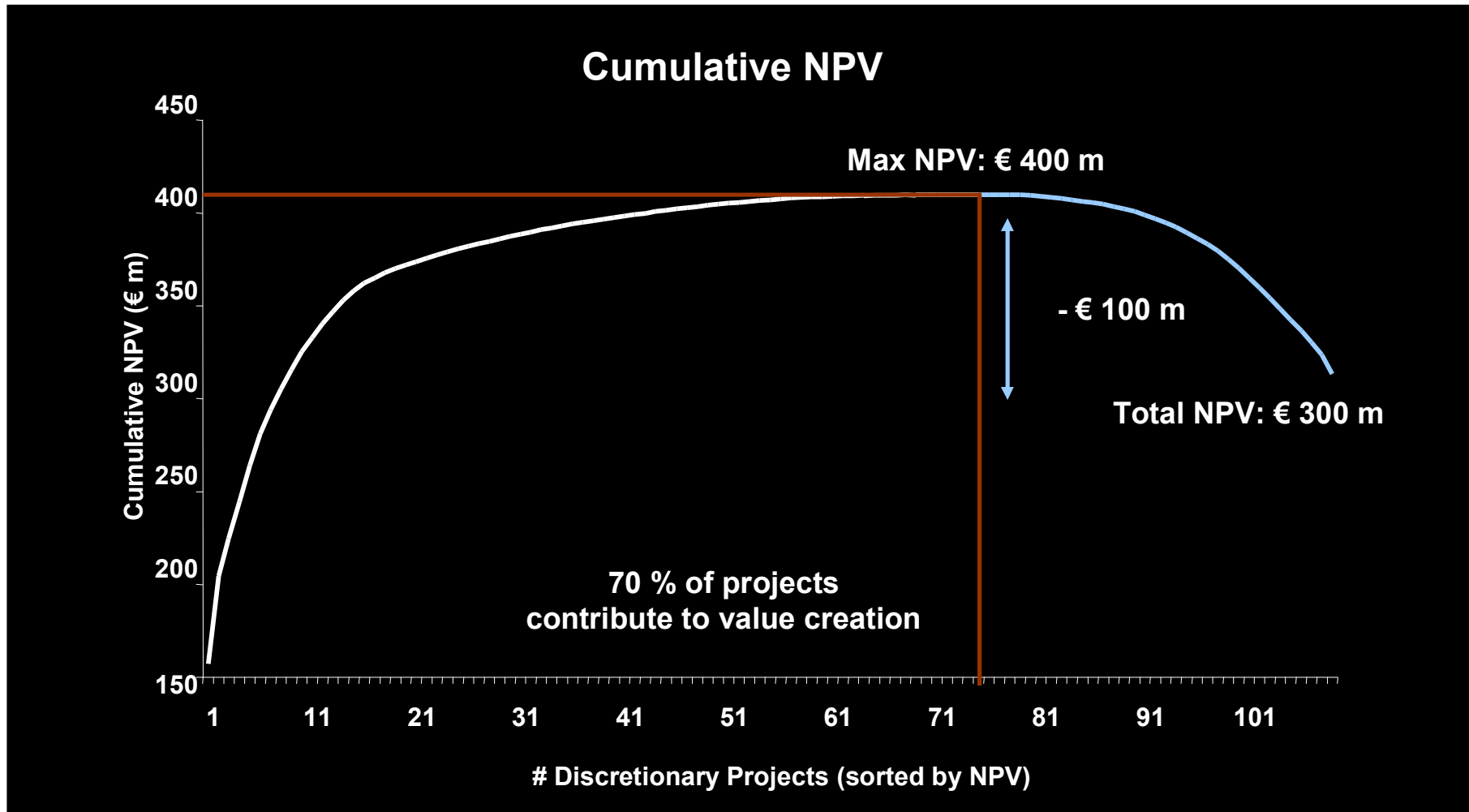


Project Portfolio Transparency

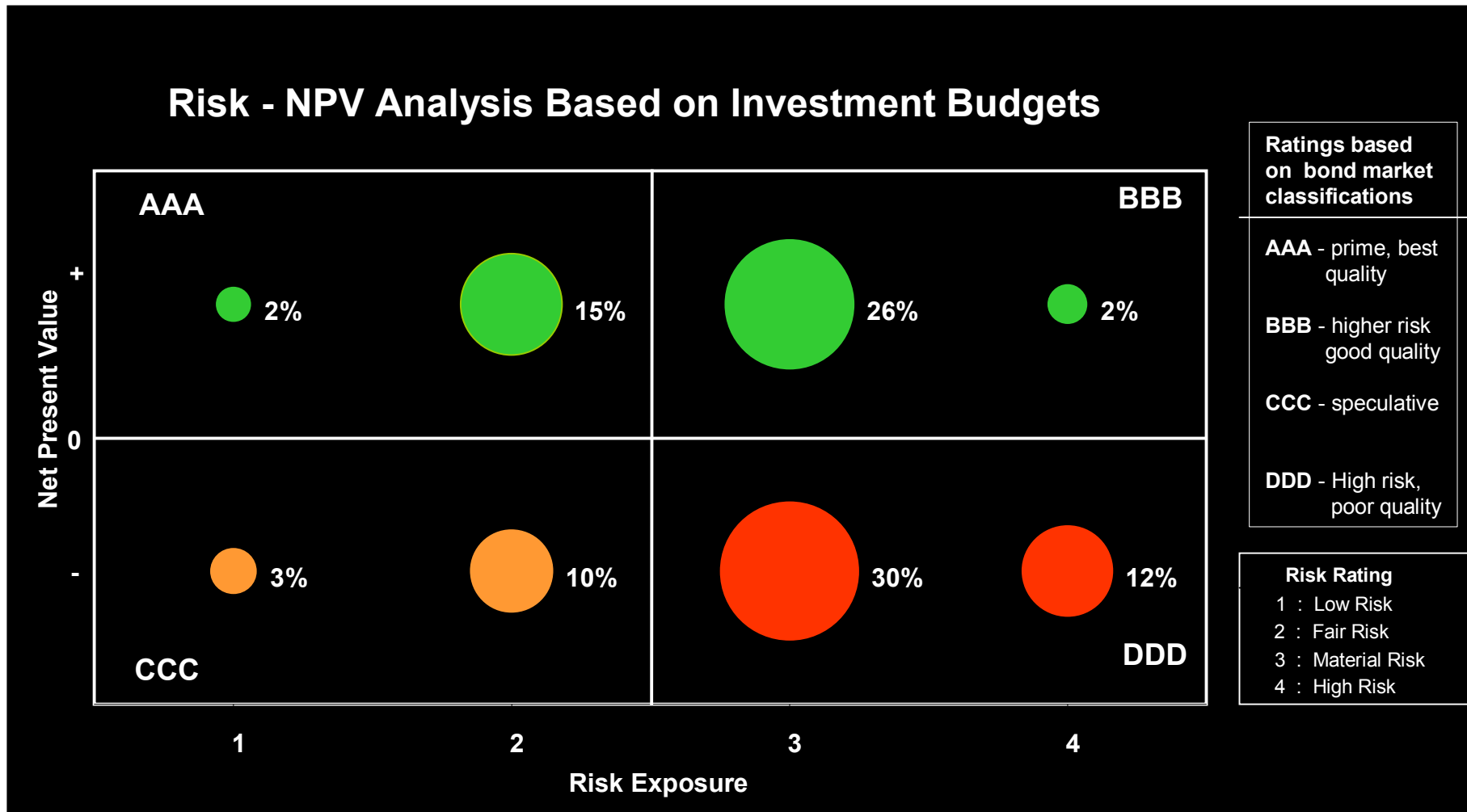
Do we understand the financial and risk profile of our projects?



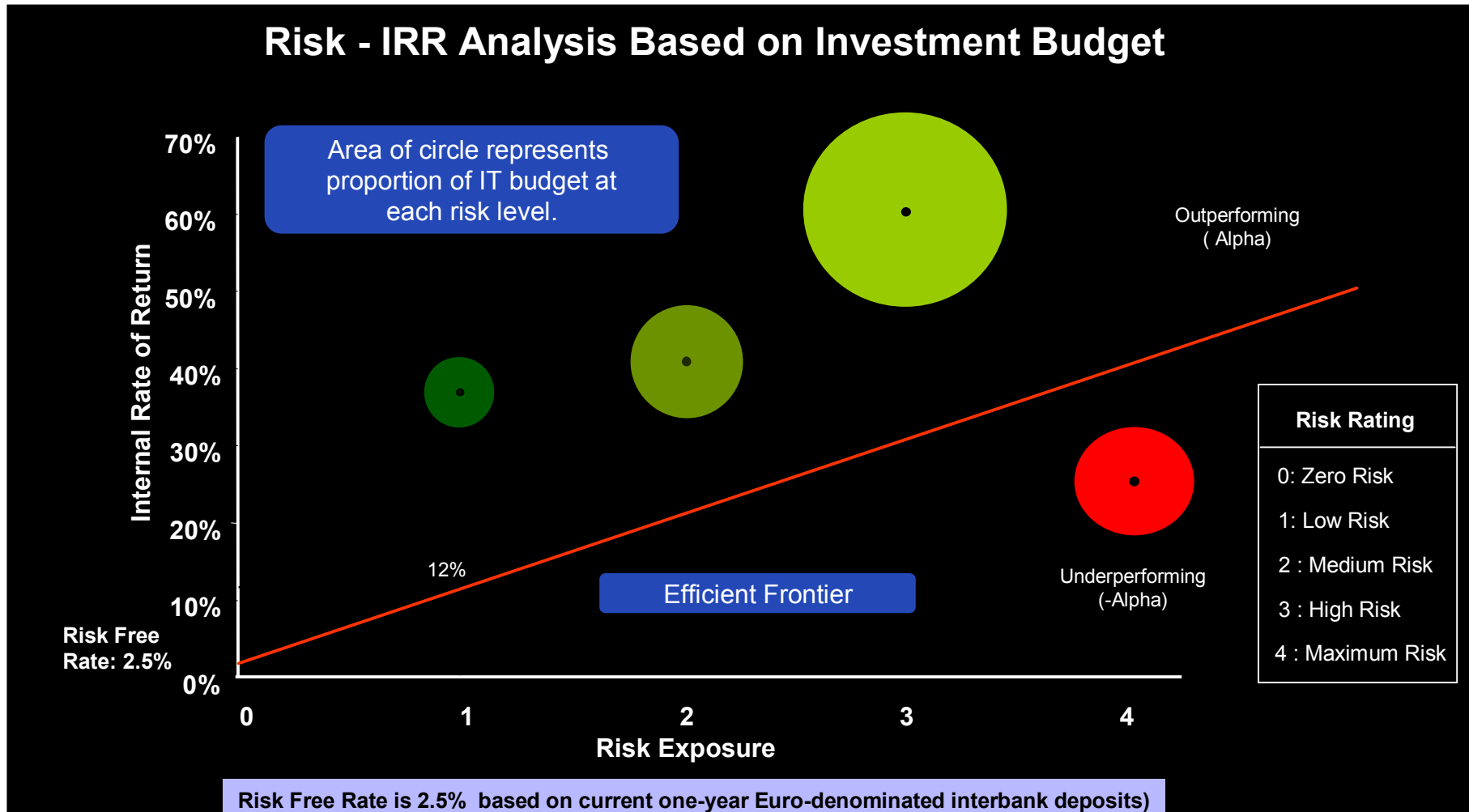
Value creation or value destruction?



Quality of Portfolio Mix based on project ratings (Example)



Outperforming the index - Efficient Frontier Analysis (Example)



Project Risk (example)

IT Investment Projects Assessment Rating Worksheet

Name of Project

Department/Business Function

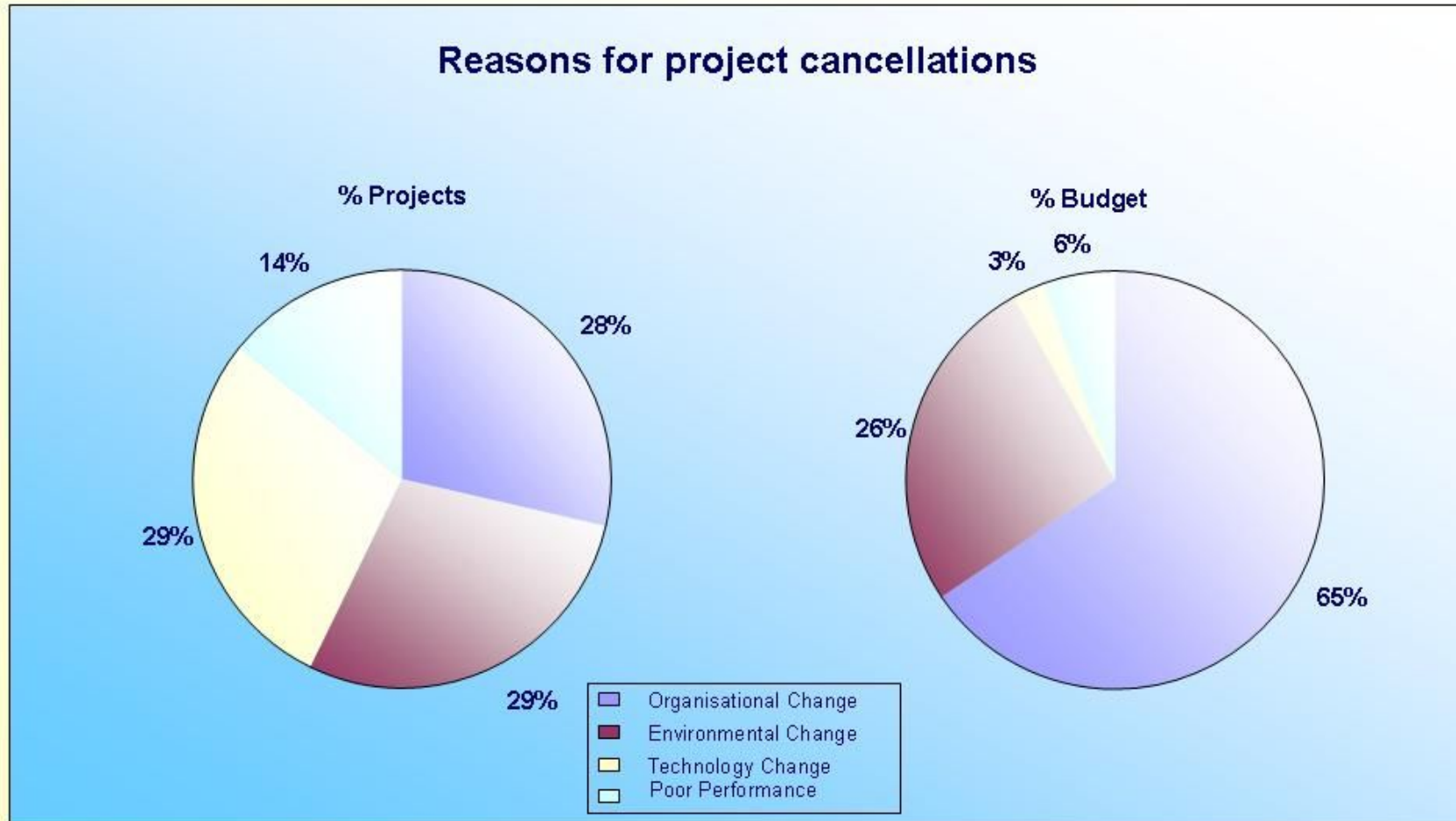
Brief Description

Business Sponsor

Project Manager

1. Use of new, unproven technology is:			6. Will the system involve direct interaction or links with:	
Non- Existent	1		One BU only	1
Insignificant	2		Other ING Bus	2
High dependence	3		Other trading/business partners	3
Maximum dependence	4		Customers (eg direct internet access)	4
2. Project duration is:			7. Within the business the new system will need to interface	
Less than six months	1		No other systems	1
Six to twelve months	2		One existing system	2
One to two years	3		Two to five existing systems	3
Over two years	4		More than five existing systems	4

Project cancellation as an indicator of active portfolio management (Example)



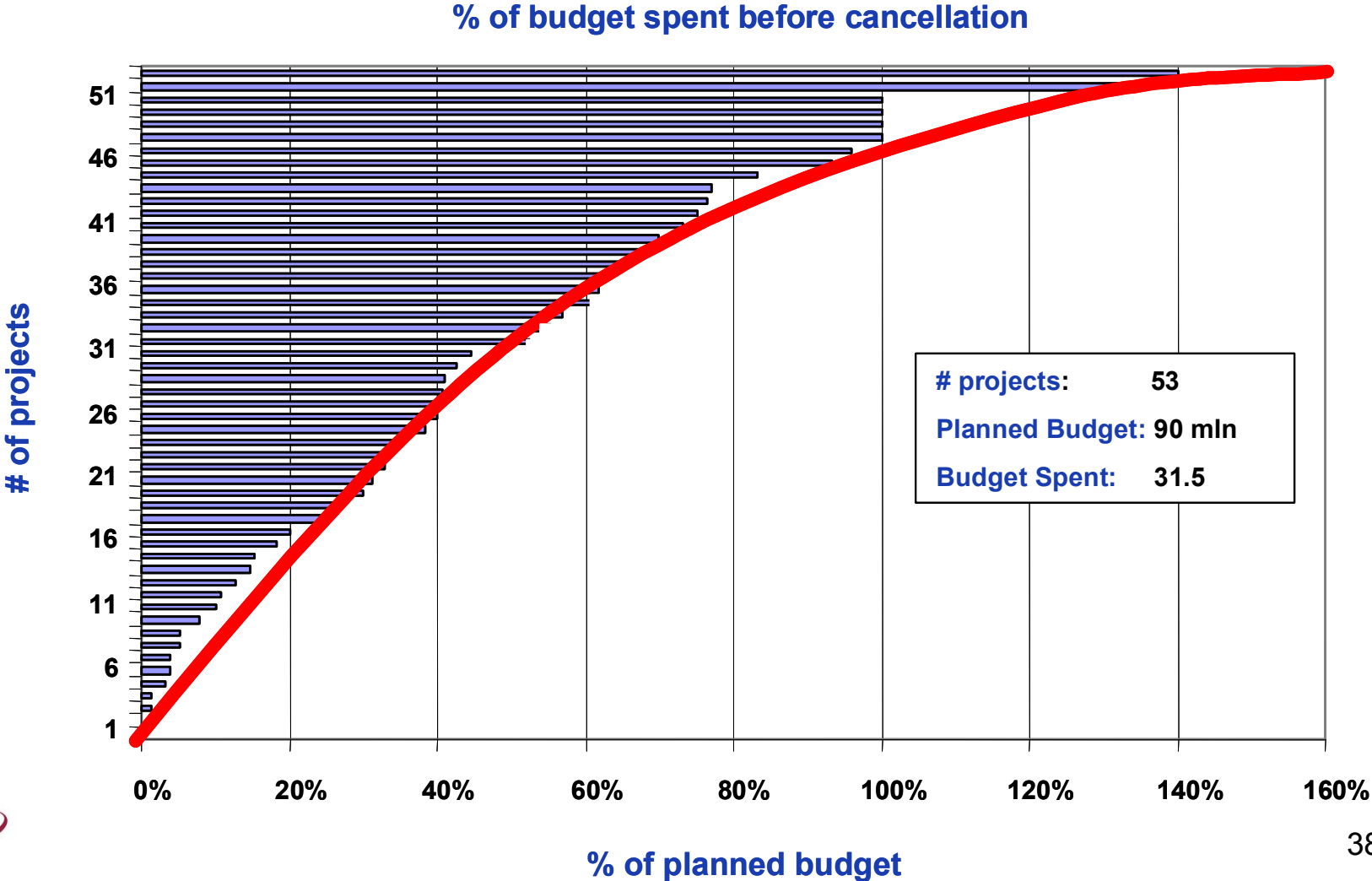
CONTINUOUS IMPROVEMENT AT ING

- Establish geographical Project Management Offices
- Establish regular review of IT investment portfolios
- Board Directive to reach minimum level 3 CMM for systems development and implementation processes by end 2006
- Increase numbers of qualified project managers
- Improve business case development and authorisation processes
- Improve training of all those involved in projects including sponsors
- Enhance accountability
- More effective and efficient SOX and Basel compliance

Empirical Evidence

- Entities with higher process maturity (CMM) are more likely to deliver their projects on time and on budget
- Higher transparency of financial and risk metrics leads to earlier identification of issues that might lead to project failure (and therefore enable earlier cancellation)
- Past solutions delivery performance is generally not taken into account in predicting future success
- Relatively few projects do get cancelled, and where they do, the cancellation can take place at any time during development life cycle

Cancellations



IT Investment Governance

Optimising Value Creation and
enhancing J-SOX compliance



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From the IT perspective, the evaluation of internal controls must include three key areas.....

- Company-level controls for IT should demonstrate that management has a good understanding of IT's capability and utilizes IT appropriately to establish internal control over financial reporting.
- IT general controls should demonstrate that there are adequate ways to manage processes such as system development, change management, system operations, and security administration related to application systems that support financial reporting.
- IT applications control should demonstrate that when application systems are utilized to support financial reporting they are properly maintained.

Practice Standards for J-SOX, February 2007

The Business Accounting Council says.....

Internal control is defined as a process performed by everyone in an organization and incorporated in its operating activities in order to provide reasonable assurance of achieving four objectives:

- Effectiveness and efficiency of business operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations
- **Safeguarding of assets**

The IT investment portfolio as defined by Val IT is an asset and is therefore relevant to J-SOX compliance

If the deficiencies have a qualitative and quantitative significance, they should be judged to be material weaknesses.

What distinguishes successful from less successful organisations in realising benefits?

- 1. The more successful select projects on the basis of desirability and their capability to deliver them, not just desirability.
- 2. Having methodologies is not sufficient; it is important that both business managers and specialists use them on all projects
- 3. Developing realistic and robust business cases, which include benefits for (if possible) all the investment stakeholders
- 4. Managing the benefits over the whole investment lifecycle through consistently applied practices and processes
- 5. Integrated planning of benefit delivery with organisational, process and technology changes
- 6. Business ownership and accountability for the benefits and changes
- 7. Systematic review of the results of investments in terms of the benefits realised or not realised
- 8. Transferring the lessons learned from successful and unsuccessful projects to others

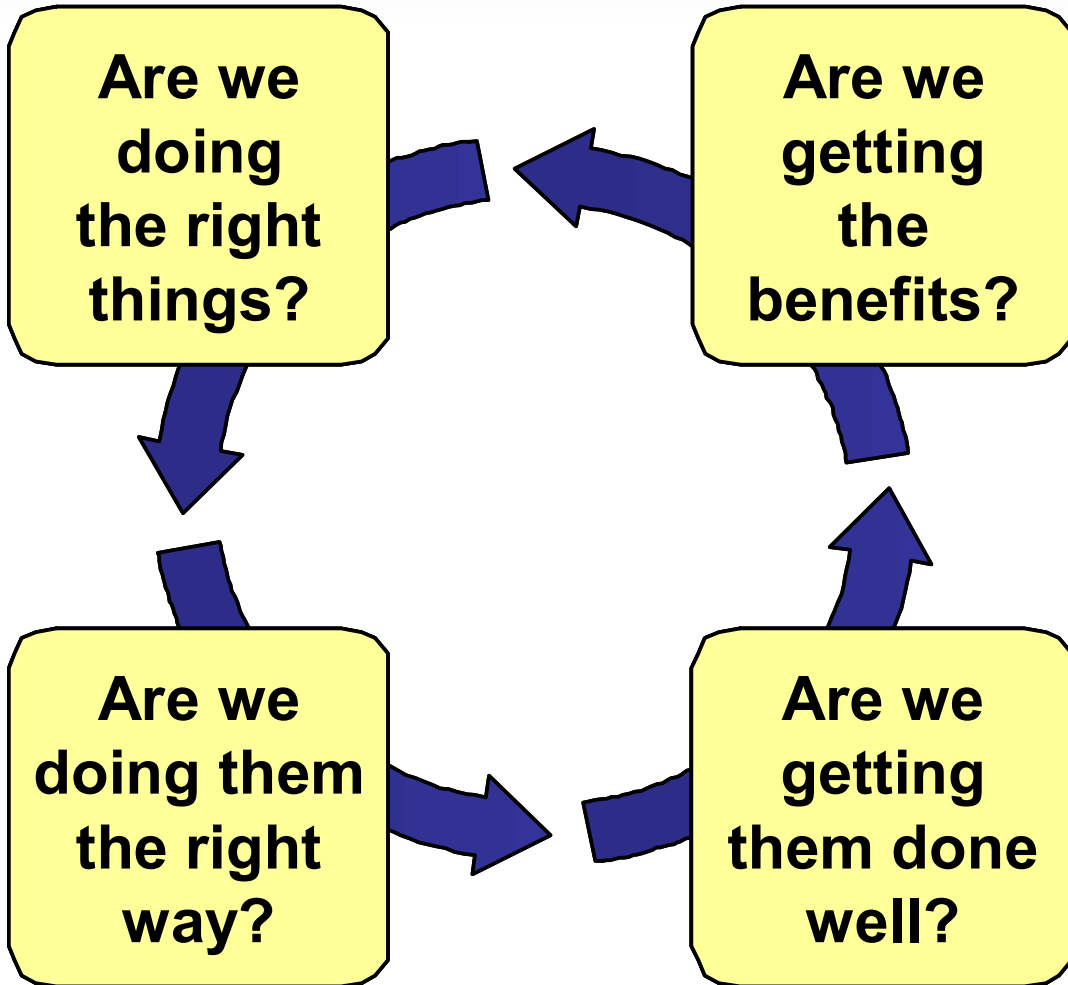
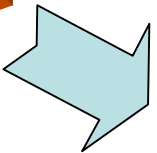
Val IT Principles

Results CIO Interviews

<input type="checkbox"/> IT-enabled investments will be managed as a portfolio of investments .	
<input type="checkbox"/> IT-enabled investments will include the full scope of activities that are required to achieve business value.	
<input type="checkbox"/> IT-enabled investments will be managed through their full economic life cycle .	
<input type="checkbox"/> Value delivery practices will recognize that there are different categories of investments that will be evaluated and managed differently.	
<input type="checkbox"/> Value delivery practices will define and monitor key metrics and will respond quickly to any changes or deviations.	
<input type="checkbox"/> Value delivery practices will engage all stakeholders and assign appropriate accountability for the delivery of capabilities and the realization of business benefits.	
<input type="checkbox"/> Value delivery practices will be continually monitored, evaluated and improved .	

The IT Value Continuum

Start here

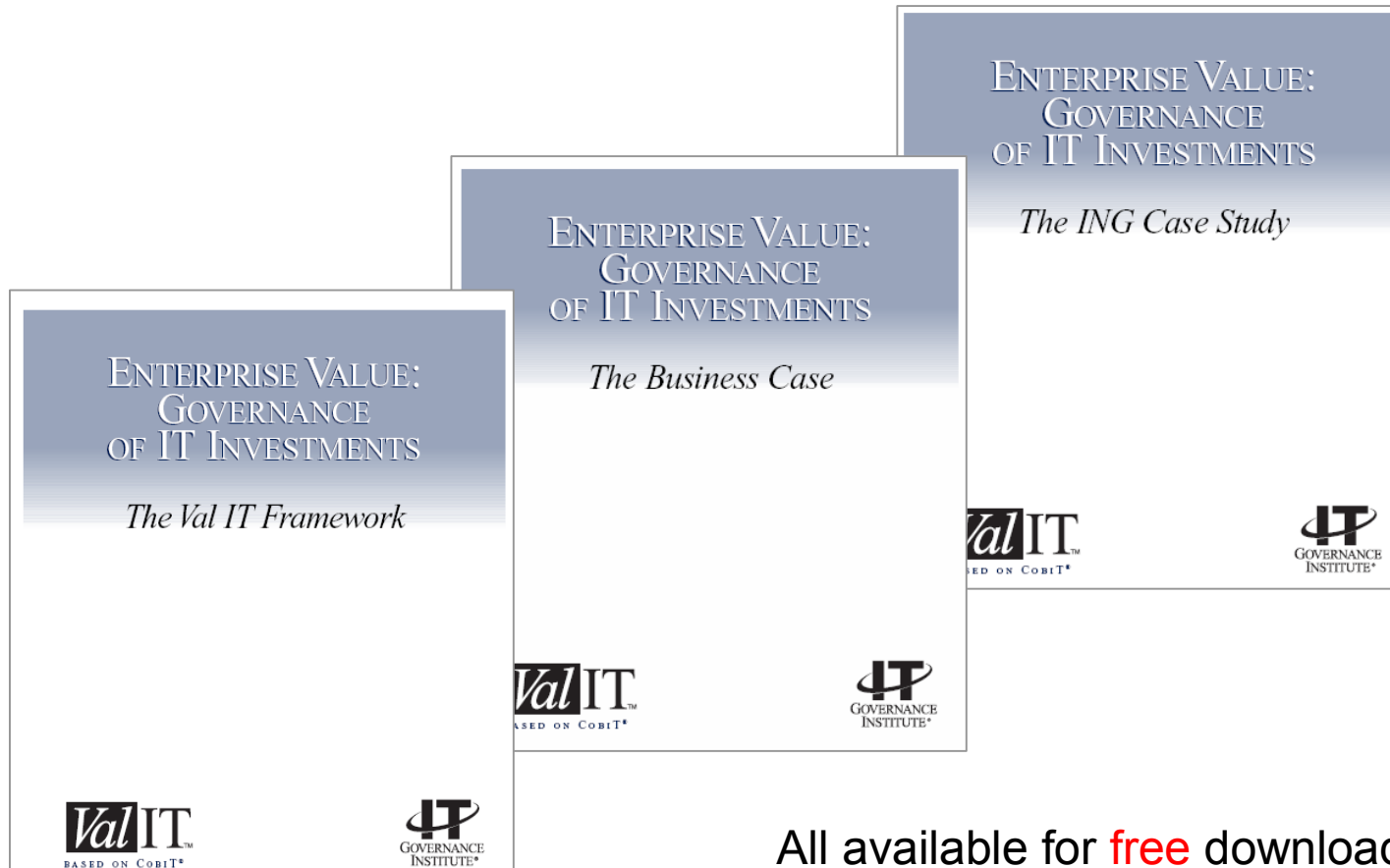


What fits where?





Three initial deliverables



All available for **free** download from
www.itgi.org



Val IT – Processes

Value Governance (VG)

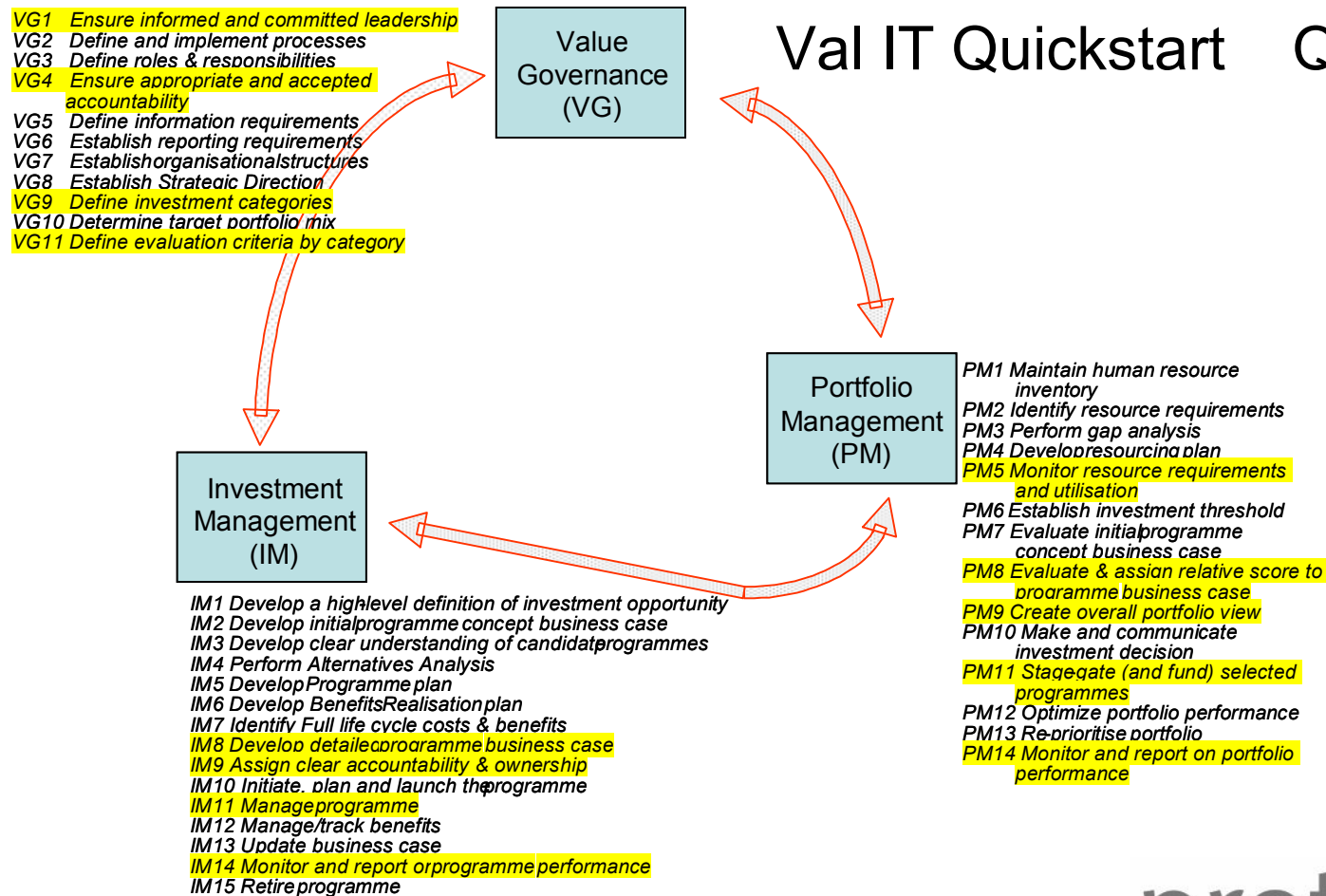
Portfolio Management (PM)

Investment Management (IM)

Val IT

Processes & Key Management Practices

Val IT Quickstart Q1 2008



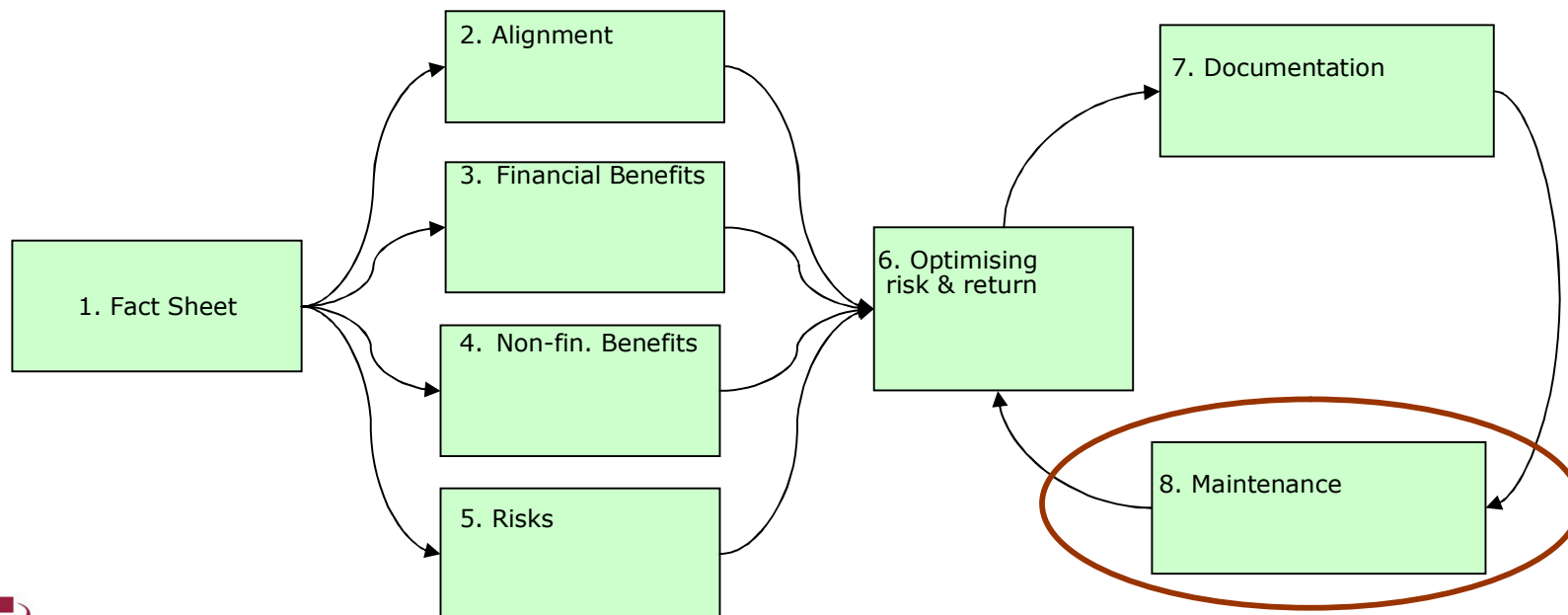
IM8

Key Management Practices	COBIT Cross-references	RACI Chart		
		Exec	Bus	IT
<p><i>IM8 Develop a detailed programme business case.</i></p> <p>Develop a complete and comprehensive business case for the programme consistent with the enterprise's standard business case requirements. The business case should include an executive summary; a description of the programme purpose, objectives, approach and scope; programme dependencies, risks and milestones; organisational change impact of the programme; a value assessment and a programme plan. The programme value assessment should include full economic life cycle costs and benefits, both financial and nonfinancial; overall financial worth; strategic alignment; risks, both delivery and benefits risks; the programme's overall relative value scoring and any key assumptions. The programme plan should include component project plans, a benefits realisation plan, the approach to risk and change management, and the programme governance structure and controls. The IT function manager signs off on the technical aspects of the programme. The business sponsor approves and signs off on the business case.</p>	<p>Primary: P01.1, P05.3</p>		A/ R	C

IM - The Business Case

Why the business case?

- Understanding of what you plan to achieve; how you are going to manage it and who is accountable
- Basis for comparison and choice
- Recording all that needs to be tracked (cost, risks, benefits, etc.)
- Maintain clarity on what you are doing



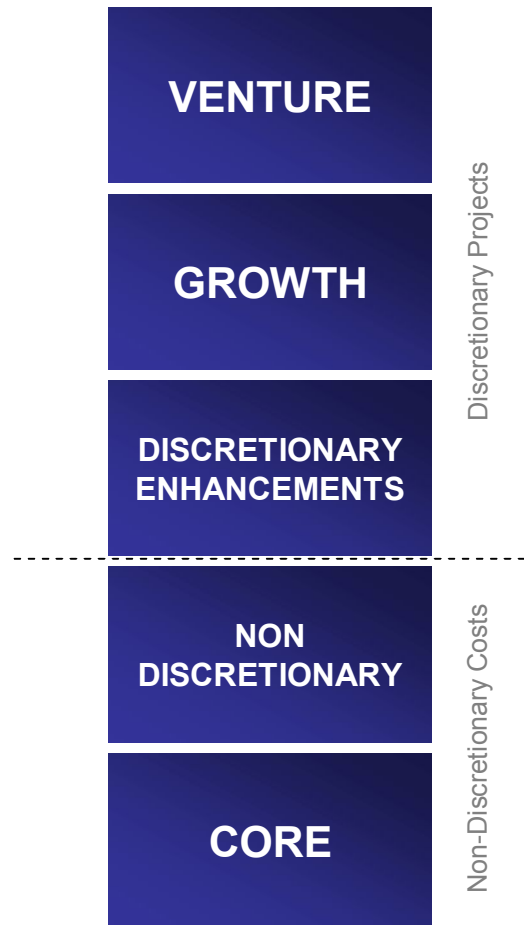
IM9

Key Management Practices	COBIT Cross-references	RACI Chart		
		Exec	Bus	IT
<p>IM9 Assign clear accountability and ownership</p> <p>Accountability for achieving the benefits, controlling the costs, managing the risks, and coordinating the activities and interdependencies of multiple projects should be clearly and unambiguously assigned and monitored. Where accountability is assigned, such accountability must be accepted, there must be a clear mandate and scope, and the person accountable must have sufficient authority and latitude to act, requisite competence, commensurate resources, clear lines of accountability, an understanding of rights and obligations, and relevant performance measures.</p>	<p>Primary: PO1.1, PO6.1, PO10.1</p>		A/R	C

VG9

Key Management Practices	COBIT Cross-references	RACI Chart		
		Exec	Bus	IT
<p>VG9 Define investment categories</p> <p>The governance processes must recognise that there are a variety of investment types that differ in complexity and the degree of freedom in allocating funds. These different investment types must be categorised. Categories could include, but are not limited to, mandatory, continuity or sustaining, and discretionary. Discretionary could include, but is not limited to, strategic or transformational (to gain competitive advantage or major innovation), informational (to provide better information), transactional (to process transactions and reduce the cost of doing business) and infrastructure (to provide shared services and integration).</p>	<p>Primary: PO5.1</p>	A	R	C

Categorisation



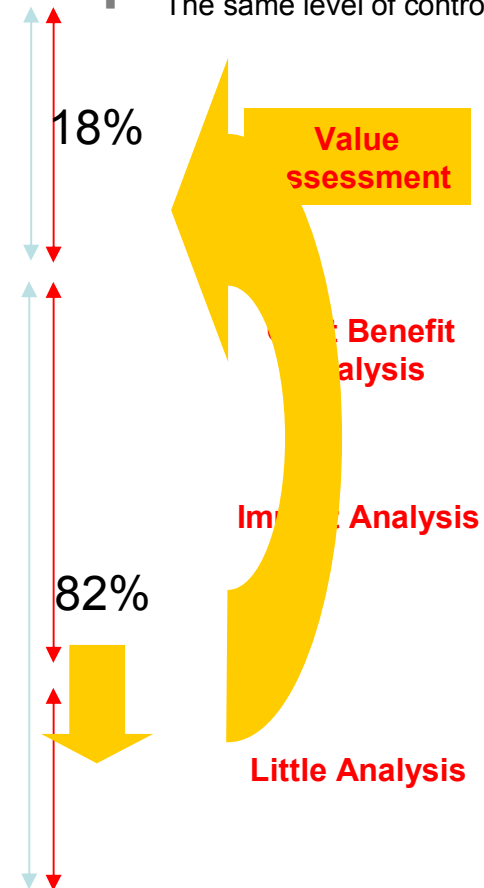
Source: Meta Group

- Every investment need not follow:
 - The same level of value analysis
 - The same level of control

Transform the Business

Grow the Business

Run the Business



Source: Forrester

For CIOs



June 22, 2007

From IT Governance To Value Delivery

The Val IT Framework Shows The Way

by Craig Symons

with Lewis Cardin, Alex Cullen, and Bo Belanger

EXECUTIVE SUMMARY

An IT governance framework articulates decision rights with respect to IT investments to ensure that they deliver the maximum business value at an acceptable level of risk. To do this, you must be able to measure business value and also manage and communicate value delivery. IT value delivery is part of IT governance — it answers the following questions: 1) Are we doing the right things? and 2) are we getting the benefits? Building on COBIT, the IT Governance Institute has published Val IT as a framework for the governance of IT investments. Organizations struggling to execute IT strategies that deliver business value and to communicate this value to stakeholders should evaluate Val IT as a tool for improved value delivery.

The *Val* IT framework provides a road map for organizations to follow on their way to improved IT investment decisions

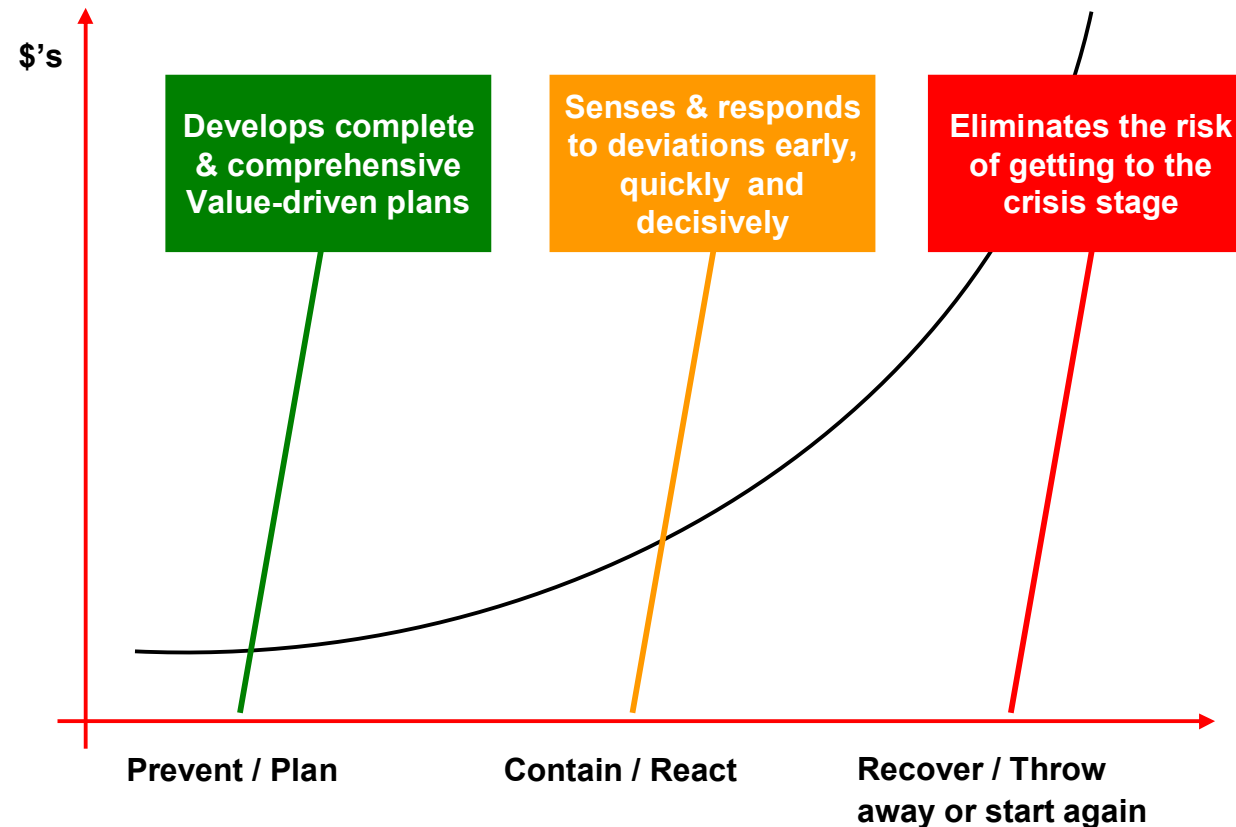
The *Val* IT framework is grounded in real-world practices

Organizations struggling to execute IT strategies that deliver business value and to communicate this value to stakeholders should evaluate *Val* IT as a tool for improved value delivery

From IT Governance to Value Delivery
Craig Simons, Forrester Research
June 22, 2007

Getting ahead of the Curve!

Requires an Effective Full Cycle Governance Process that...



Val IT Future Plans

Tokyo
November 8th, 2007



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Val IT Initiative Status

DONE

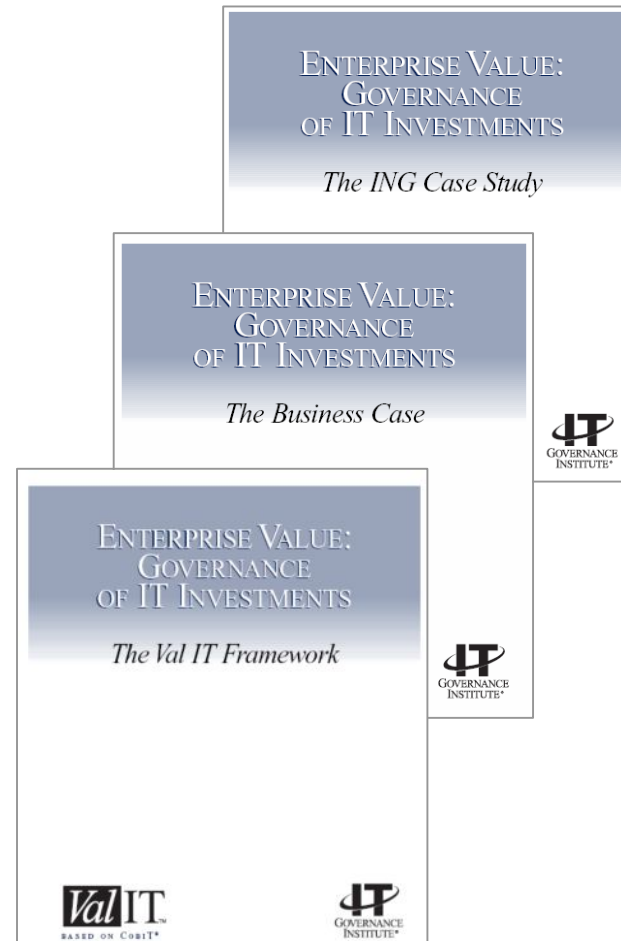
- Framework
- Business Case
- Case Study (initial)

IN PROCESS

- Extend FW to services & other IT assets/resources
- Maturity Models
- Management Guidelines
- Taxonomy
- QuickStart Guide

PLANNED

- Business Case v2.0
- Empirical Analysis
- Benchmarking
- Forums



Available for free download from:
www.isaca.org or www.itgi.org 58

J-SOX

Some Final Thoughts



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The Responsibility of IT

- IT underpins and enables all business processes including financial transactions
- IT based applications form the basis for business to be transacted, including extended supply chains
- IT has a responsibility to ensure that robust and reliable processes exist to minimise risk to the completeness, accuracy and integrity of business information including financials
- Basic rule is 'poor processes lead to poor outcomes'
- Robust and reliable processes will assist compliance with all legal and regulatory compliance requirements
- CobiT, Val IT, ITIL, ISO27000 etc. provide excellent frameworks for enhanced control and assurance
- Consider true value of capitalised IT related business projects – will they actually deliver? Val IT can help

The Challenge and the Opportunity

While presenting many challenges in the year ahead, J-SOX provides an opportunity for Japanese companies to improve their governance by improving or standardizing business processes and systems across the globe. Management of international subsidiaries can and should make a significant contribution to such an effort.

Aki Tohyamais, Managing Director, Protiviti

Closing Thoughts

- J-SOX, and most other regulatory requirements, are nothing more than good governance. Simply put, management should:
 - Understand the risks of the business;
 - Establish a framework of controls;
 - Monitor the operating effectiveness of key controls;
 - Keep investors informed of potential uncertainties in the information that is being reported.
- The challenge of business is to move to a more sustainable control environment.
- This challenge applies to IT departments as much as to other parts of the business.
- The move to a more sustainable control environment is likely to place increased reliance on systems and application controls as well as generally improved and documented IT processes.
- This will place increased reliance on General Computer Controls.
- IT departments need to lead the way.

Cobit and Val IT can help!

A New Era of IT Governance

Optimising Value from IT Investment

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Tokyo

November 8th, 2007



LEADING THE IT GOVERNANCE COMMUNITY

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