



IT Governance: A Framework and Implementation Guide

*Marios Damianides
Ernst & Young LLP
ISACA Membership Drive
April 20, 2006 – New Orleans, Louisiana*

Agenda

- IT governance defined
- IT governance focus areas: theory and practice
- Roles and responsibilities for IT governance
- Implementation guidelines
- ITGI market research findings
- Top 10 Questions to ask

Sources

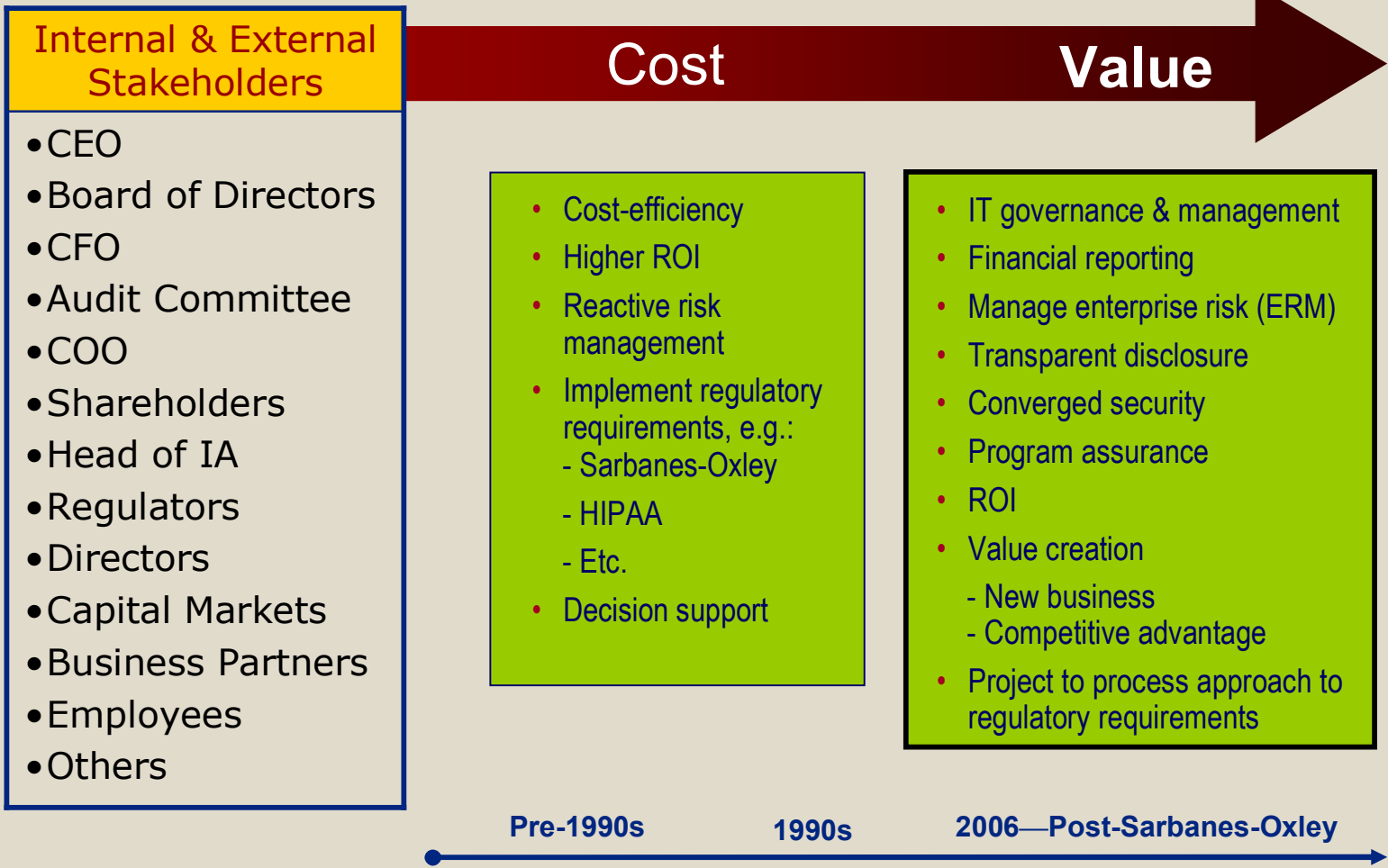


Board Briefing on IT Governance, 2nd Edition

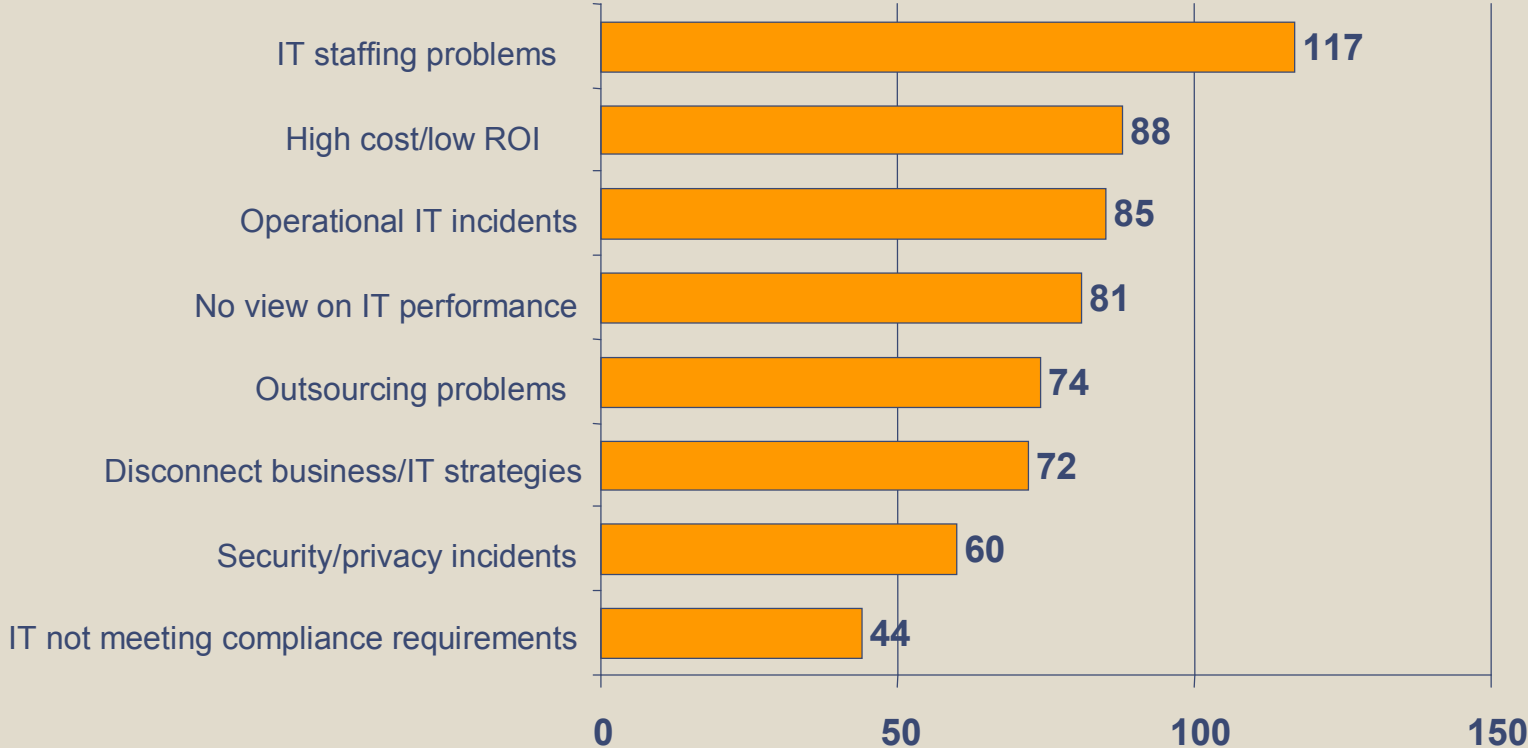
IT Governance Global Status Report 2003 and 2006

www.itgi.org

Increasing Expectations of IT Function

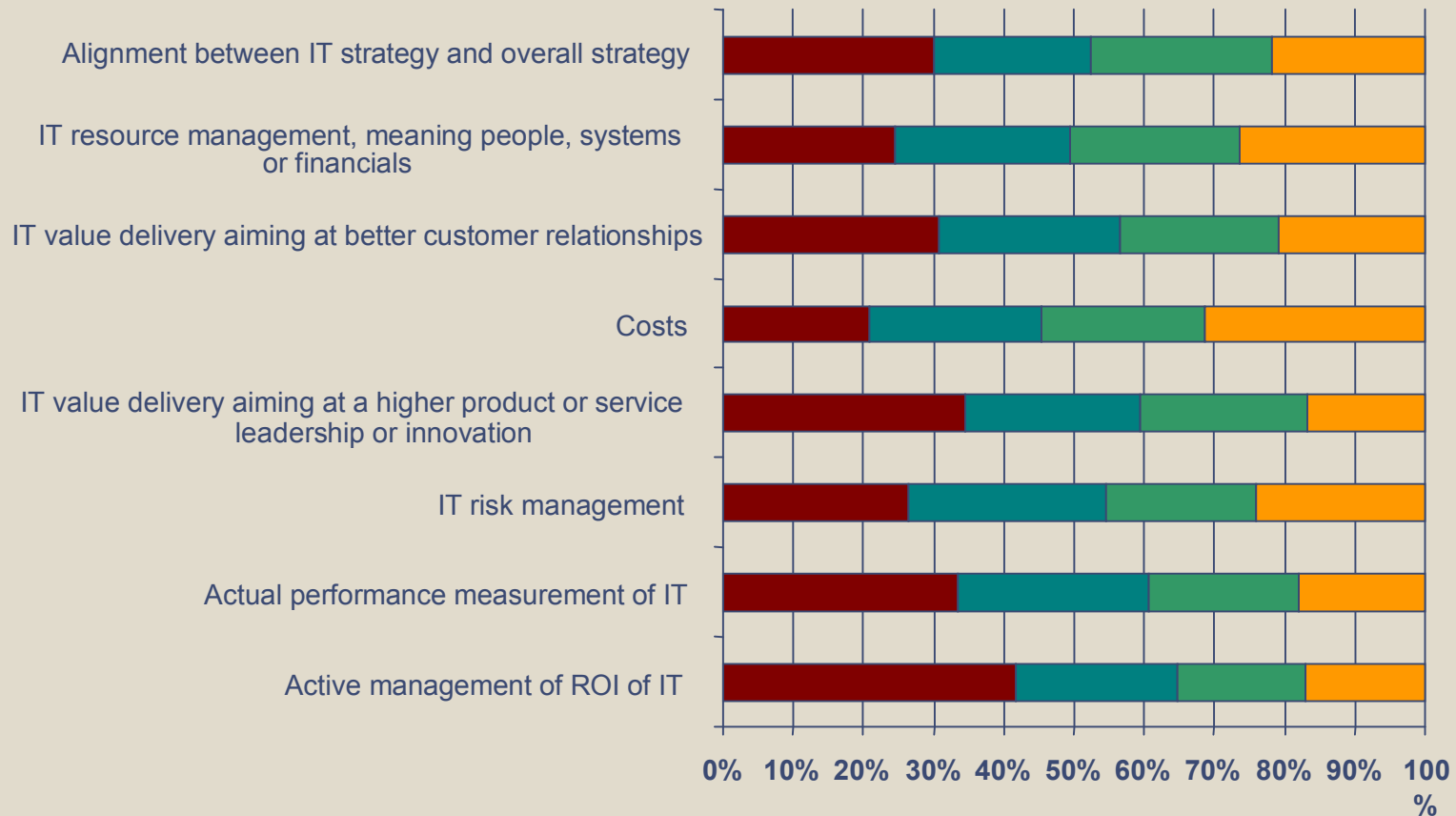


IT Governance Global Status Report: Problems with IT (CPI)



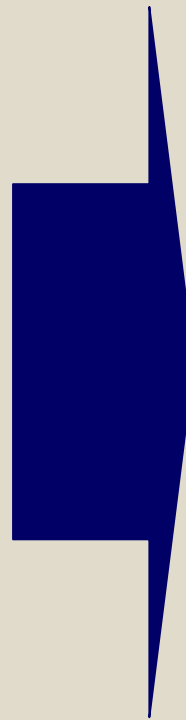
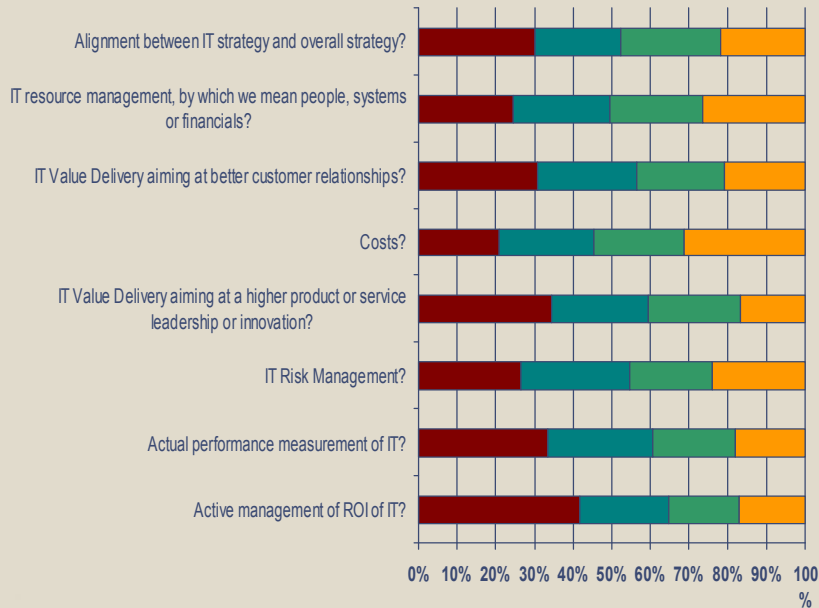
IT Governance Global Status Report: Status of IT Governance Implementation

■ Not considering implementing
 ■ Considering implementing
 ■ Implementing now
 ■ Have implemented



The IT Governance Solution

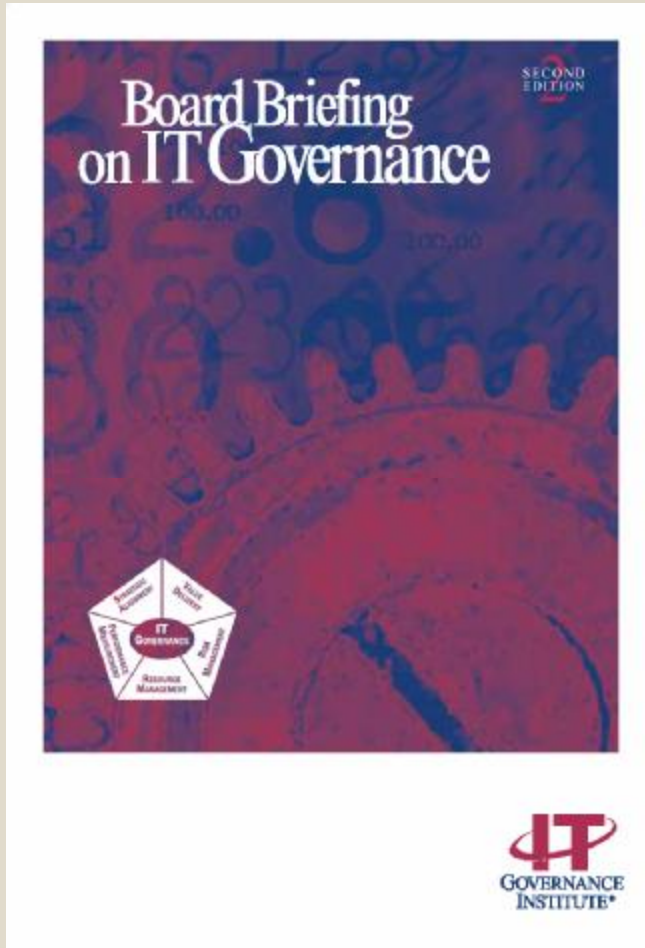
■ Not considering implementation
 ■ Considering implementation
 ■ Implementing now
 ■ Have implemented



Why Now?

- Australia: Corporate Law Economic Reform Program (CLERP 9)
- Proposed EU legislation to enforce international audit standards, create a registration regime and a regulatory body
- EU Data Protection Act
- Basel II
- Canadian Privacy Act
- Canadian Securities Administrators Regulation
- Health Insurance Portability and Accountability Act (US)
- Sarbanes-Oxley Act (US)

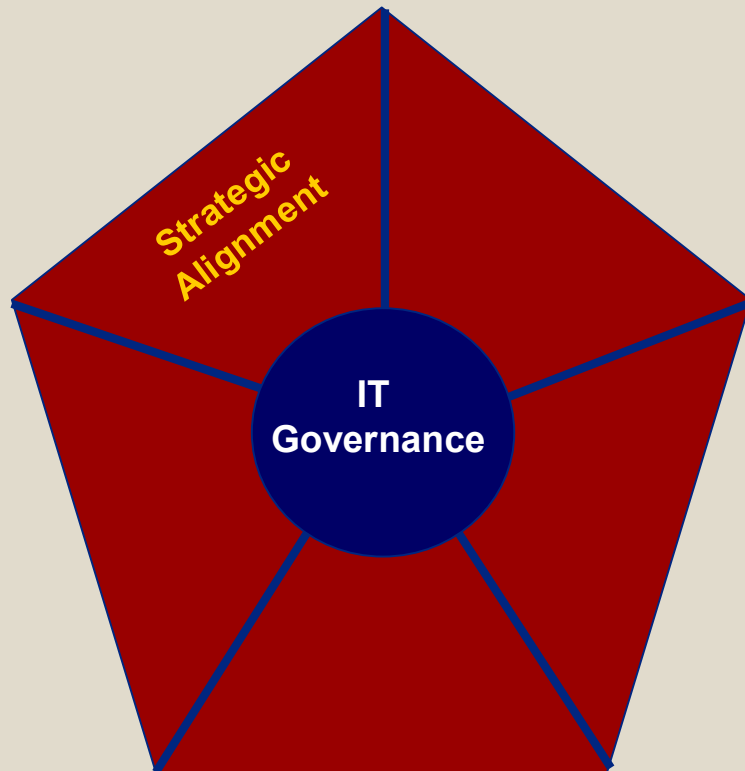
IT Governance Defined



“**IT governance** is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organisational structures and processes that ensure that the organisation’s IT sustains and extends the organisation’s strategies and objectives.”

Board Briefing on IT Governance, 2nd Edition
IT Governance Institute
www.itgi.org

IT Governance Focus Areas



Strategic Alignment

- Linking business and IT plan
- Defining, maintaining and validating the IT value proposition
- Aligning IT operations with the enterprise operations
- Adding value and competitive positioning to the enterprise's products and services
- Containing costs while improving administrative efficiency and managerial effectiveness

In 2003, 49% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 70%.

Strategic Alignment

The Focus

IS Strategy

Development Projects

Operations Support

IS Governance Expenditures

Alignment is achieved within the structure of the companies' annual planning and budgeting process through the transparency of the value/risk vs cost propositions.

Structure

Strategy	Inter-company IS Executive Committee, ISEC
Development	Line of Business Steering Committees, Account Managers
Operations	Business Process Owners, Account Managers, Service Delivery Managers
Governance	Executive/Risk Management Committees, Functional Leadership

Internal Economy

- ☛ IS expenses are targeted and capped (zero tolerance)
- ☛ IS expenses are fully burdened and recovered by chargeback (zero profit)
- ☛ Lines of business have clear ROE targets which include I.S. chargebacks

Methods & Tools

Strategy	I.S. Strategy Map, Balanced Scorecard, COBIT
Development	Business Case Disciplines > \$250K
Operations	Service Level Agreements, IS Product and Service Standards
Governance	Risk / Compliance / Maturity Assessments (COBIT)

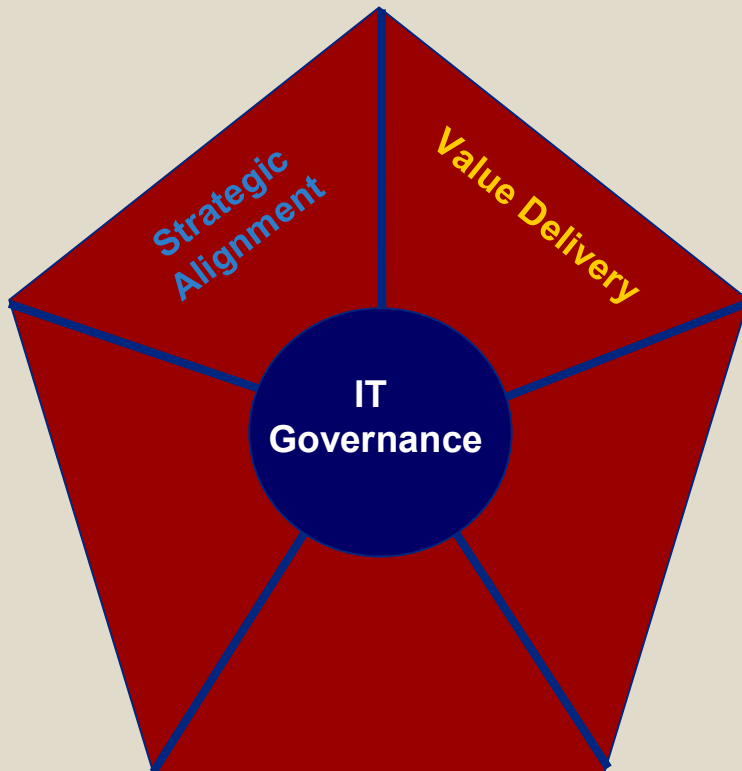
Metrics & Rewards

Financial Targets	Minimum 15% annual growth in shareholder earnings, 18% ROE: Company, Line of Business
Contributing Metrics	Sales, Expense Management, Customer Service, Project Delivery, Service Achievement
Rewards	Ties to management incentives, stock option / purchase plans

Culture

- ☛ Empowered hierarchy, command and control management style
- ☛ Rigorous approaches to analysis, planning and risk management (fact-based)
- ☛ Strong preference for measurable, verifiable benefits

IT Governance Focus Areas



Value Delivery

- Executing the value proposition throughout the delivery cycle
- Ensuring that IT delivers the promised benefits against the strategy
- Concentrating on optimizing expenses and proving the value of IT
- Controlling projects and operational processes with practices that increase the probability of success (quality, risk, time, budget, cost, etc.).

In 2003, 39% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 69%.

Value Delivery

The Focus

IS Strategy

Development Projects

Operations Support

IS Governance Expenditures

Value delivery is ensured on business projects and operations through co-responsibility with business leaders and on governance through direct accountability to the executive committees.

Structure

Development	Business sponsors, IS Project Managers, IS leadership teams, A.C.T., PMI-based methodology, formal SDLC methodologies
Operations	Business process owners, Service Delivery Managers, Service Management Process
Governance	Risk Management Committee (risk, compliance, audit, IS), Architecture Collaboration Team, Chief/Site Architects

Internal Economy

- IS expense budgets are allocated to lines of business and specific activities, these allocations act as expense caps
- Allocations are exceeded only by formal change control first considering scope reduction
- Expense over-runs at the activity level are offset within the LOB's, or failing that, across the LOB's

Methods & Tools

Development	Bates Project Management, SEI-CMM, Enterprise Architecture, TeamPlay, SAP
Operations	ITIL, CobiT, SAP
Governance	COBIT, SAP

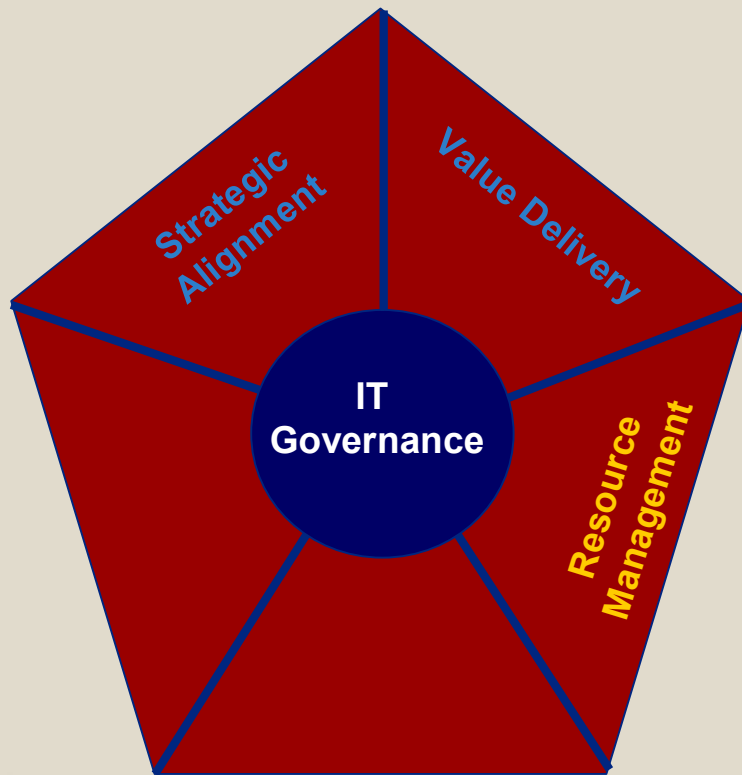
Metrics & Rewards

Development	Co-responsibility for results with business (quality, risk, time, cost)
Operations	Co-responsibility for results with business (service, cost, problem management)
Governance	Accountability to executive committees (incidents, maturity, audits, initiative completions, compliance to standards and processes)
Rewards	Ties to incentives at next levels of management and practitioners

Culture

- Active, hands-on management of emerging results and adjusting actions
- Business partnership: business says "what", IS says "how"
- IS is a professional services organization: we charge for our services, strive for repeatable performance

IT Governance Focus Areas



Resource Management

- Optimal investment, use and allocation of IT resources and capabilities (people, applications, technology, facilities, data) in servicing the needs of the enterprise
- Maximizing the efficiency of these assets and optimizing their costs
- Optimizing knowledge and the IT infrastructure and on where and how to outsource

In 2003, 50% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 75%.

Resource Management

The Focus

IS Strategy

Development Projects

Operations Support

IS Governance Expenditures

Resource management is the most direct and controllable leverage point to ensure the delivery of our financial targets and is the focus of our detailed and active management approach.

Structure

Development	Business steering committees, business sponsors, IS project managers
Operations	Business process owners, Account Managers, Service Delivery Managers
Governance	Risk Management Committee, functional leadership, ISFM, Career Centres, ISHR Organization

Internal Economy

- IS expense budgets are allocated to lines of business and specific activities, these allocations act as expense caps
- IS is accountable to manage within its budget (gatekeeper role)
- Business leaders cannot spend above their IS budget without executive approval

Methods & Tools

Financial	SAP, TeamPlay, MICS, Remedy
Human Resources	TimeControl, SEI-PCMM
Assets	Applications / Data Inventory, Remedy

Metrics & Rewards

Financial	Expense management, unit cost targets
Human Resources	Utilization / "billable" ratios, blended labor rates, benchmark staffing ratios
Assets	Managed seat costs, recovery for assets
Rewards	Tied to management incentives at all levels

Culture

- Strong belief in internal expense management capability
- Decided preference for internal sourcing and control
- Expectation of managers to know / be engaged at a detailed level and be fiscally responsible

IT Governance Focus Areas



Risk Management

- Requires risk awareness of senior corporate officers, a clear understanding of the enterprise's appetite for risk and transparency about the significant risks to the enterprise
- Embeds risk management responsibilities in the operation of the enterprise
- Addresses the safeguarding of IT assets, disaster recovery and continuity of operations

In 2003, 34% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 73%.

Risk Management



Risk management is approached by selecting an acceptable risk level based upon the detailed assessments of exposure, probability of occurrence, compliance to legal or regulatory requirements and emerging industry good practice vs the cost of mitigating the risk.

Structure

Executive	Executive Committee sponsorship, Risk Committee oversight
Risk Management	IS Risk Management Office with focus on risk assessment, security, privacy, DR, compliance and process / quality management
Supplier Management	Vendor Relations Team focuses on leveraged purchasing and contractual risks

Internal Economy

- ☛ Governance improvements are structured as internal IS initiatives and compete for approval with business projects
- ☛ Scrutiny is also focused on the total expenditures on risk management activities

Methods & Tools

Risk Management	Formal Enterprise Risk Management Program
Security	COBIT, ISO 17799
Disaster Recovery	COBIT, E & Y maturity framework
Control	COBIT, COSO

Metrics & Rewards

Progress Results	Avoidance of major incidents (nonoccurrence, response), compliance levels, Security Performance Indicator
Rewards	Measured through initiative completions, domain level maturity assessments and audits

Culture

- ☛ Willingness to accept reasonable level of risk
 - ☛ Risks must be explained in detail and target maturity levels justified
 - ☛ Risk management viewed as overhead, value proposition is challenging
- Tied to incentive based on results, progress and quality of assessments

IT Governance Focus Areas



Performance Measurement

- Tracking project delivery and monitoring IT services
- Using balanced scorecards that translate strategy into action to achieve goals measurable beyond conventional accounting
- Measuring those relationships and knowledge-based assets necessary to compete in the information age: customer focus, process efficiency and the ability to learn and grow

In 2003, 34% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 67%.

Performance Measurement

The Focus

IS Strategy

Development Projects

Operations Support

IS Governance Expenditures

Performance measurement is an essential element of the management discipline to drive delivery, validate the effectiveness of business and I.S. strategy and to trigger management rewards based on company performance and individual contributions to its achievement.

Structure

Strategy	IS Executive Committee, ISFM, Process Management function
Development	IS Project Managers, IS Project Management Office
Operations	Account Managers, Service Delivery Managers, Service Management Process
Governance	Risk Management Organization, Internal Audit, Compliance Officers

Internal Economy

- Measurement investments are reviewed along with other control costs
- Measurement systems must demonstrate that control information is actionable and costs do not exceed the value obtained.

Methods & Tools

Strategy	IS Balanced Scorecard, COBIT
Development	Major Projects Review methodology
Operations	Operations Management Report by LOB, COBIT, ITIL
Governance	COBIT

Metrics & Rewards

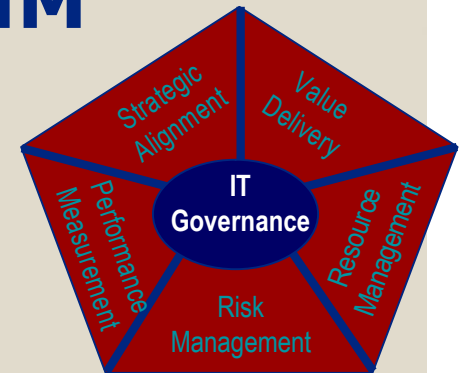
Metrics	Measurable outcomes are required for all management objectives
Rewards	Rewards and bonuses are only triggered when results are measured

Culture

- Belief: "If you cannot measure it, you cannot manage it"
- "Show me" culture, insistence on demonstrable results
- "We deliver on our commitments"

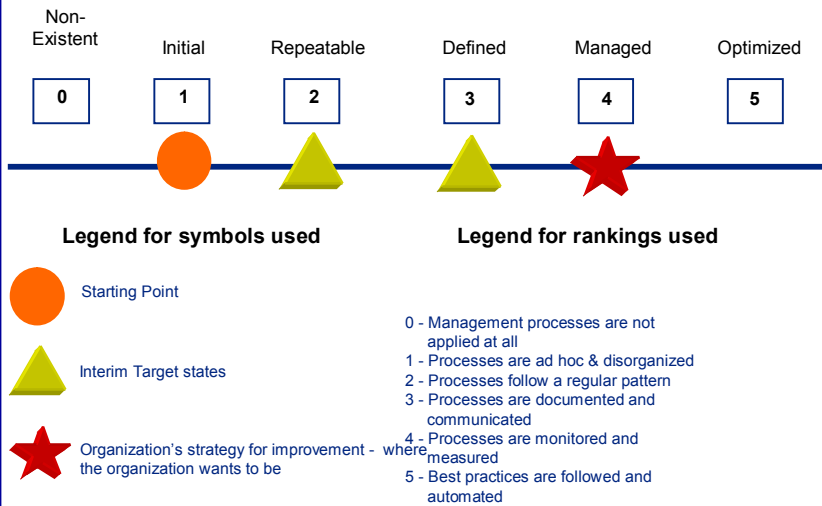
Measuring Progress—CMM

How far we've come...

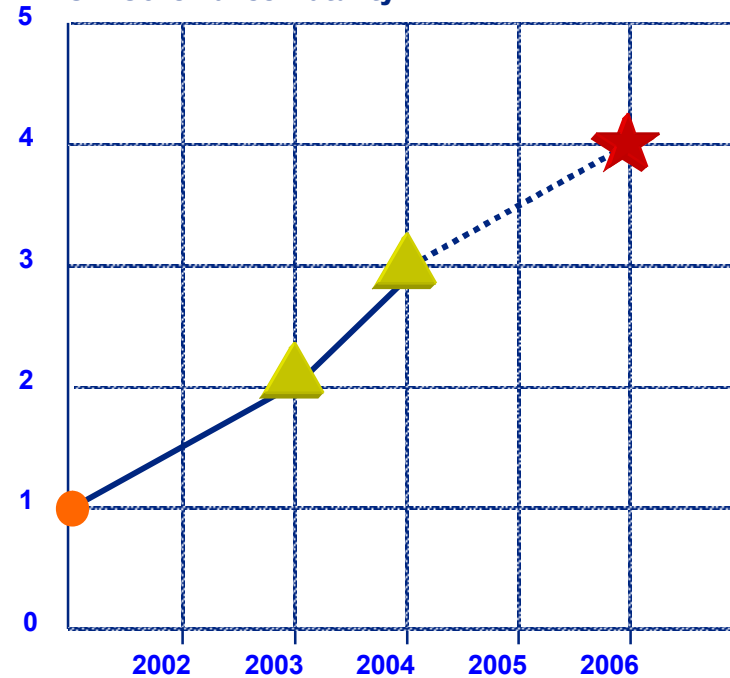


I.S. Governance Assessment

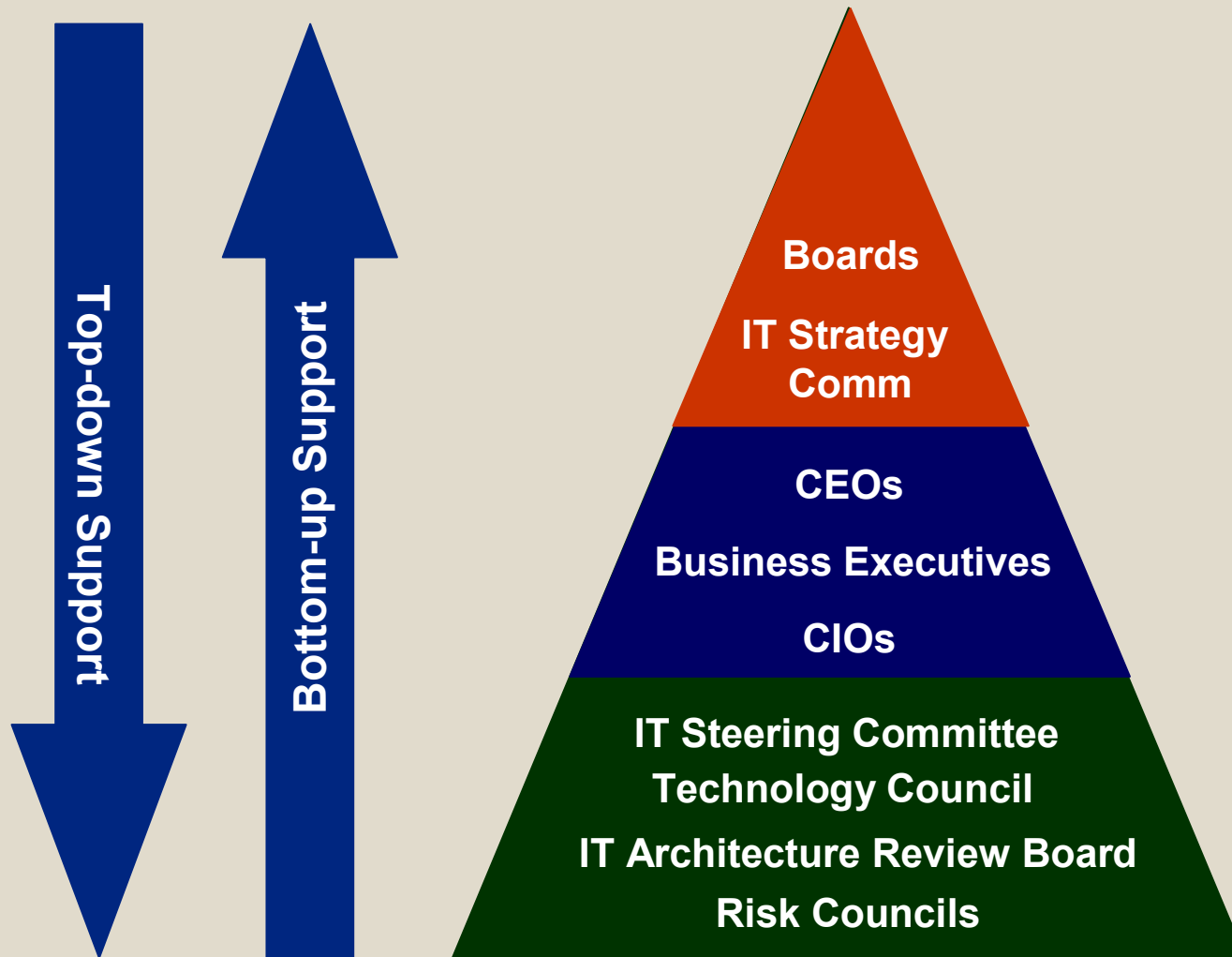
Maturity Model Applied: CobiT 3 Management Guidelines



GLI Governance Maturity

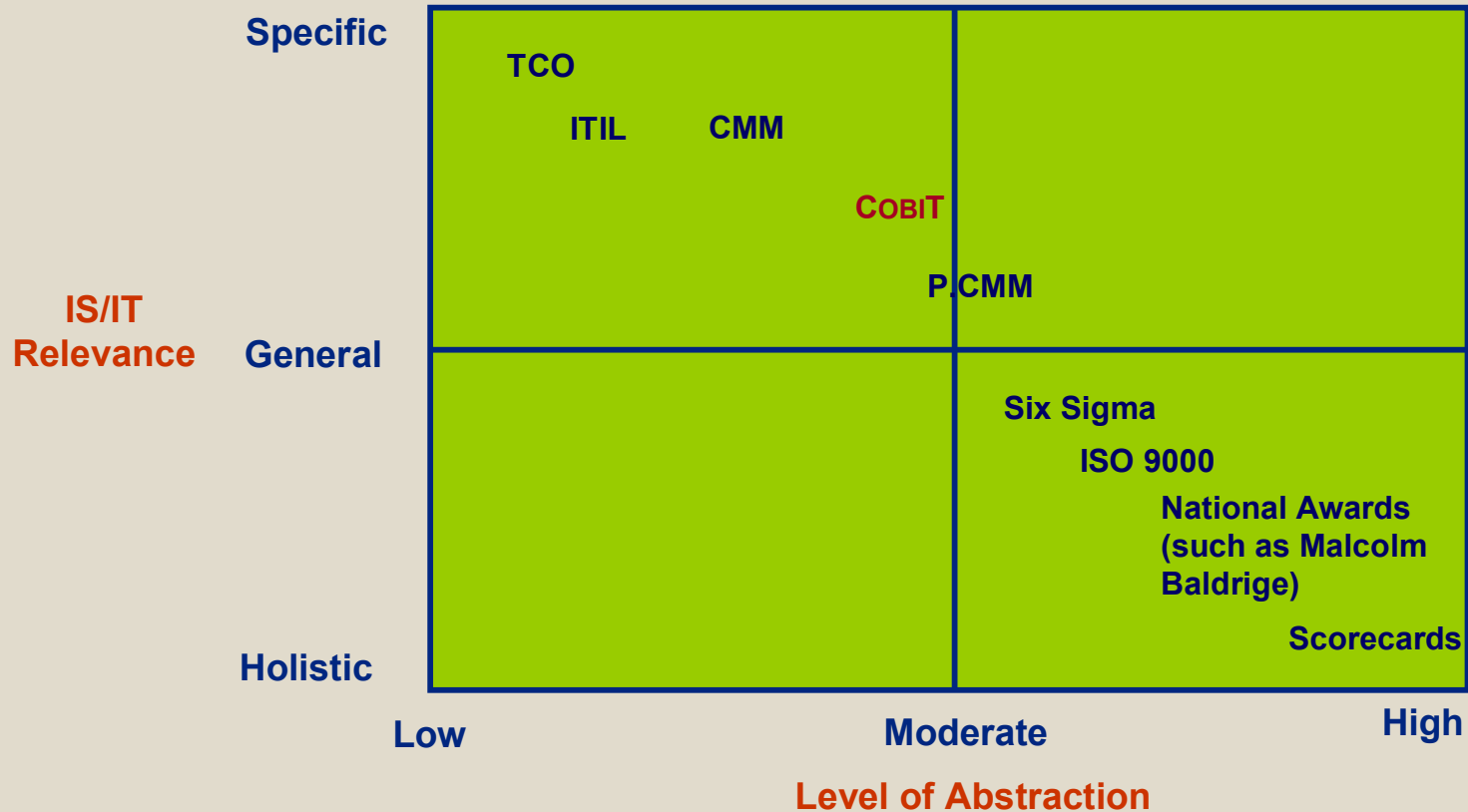


Implementation Guide: Roles and Responsibilities



Implementation Guide: Framework

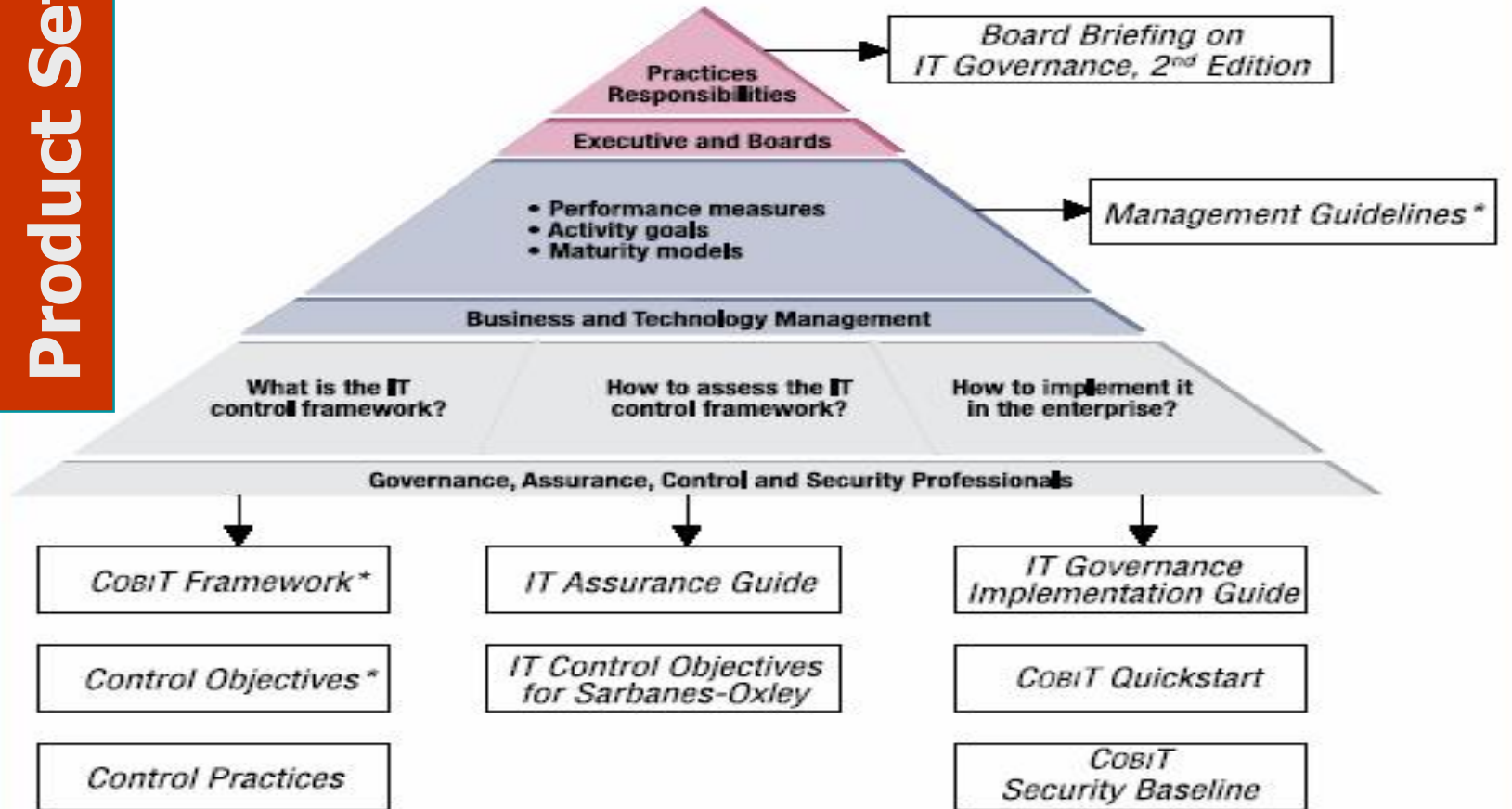
Model Selection Matrix



Source: Gartner Research, June 2003

Implementation Guide: COBIT

Product Set

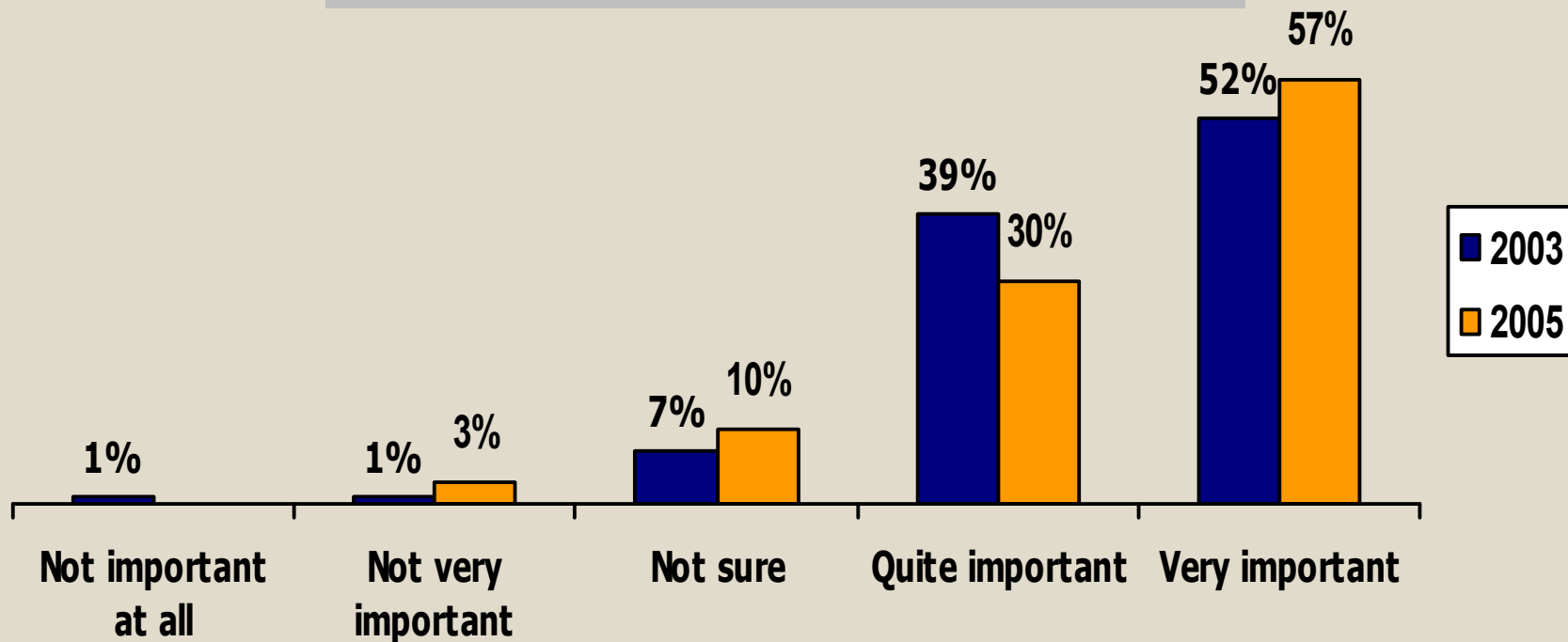


* Now integrated into COBIT 4.0

Free download at www.itgi.org

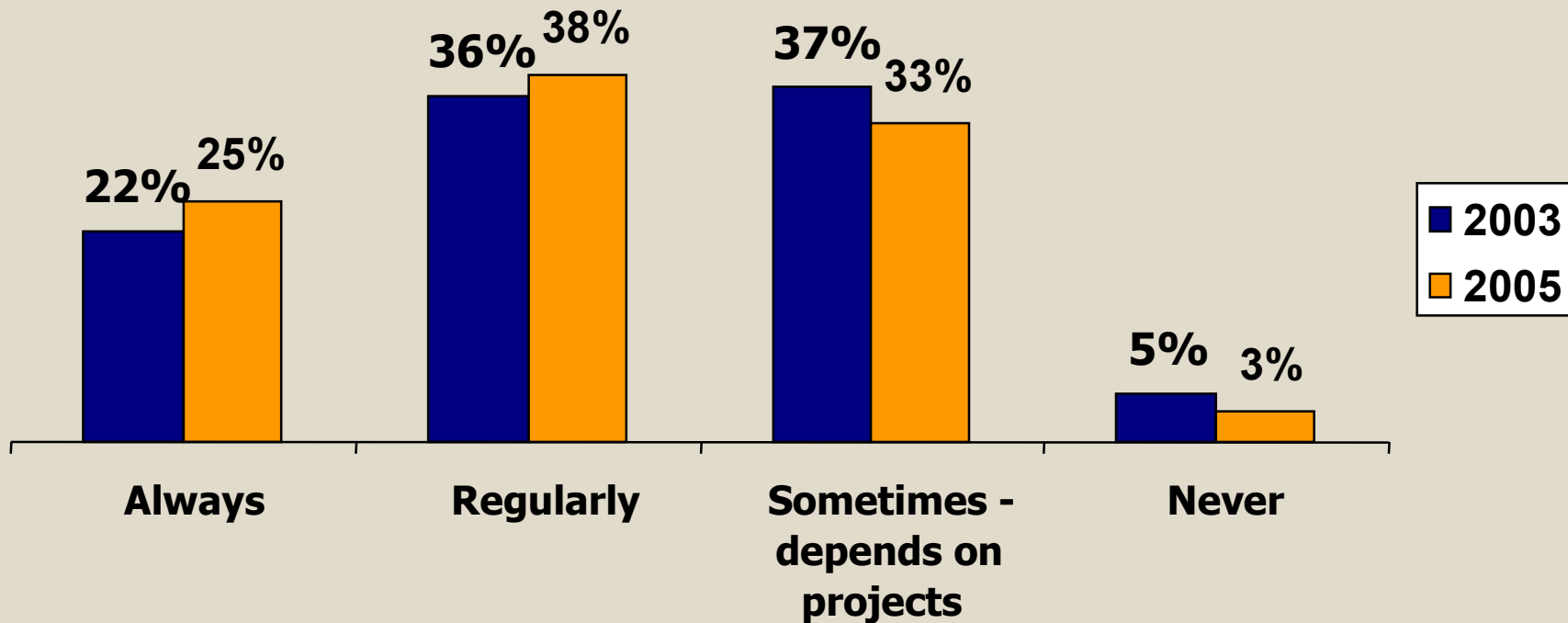
IT Governance Global Status Report

Importance of IT for Overall Strategy Delivery



IT Governance Global Status Report

Frequency of IT on Board's Agenda



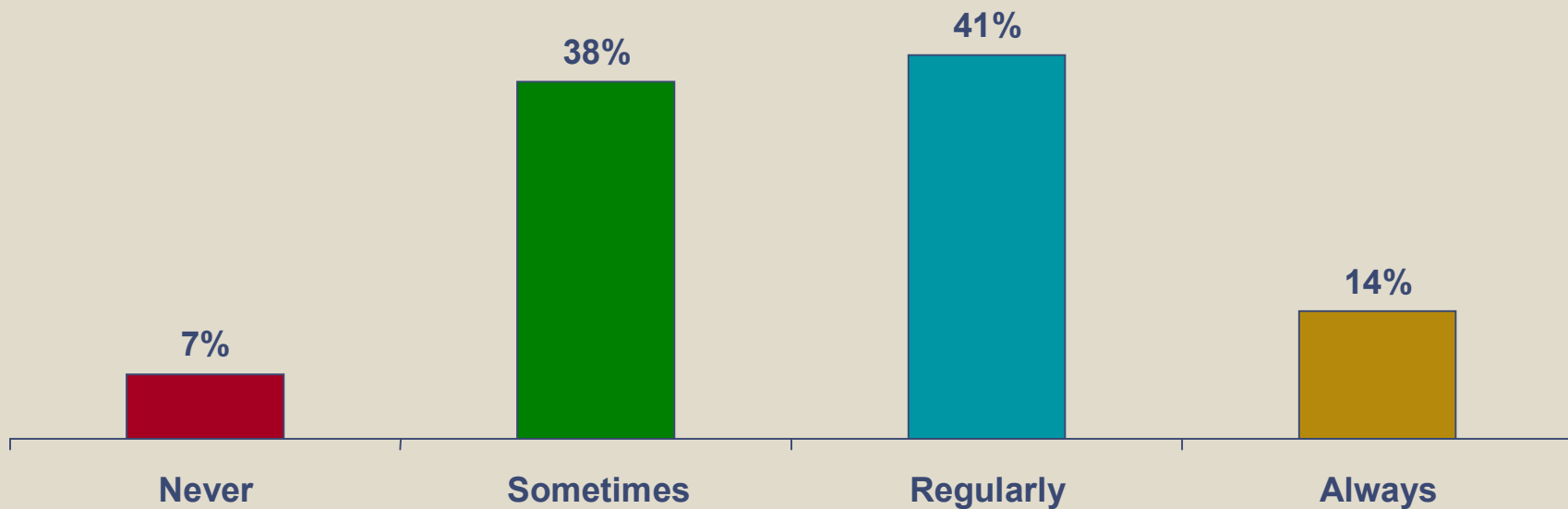
IT Governance Global Status Report

IT Investments Outcome



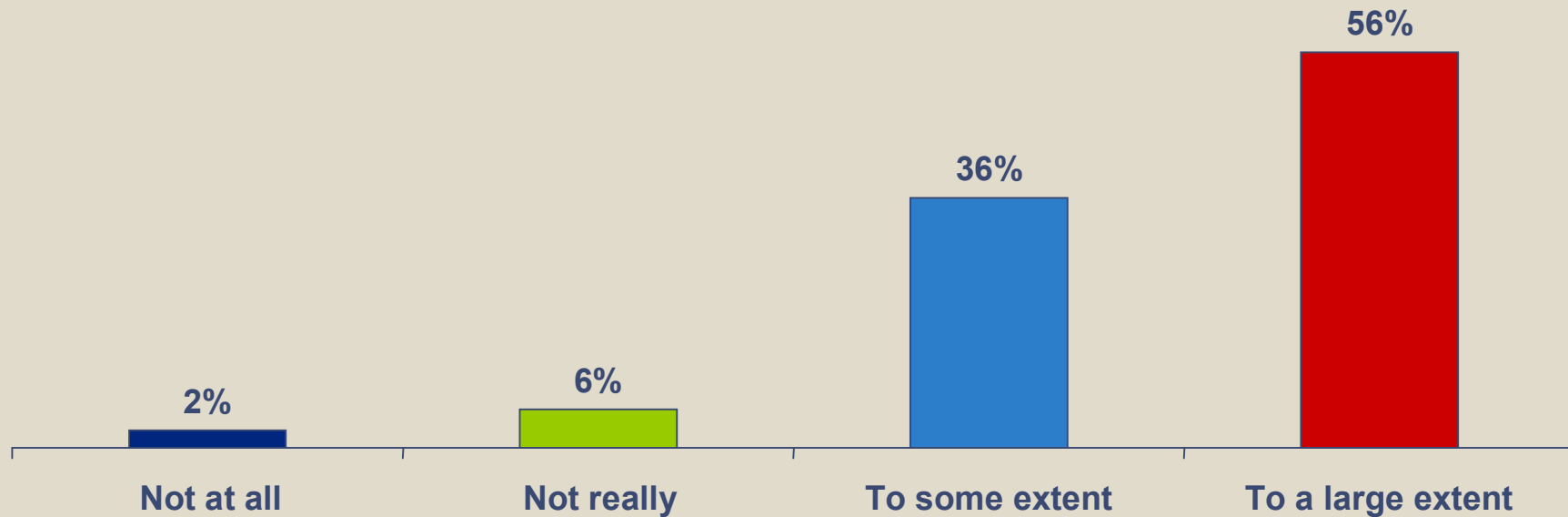
IT Governance Global Status Report

Communication from IT to the Business



IT Governance Global Status Report

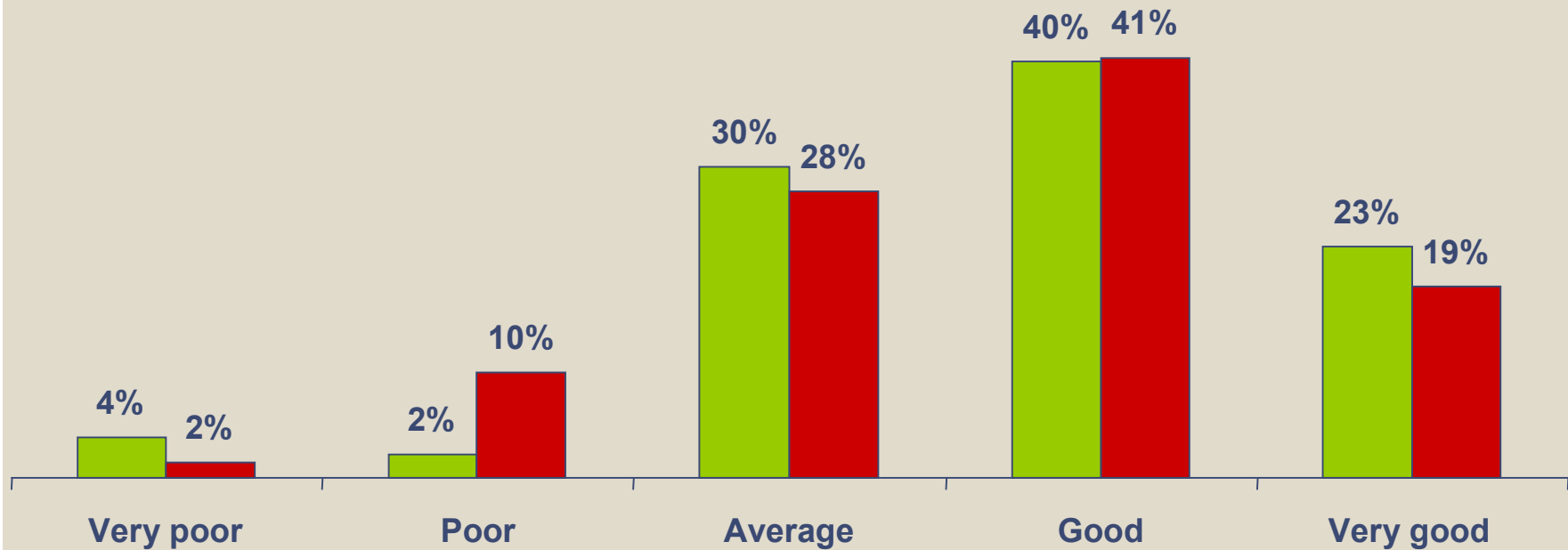
IT Department's Understanding of Business Users' Needs



IT Governance Global Status Report

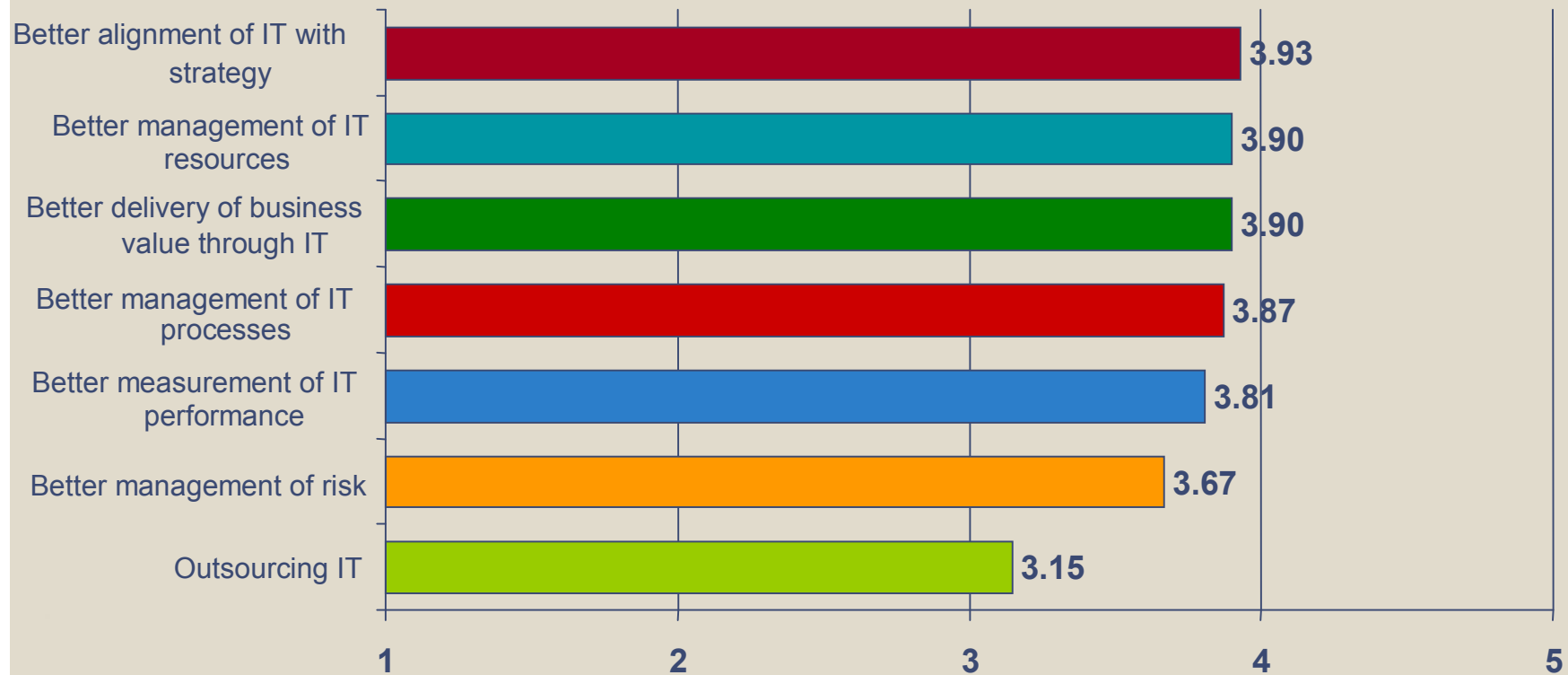
Fit Between IT Plan and Business Strategy

■ General Management ■ IT Management



IT Governance Global Status Report

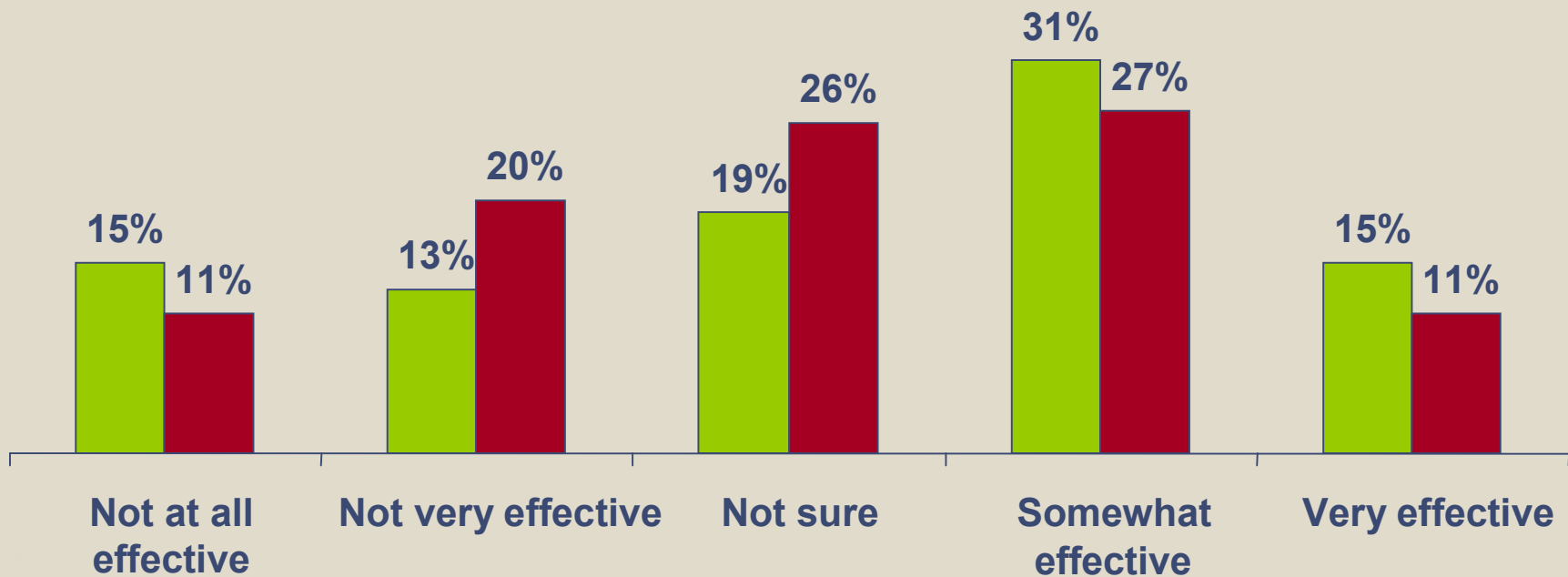
Effectiveness of High-level Measures



IT Governance Global Status Report

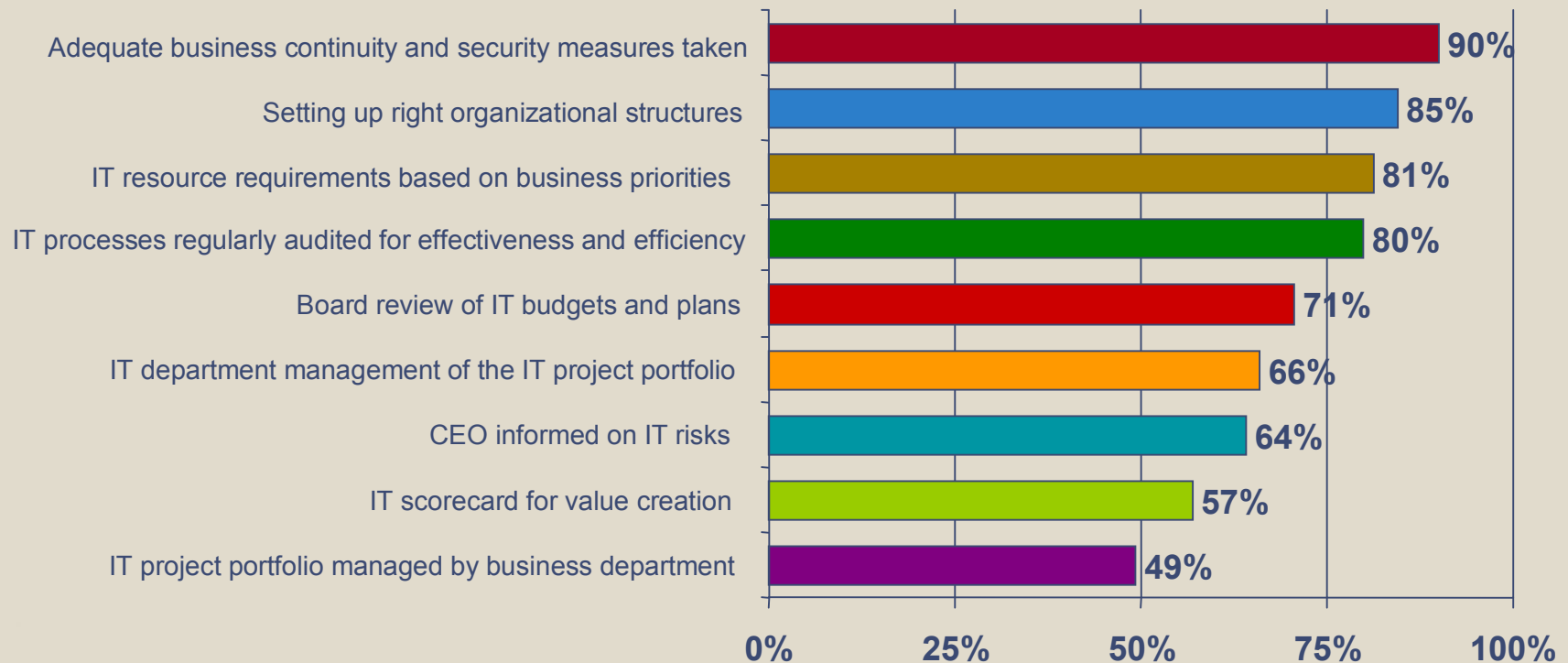
Effectiveness of IT Outsourcing, by Job Function

■ General Management ■ IT Management



IT Governance Global Status Report

IT Governance Practices



“ We're going to have to recognize there's a revolution, and if you don't take action, there's a threat of more legislation like Sarbanes-Oxley that would require companies to provide more disclosure on IT investments, and the risks of these investments. ”

—Harvard Business School Professor Emeritus Richard L. Nolan

Ten Questions To Ask the Board

1. Is the company getting adequate return from its investment in information resources?
2. Does the firm have the appropriate IT to exploit its intellectual assets?
3. Does the firm have management practices to guard against technology obsolescence?
4. Does the company have adequate security to protect its information assets?
5. Does the company have management processes to ensure 24/7 service levels?
6. Are processes in place to exploit discovery and execution of IT strategic opportunities?
7. Are processes in place to ensure that an IT failure will not damage the business?
8. Is benchmarking a standard practice to ensure the company's competitive cost structure?
9. Are procedures in place to ensure against costly lawsuits?
10. Are processes in place to ensure against IT-based surprises to senior management?

Thank You!

Marios Damianides, Partner

Ernst & Young LLP

5 Times Square, New York, NY 10036 USA

Phone: +1.212.773.5776

E-Mail: marios.damianides@ey.com

ITGI Past International President

3701 Algonquin Road, Suite 1010

Rolling Meadows, IL 60008 USA

Phone: +1.847.253.1545

Fax: +1.847.253.1443

E-mail: info@itgi.org

Web site: www.itgi.org