



IT Governance

Common Sense, Not Common Practice

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IT Governance

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- What makes IT Governance so important?
- What is IT Governance?
- COBIT– The IT Governance framework
- COBIT and Other Frameworks
- The COBIT Framework Evolution
 - How business drives IT
 - Value Management
 - Extended Practices
 - Supporting Products
- A Value Management Audit Approach
- Conclusions



What makes IT Governance so important?

Business and Operational Management want Value Transparency and Risk Mitigation

	2003	2005
Inadequate view on how well IT is performing	1	4
Operational failures of IT	2	3
Amount of security problems and incidents	3	7
High cost of IT with low return on investment	4	2
IT staffing problems	5	1
Lack of knowledge of critical systems	6	-
Disconnect between IT strategy and business strategy	7	6
Unmanaged dependencies on entities beyond own control	8	5
IT not meeting compliance requirements	-	8

- More Problems (operational ↑; security ↓)
- Transparency still an issue but shift to value
- Alignment slightly better
- Compliance top of agenda

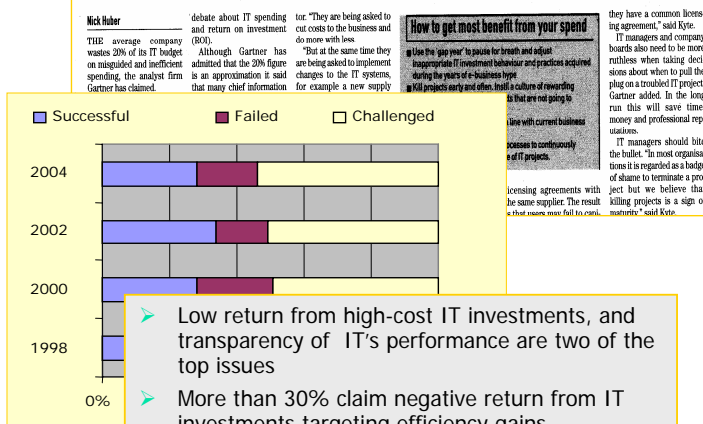
Surveys by PwC for the IT Governance Institute Sep-Oct2003 and Sep-Oct2005



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What makes IT Governance so important?

Gartner: firms waste \$351bn each year on ill-conceived IT projects



- Low return from high-cost IT investments, and transparency of IT's performance are two of the top issues
- More than 30% claim negative return from IT investments targeting efficiency gains
- 40% do not have good alignment between IT plans and business strategy
- Interest in and use of active management of the return on IT investment has doubled in 2 years (28 to 58%)

- Gartner – more than 600 billion \$ thrown away annually on ill conceived or ill executed IT projects
- Standish Group – about 20% of projects fail outright, 50% are challenged and only 30% are successful
- ITGI 2005 Survey early findings confirm concerns



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What makes IT Governance so important?

- Financial Reliability
- Information Privacy
- Operational Risk
- Shareholder confidence
- Investor trust



NEEDS

- Transparent, accountable and effective governance
- Awareness of corporate officers of the risk to and dependence on the information infrastructure
- More frequent, broader and deeper assurance about risk, information integrity and internal control

What makes IT Governance so important?

In October 2005 Mc Kinsey and the London School of Economics measured the increase in productivity from investments in IT versus investments in management practices in 100 enterprises.



**Additional spending in Information Technology can raise productivity.....
.....but only in well managed companies!**

¹For 9 out of 10 companies whose management-practices scores and levels of IT deployment are both in top quartile.

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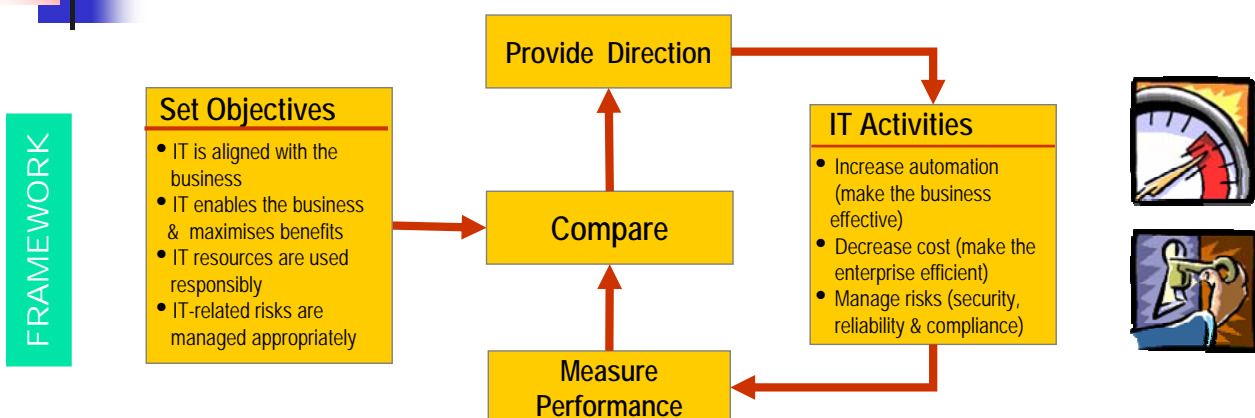


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What is IT Governance?



- Objective: ensure that IT enables, sustains and extends the organisation's strategies and objectives
- Method: providing direction and exercising control
- Content: Leadership, organisational structures and processes
- Responsibility: board of directors and executive management



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What is IT Governance?

Board Briefing on IT Governance, 2nd Edition

- IT Governance : Definitions, facts, approach
 - ◆ Framework
 - ◆ Definitions
 - ◆ Five domains : Value and Risk focus
- Toolkit
 - ◆ Questions to ask
 - ◆ IT Governance Practices
 - ◆ Metrics to consider
- Supporting material
 - ◆ IT Strategy committee charter
 - ◆ IT Governance implementation advice
 - ◆ Roles and responsibilities of key players

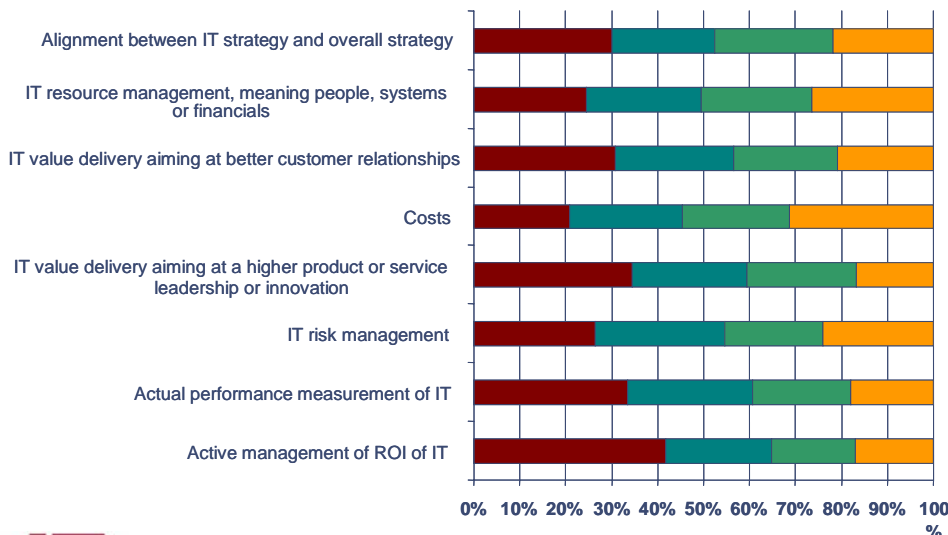


A free download at www.itgi.org

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What is being done about IT Governance?

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



+ Cost
+ Resources
+ Risk
- Value
- Performance



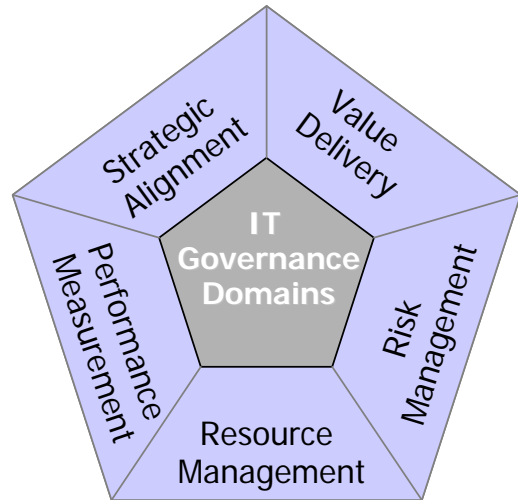
ITGI Survey of 700 CEO/CIO's worldwide by PwC – Oct 2005

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What is IT Governance?

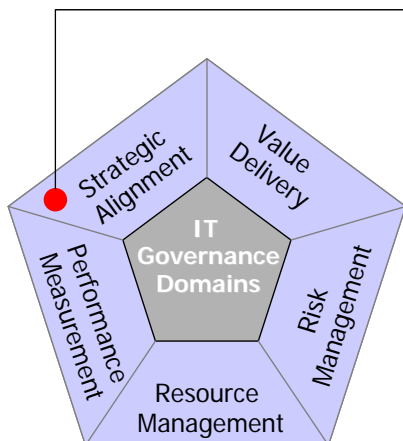
DOMAINS

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



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IT Governance – The Five Domains



Strategic Alignment

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

Best Practices

- Integrated approach to business/IT strategy
- Cascading strategy and objectives down into the organisation
- Co-responsibility of business and IT
- Business relationship managers
- Clearer objectives for IT investments
- IT Strategy & IT Steering Committees



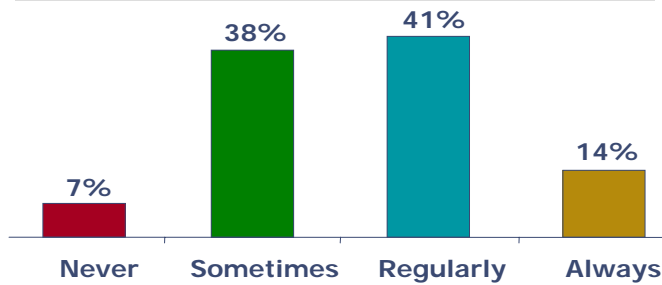
In 2003, 49% of respondents had implemented, were considering implementing or were in the process of implementing this phase of IT governance. In 2005, 70%.



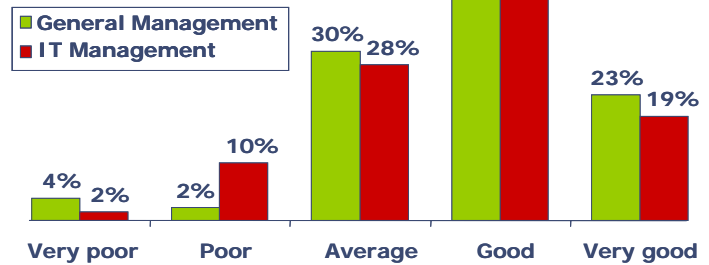
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IT Governance – Strategic Alignment

Communication from IT to the Business



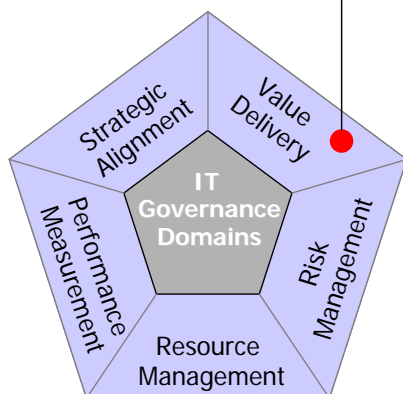
Fit Between IT Plan and Business Strategy



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IT Governance – The Five Domains



Value Delivery

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

Best Practices

- Clarify value, educate, involve stakeholders and manage perceptions
- Formal tracking of business value of IT
- Enabling effective value measurement (ROI, TCO, NPV...)
- Disciplined approach to project management with a larger role for the business
- Technology standardisation



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%.



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Risk and Value are very closely related

Sainsbury share price



Suffered major embarrassment and financial loss when their failure to implement fully and on time their major new logistic support system became public knowledge became public knowledge

MFI share price



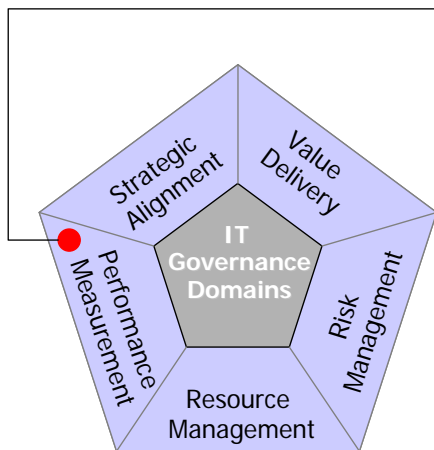
Share price drops following difficulties with the implementation of their SAP based warehousing and logistics system presenting them with significant issues with their order fulfilment.

... both have recovered well since then



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IT Governance – The Five Domains



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 relationships and assets necessary to compete: customer focus, process efficiency and the ability to learn and grow

Best Practices

- IT Balance Scorecard as emerging reporting system
- A management reporting system that feeds back into the strategy
- The most effective means to achieve IT and Business alignment
- IT Scorecard approval by the key stakeholders for alignment

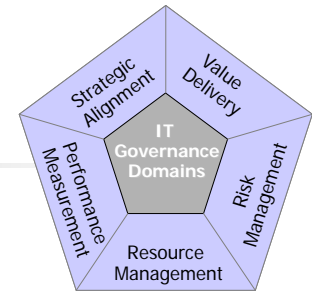


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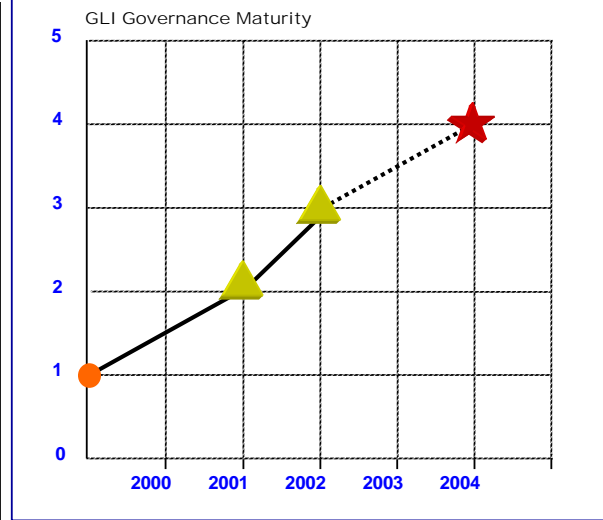
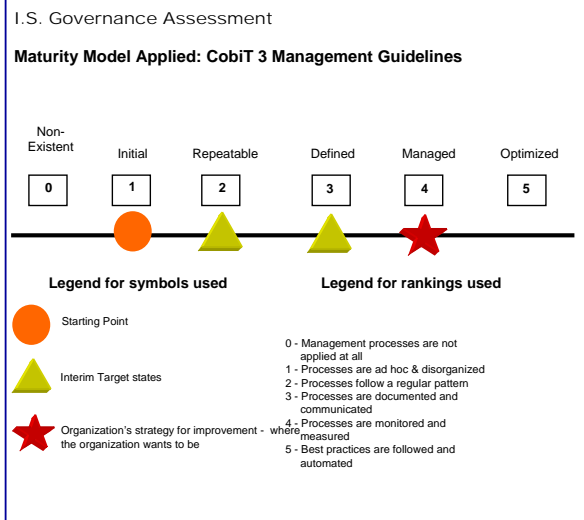


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Measuring Progress



How far we've come...



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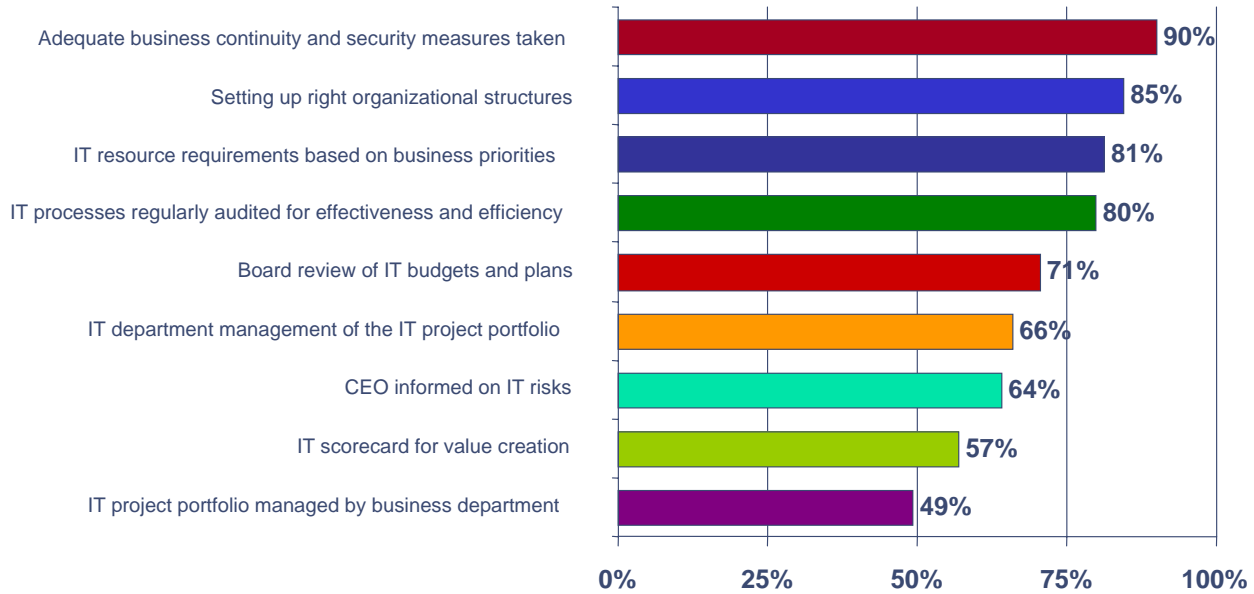
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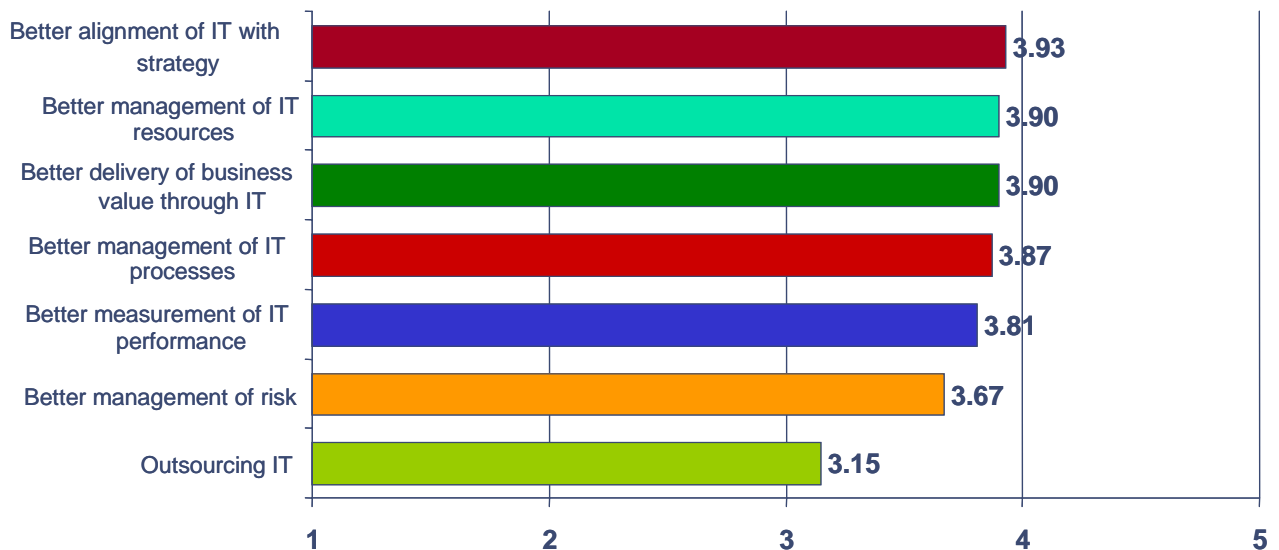
Which IT Governance Practices are in use?



ITGI Survey of 700 CEO/CIO's worldwide by PwC – Oct 2005

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Which IT Governance Practices are effective?



ITGI Survey of 700 CEO/CIO's worldwide by PwC – Oct 2005

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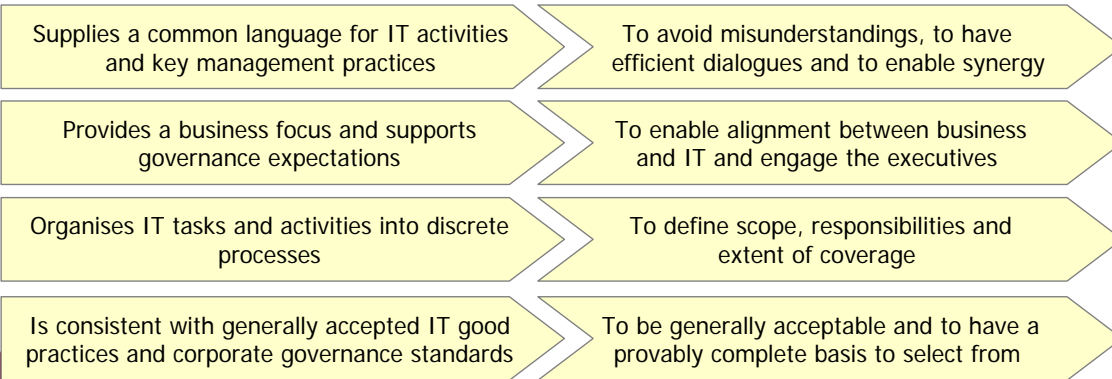
Why does IT Governance need a framework?



To deal with the complexities of not only ensuring that risks are mitigated, but also ensuring that objectives are achieved

- ▶ cost, time and functionality are as expected and promised benefits are returned
- ▶ risks are mitigated and resources are responsibly managed
- ▶ opportunities for process, product and services are leveraged

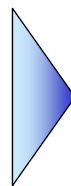
The solution: a management control framework that



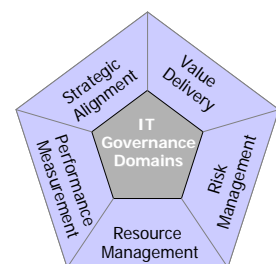
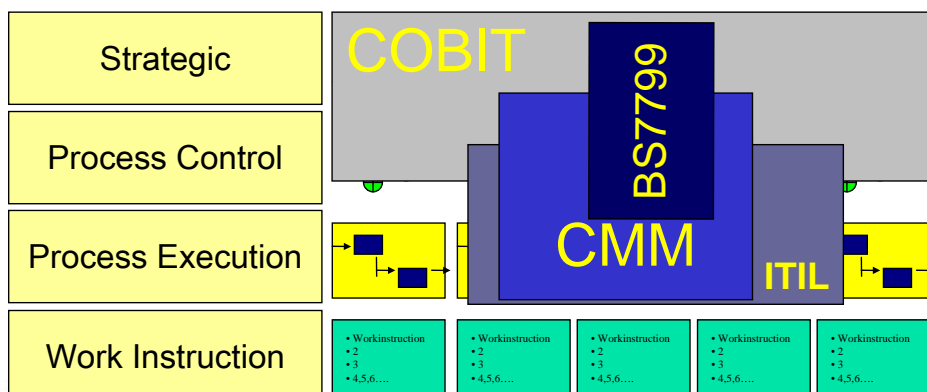
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IT Governance framework candidates

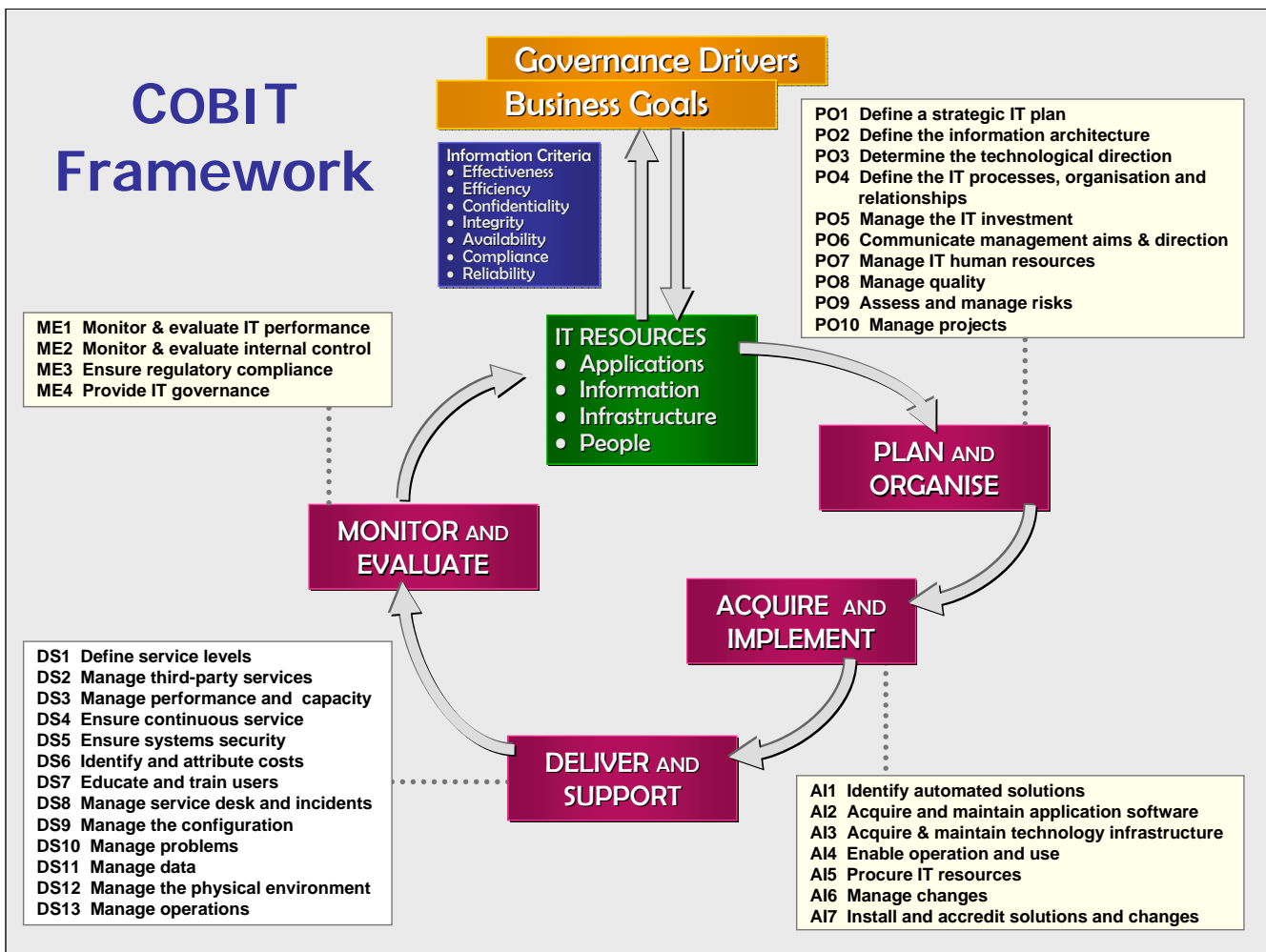
- /// ITIL for service delivery
- /// CMM for software development
- /// Prince2 for project management
- ///



- ▶ Governance
- ▶ Strategy
- ▶ Planning
- ▶ Value delivery
- ▶ Performance measurement
- ▶ Risk management
- ▶ Control and assessment



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COBIT - The Emerging IT Governance Framework

Each of the 34 IT processes, while referring to the major business requirement supported and the important resources leveraged, is provided with:

- **Control Objectives** describing the characteristics of a well governed process
- **Control Practices** providing more details on how to implement
- **Performance Metrics** to track process goals and actual performance
- **Critical Success Factors** for managing processes efficiently and effectively
- **Maturity Models** to support continuous improvement planning

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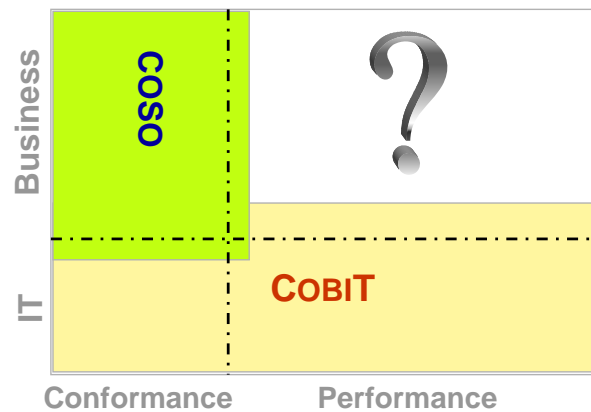
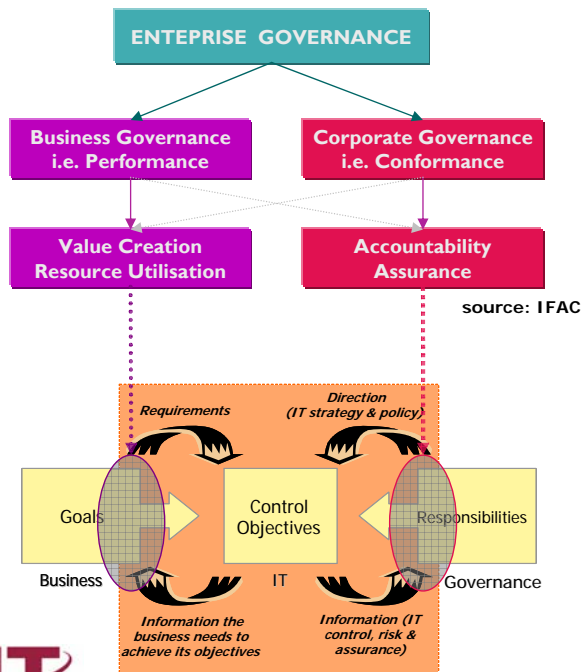


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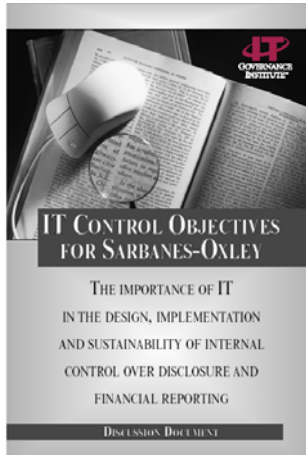
CobiT and COSO



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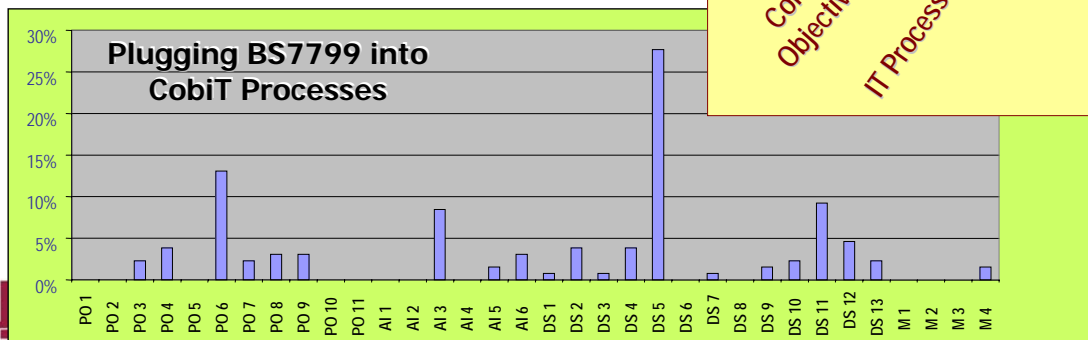
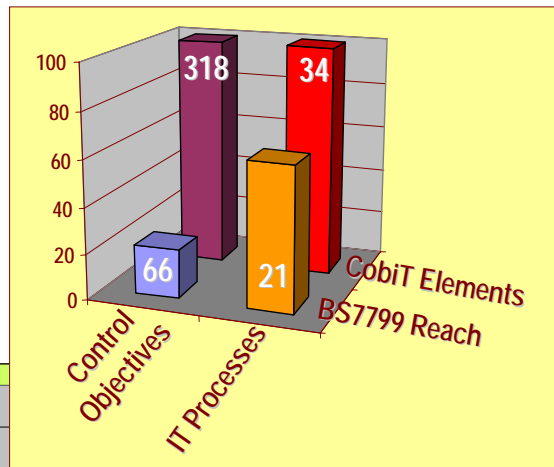
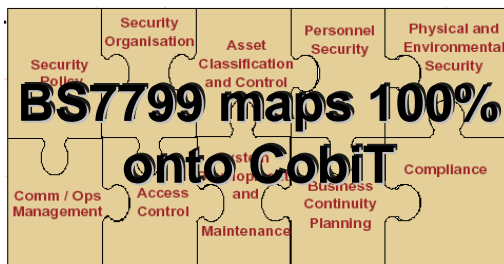
CobiT and COSO

Sarbanes-Oxley Compliance initiatives have shown that COSO and CobiT are complimentary.



CobiT Control Objectives	Control Environment	Risk Assessment	Control Activities	Information and Communication	Monitoring
Plan and Organize					
Define a strategic IT plan.		•		•	•
Define the information architecture.			•	•	
Determine technological direction.					
Define the IT organization and relationships.	•			•	
Manage the IT investment.					
Communicate management aims and direction.	•			•	•
Manage human resources.	•			•	
Ensure compliance with external requirements.				•	•
Assess risks.		•			
Manage projects.					
Manage quality.	•		•	•	•
Acquire and Implement					
Identify automated solutions.					
Acquire and maintain application software.			•		
Acquire and maintain technology infrastructure.			•		
Develop and maintain procedures.			•	•	
Install and accredit systems.			•		
Manage changes.			•		•
Deliver and Support					
Define and manage service levels.	•		•		•
Manage third-party services.	•	•	•		•
Manage performance and capacity.			•		
Ensure continuous service.			•		•
Ensure systems security.			•	•	•
Identify and allocate costs.					
Educate and train users.	•			•	
Assist and advise customers.					
Manage the configuration.			•	•	
Manage problems and incidents.			•	•	•
Manage data.			•	•	
Manage facilities.			•		
Manage operations.			•	•	
Monitor and Evaluate					
Monitor the processes.				•	•
Assess internal control adequacy.					•
Obtain independent assurance.					•
Provide for independent audit.	•				•

CobiT and ISO17799



CobiT and ITIL

Gartner Advisory

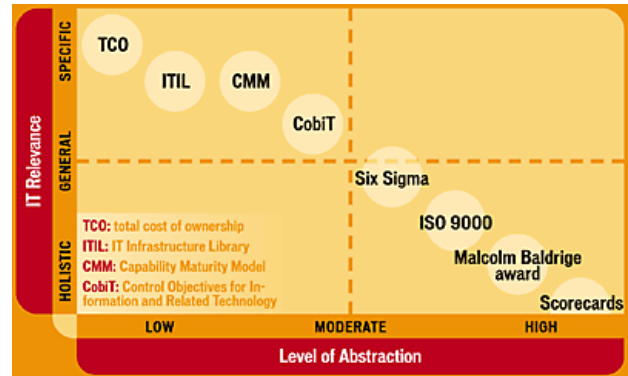
Tactical Guidelines, TG-16-1849
S. Mingay, S. Bittinger

Research Note
10 June 2002

Combine CobiT and ITIL for Powerful IT Governance

Strong framework tools are essential for ensuring IT resources are aligned with an enterprise's business objectives, and that services and information meet quality, fiduciary and security needs.

Bottom Line: CobiT and ITIL are not mutually exclusive and can be combined to provide a powerful IT governance, control and best-practice framework in IT service management. Enterprises that want to put their ITIL program into the context of a wider control and governance framework should use CobiT.

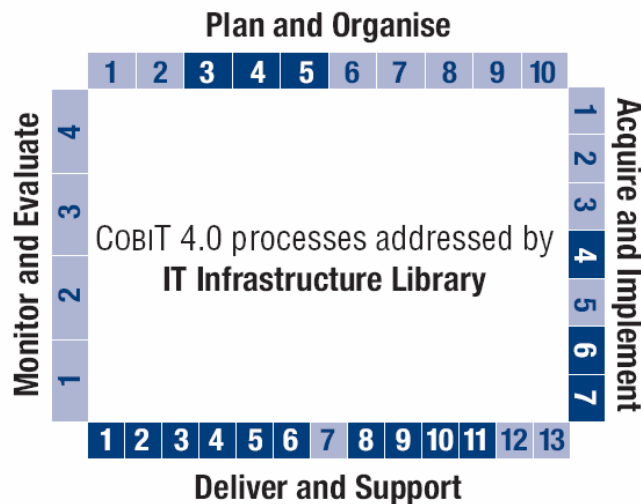
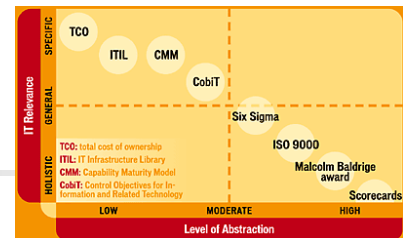


- CobiT and other standards
 - Integrator of technical standards
 - Interface to business standards
 - Generally accepted "de facto" standard



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CobiT and ITIL



Legend:

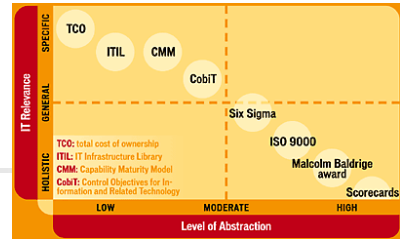
Requirements of the COBIT process are...

- ...frequently addressed
- ...not or rarely addressed



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CobiT, ITIL and ISO17799

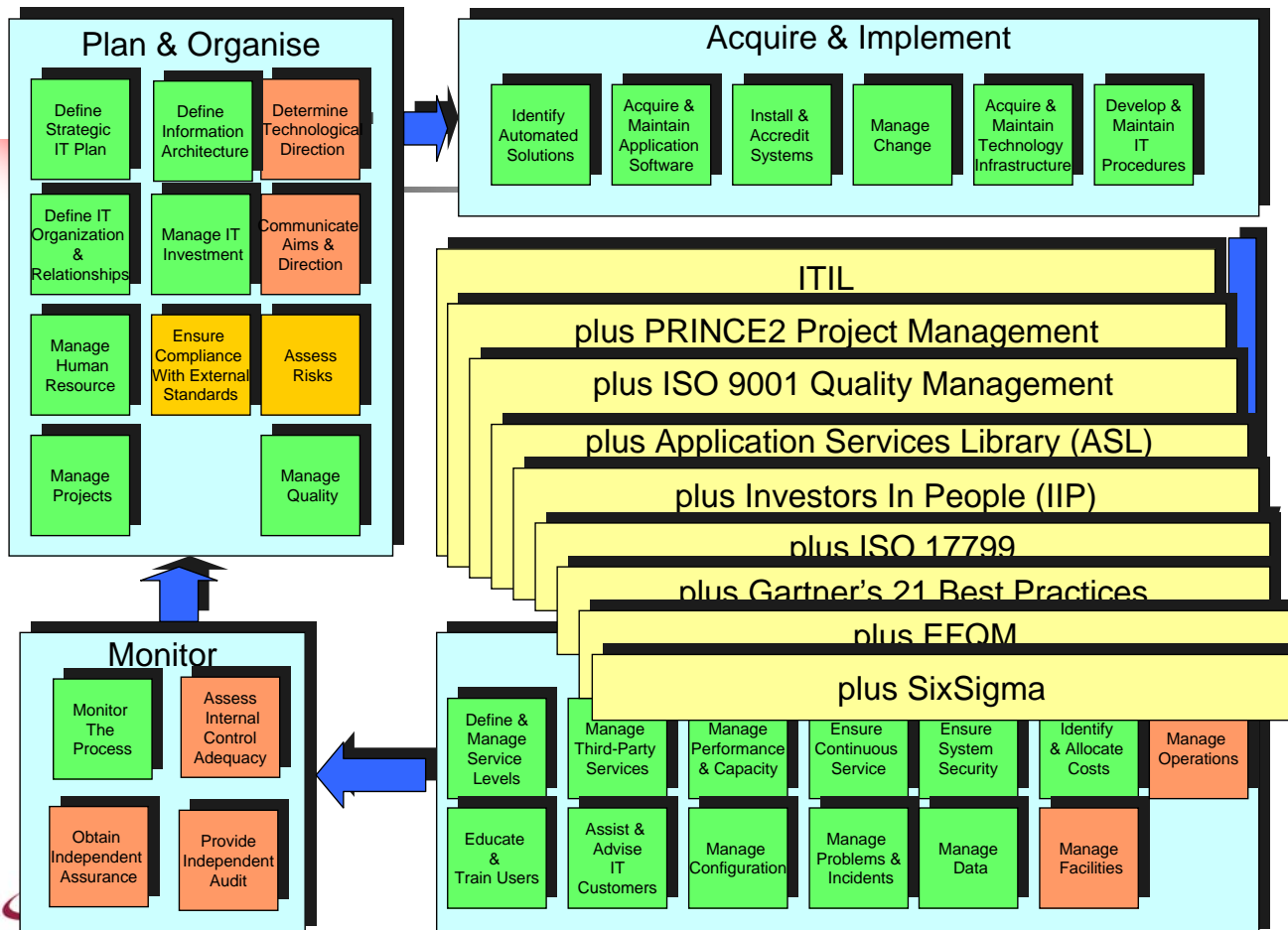


COBIT Domain: Acquisition & Implementation AI6: Manage Changes			
Managing changes With the business goal of minimising the likelihood of disruption, unauthorised alterations and errors... Is enabled by a management system which provides for the analysis, implementation and follow-up of all changes requested and made to the existing IT infrastructure			
COBIT Control Ref.	Keywords	ITIL mapping	ITIL mapping
Change Request initiation and Control	RFC; formal Change Management; Change categories; priorities; status; urgency	Basic concepts of Change Management (SS 8.3) Activities (SS 8.5)	8.5.1 Change control procedures
Impact assessment	Impact analysis (system & functionality); Change assessment	Scope of Change Management (SS 8.2) Impact & Resource Assessment (SS 8.5.6)	8.5.1 Change control procedures
Control of Changes	Change management; Software Control & Distribution; Configuration Management integrated; Changes recorded & tracked		8.5.3 Restrictions on changes to software packages 8.5.1 Change control procedures
Emergency Changes	Management assessment	Scope of Change Management (SS 8.2) Change Advisory Board (SS 8.3.2)	8.5.1 Change control procedures
Documentation and Procedures	Change implementation; documentation updates	Change Management (SS 2.2) Scope of Change Management (SS 8.2)	8.5.1 Change control procedures
Authorised Maintenance	System access rights; risk avoidance		8.5.1 Change control procedures
Software Release Policy	Release approval; sign-off; regression testing; handover	Scope of Release Management (SS 9.2)	8.5.1 Change control procedures
Distribution of Software	Internal controls; integrity; audit trails		8.5.1 Change control procedures

- Management Awareness
- Joint publication ITGI and OGC
- Maps CobiT to ITIL and ISO17799
- Follows the CobiT process structure
- Free download www.itgi.org



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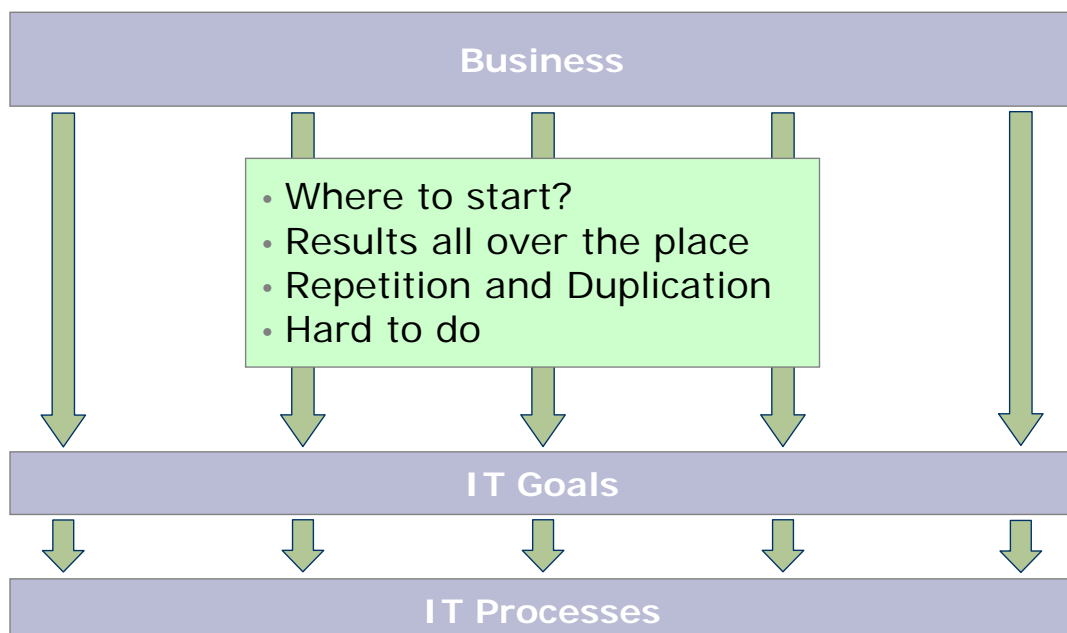
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How Do Governance and the Business Drive IT?

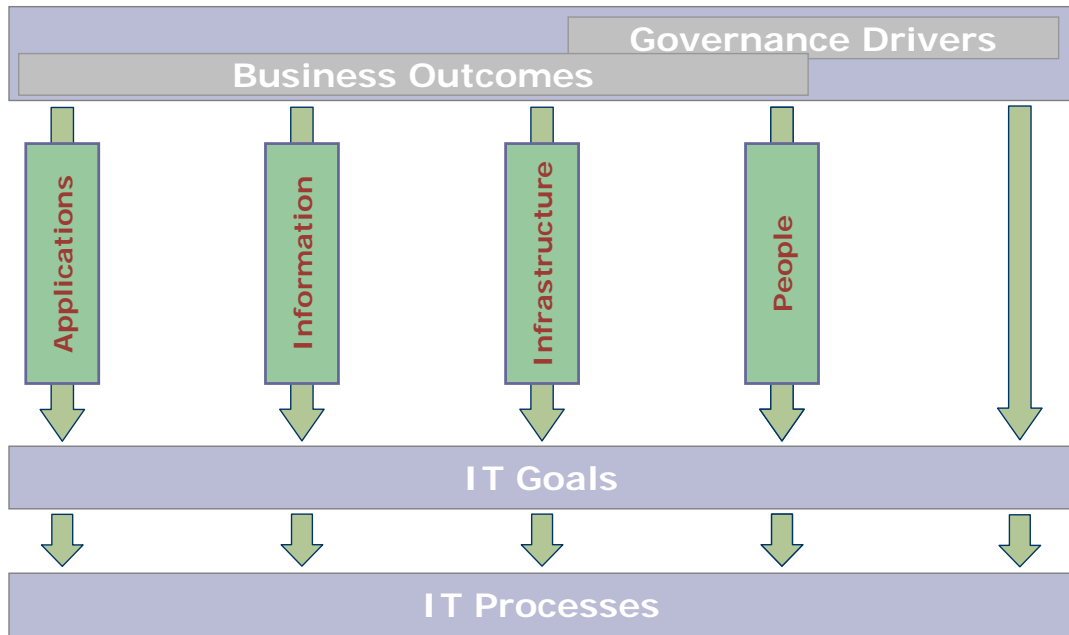
STRATEGIC ALIGNMENT RESEARCH



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How Do Governance and the Business Drive IT?

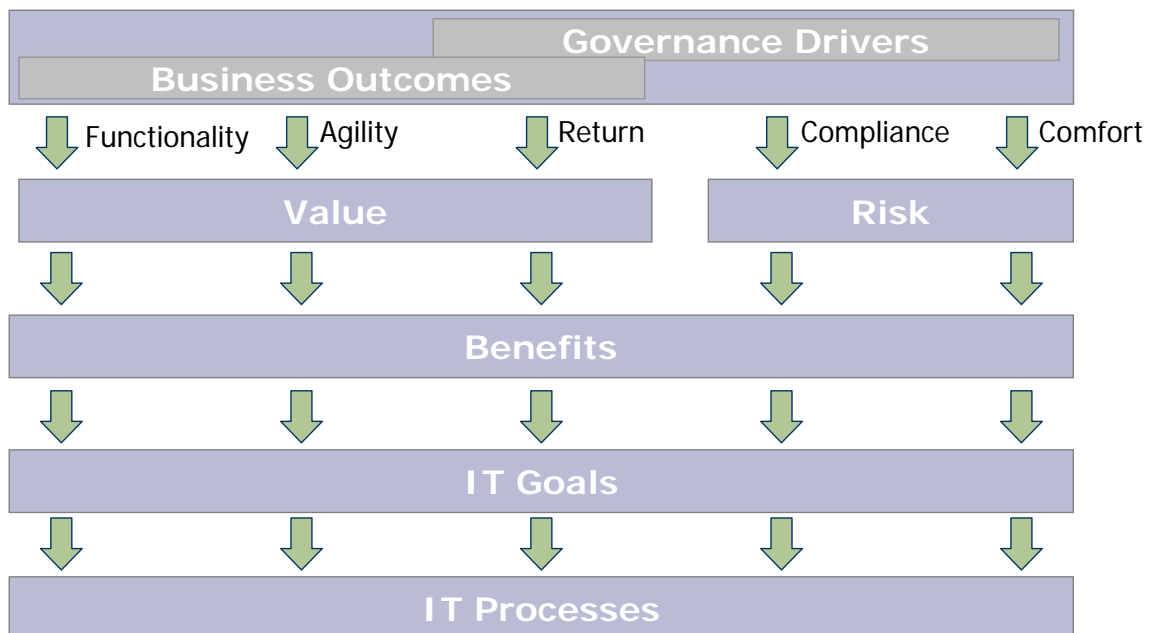
STRATEGIC ALIGNMENT RESEARCH



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How Do Governance and the Business Drive IT?

STRATEGIC ALIGNMENT RESEARCH



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How do governance and the business drive IT?

BUSINESS GOALS

Financial perspective	Expand market share
	Increase revenue
	Return on investment
	Optimise asset utilisation
	Manage business risks
Customer perspective	Improve customer orientation and service
	Offer competitive products and services
	Service Availability
	Agility in responding to changing business requirements (time to market)
	Cost optimisation of service delivery
Internal perspective	Automate and integrate the enterprise value chain
	Improve and maintain business process functionality
	Lower process costs
	Compliance with external laws and regulations
	Transparency
	Compliance with internal policies
	Improve and maintain operational and staff productivity
Learning and growth perspective	Product/business innovation
	Obtain reliable and useful information for strategic decision making
	Acquire and maintain skilled and motivated personnel



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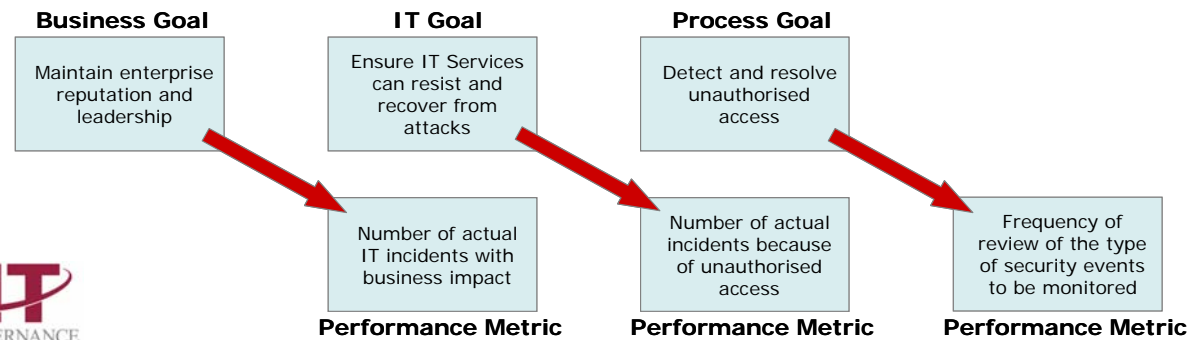
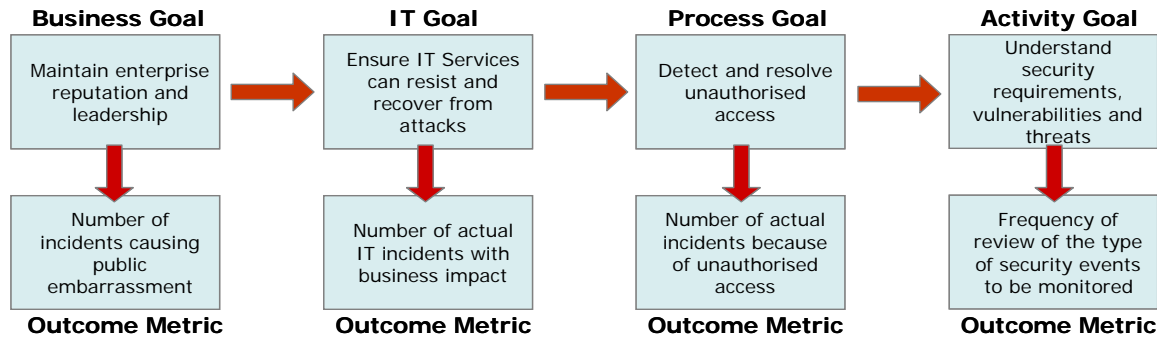
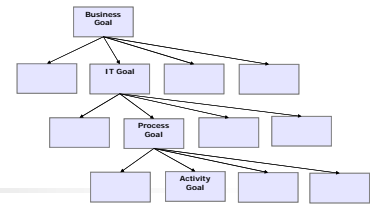
How do governance and the business drive IT?

IT GOALS

1	Respond to business requirements in alignment with the business strategy
2	Respond to governance requirements in line with board direction
3	Ensure satisfaction of end-users with service offerings and service levels
4	Optimise use of information
5	IT Agility
6	Define how business functional and control requirements are translated in effective and efficient automated solutions
7	Acquire and maintain integrated and standardised application systems
8	Acquire and maintain an integrated and standardised IT infrastructure
9	Acquire and maintain IT skills that respond to the IT strategy
10	Ensure mutual satisfaction of third-party relationships
11	Seamlessly integrate applications and technology solutions into business processes
12	Transparency and understanding of IT cost, benefits, strategy, policies and service levels
13	Ensure proper use and performance of the applications and technology solutions
14	Account for and protect all IT assets
15	Optimise the IT infrastructure, resources and capabilities
16	Reduce solution and service delivery defects and rework
17	Protect the achievement of IT objectives
18	Establish clarity of business impact of risks to IT objectives and resources
19	Ensure critical and confidential information is withheld from those who should not have access to it
20	Ensure automated business transactions and information exchanges can be trusted
21	Ensure IT services and the IT infrastructure can properly resist and recover from failures due to error, deliberate attack or disaster
22	Ensure minimum business impact in the event of an IT service disruption or change
23	Make sure that IT services are available as required
24	Improve IT's cost efficiency and its contribution to business profitability
25	Deliver projects on time and on budget meeting quality standards
26	Maintain the integrity of information and processing infrastructure
27	Ensure IT compliance with laws and regulations
28	IT demonstrates cost-efficient service quality, continuous improvement and readiness for future change



Goals and Metrics



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IT Governance

The IT Governance Institute

- ❖ Established by ISACA in 1998 to serve as "think tank" on IT governance principles and concepts
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- ❖ To promote through publications and forums, good practices for effective control and governance over IT based on original research

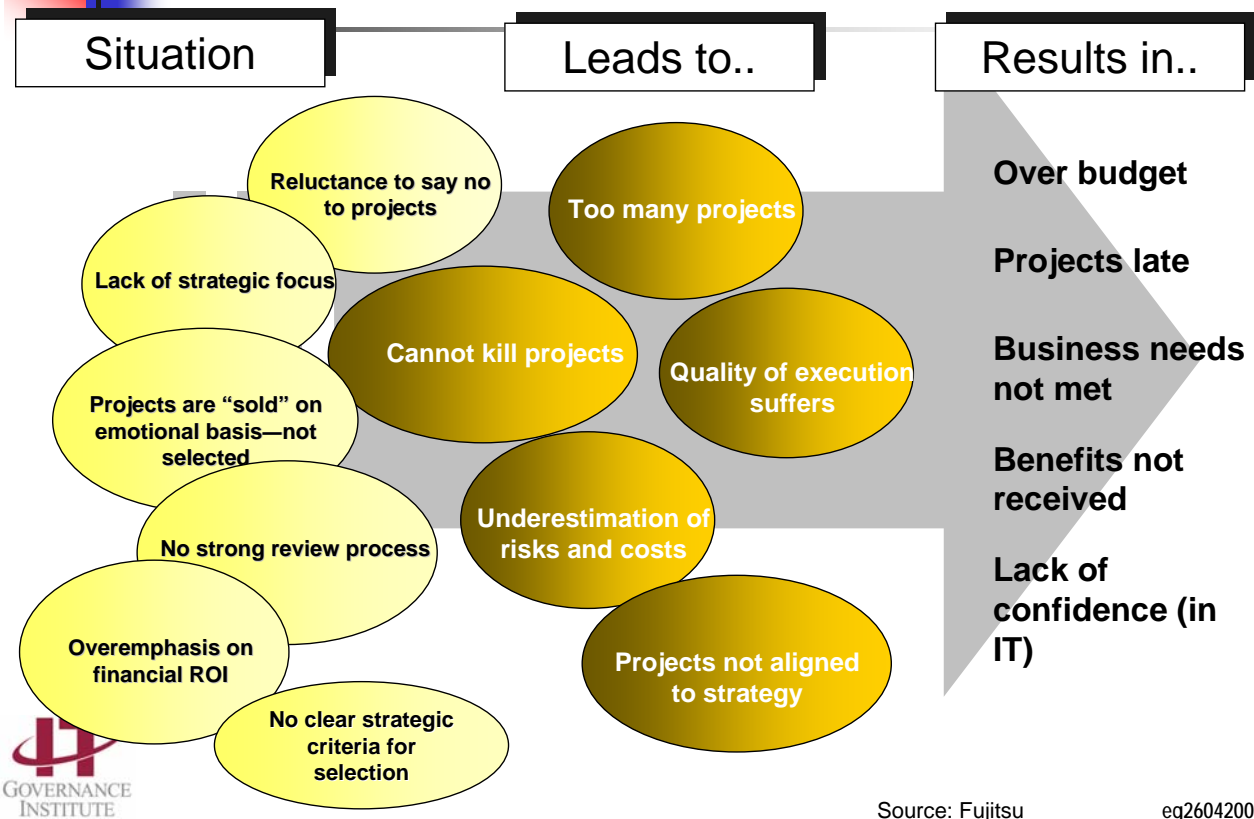
AGENDA

- What makes IT Governance so important?
- What is IT Governance?
- COBIT – The IT Governance framework
- COBIT and Other Frameworks
- The COBIT Framework Evolution
 - How business drives IT
 - Value Management
 - Extended Practices
 - Supporting Products
- A Value Management Audit Approach
- Conclusions



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Without Effective Value Governance...



CobiT - Research

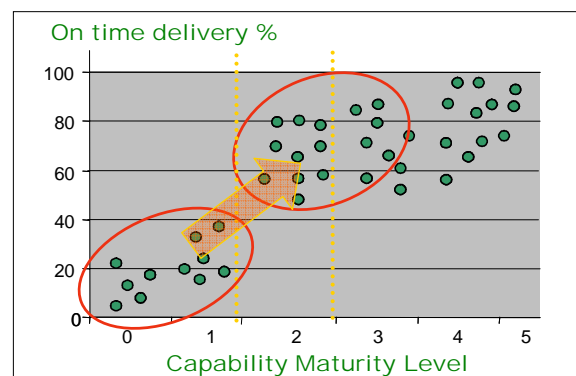
Key is the delivery of IT Value

COBIT Financials -- VALIT

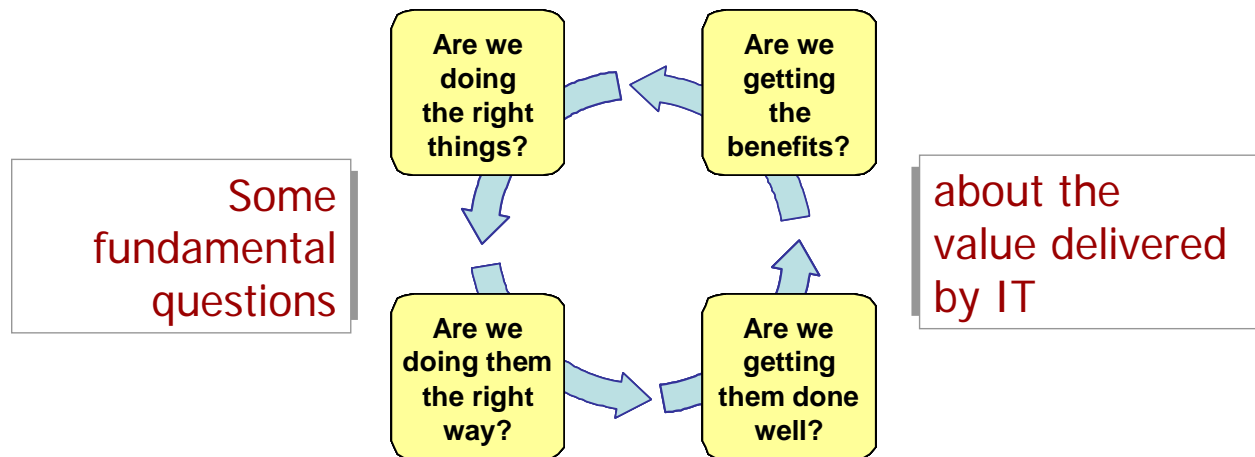
- Research, develop and promote a free internationally accepted set of good practices for optimising the value of IT enabled change through sound investment decisions, value transparency, cost optimisation and risk management, based on CobiT, supported with empirical data

- Principles
- Definitions
- Management Processes
 - IT Value Governance
 - Portfolio Management
 - Investment Management
- Control Objectives <> COBIT

- Comparison of cost vs. duration
- Correlation of delivery vs. capability



Val IT The 4 "Ares"



Val IT Principles

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

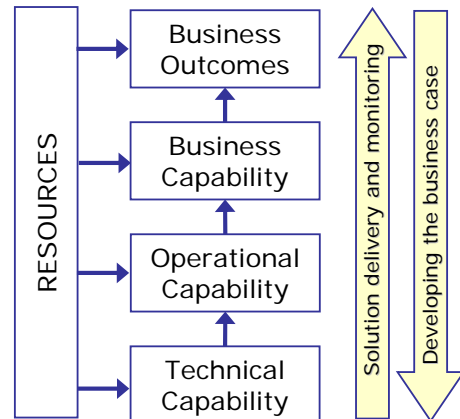
Val IT Project

Val IT is based on COBIT and deals with:

- Investment in IT-enabled business initiatives
- Taking a portfolio view of projects and programs
- Making and tracking business cases

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.)



Why Portfolio Management ?

- Portfolios and scorecards are the 'engine' of IT Governance, they provide a global view of programmes and resources

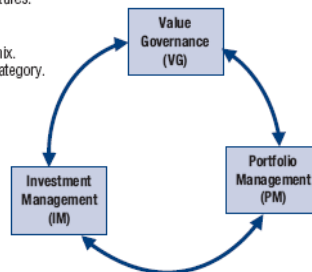


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Val IT Framework

3 Processes and 40 Key Management Practices

- VG1 Ensure informed and committed leadership.
- VG2 Define and implement processes.
- VG3 Define roles and responsibilities.
- VG4 Ensure appropriate and accepted accountability.
- VG5 Define information requirements.
- VG6 Establish reporting requirements.
- VG7 Establish organisational structures.
- VG8 Establish strategic direction.
- VG9 Define investment categories.
- VG10 Determine a target portfolio mix.
- VG11 Define evaluation criteria by category.



- IM1 Develop a high-level definition of investment opportunity.
- IM2 Develop an initial programme concept business case.
- IM3 Develop a clear understanding of candidate programmes.
- IM4 Perform alternatives analysis.
- IM5 Develop a programme plan.
- IM6 Develop a benefits realisation plan.
- IM7 Identify full life cycle costs and benefits.
- IM8 Develop a detailed programme business case.
- IM9 Assign clear accountability and ownership.
- IM10 Initiate, plan and launch the programme.
- IM11 Manage the programme.
- IM12 Manage/track benefits.
- IM13 Update the business case.
- IM14 Monitor and report on programme performance.
- IM15 Retire the programme.

- PM1 Maintain a human resource inventory.
- PM2 Identify resource requirements.
- PM3 Perform a gap analysis.
- PM4 Develop a resourcing plan.
- PM5 Monitor resource requirements and utilisation.
- PM6 Establish an investment threshold.
- PM7 Evaluate the initial programme concept business case.
- PM8 Evaluate and assign a relative score to the programme business case.
- PM9 Create an overall portfolio view.
- PM10 Make and communicate the investment decision.
- PM11 Stage-gate (and fund) selected programmes.
- PM12 Optimise portfolio performance.
- PM13 Re-prioritise the portfolio.
- PM14 Monitor and report on portfolio performance.



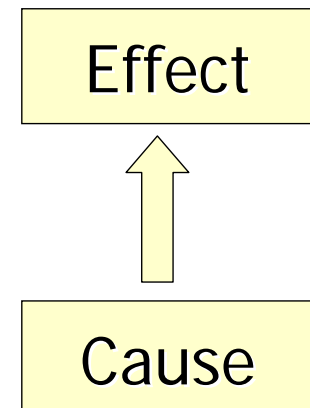
A free download at www.itqi.org

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Process Description	Key Management Practices	CobiT Cross-references	RACI Chart		
			Exec	Bus	IT
Establish governance, monitoring and control framework. Establish strategic direction. Establish portfolio characteristics.	<i>VG1 Ensure informed and committed leadership.</i> The reporting line of the CIO should be commensurate with the importance of IT within the enterprise. All executives should have a sound understanding of strategic IT issues, such as dependence on IT, and technology insights and capabilities, so there is a common and agreed understanding between the business and the IT function regarding the potential impact of IT on the business strategy. The business and IT strategy should be integrated, clearly linking enterprise goals and IT goals, and should be broadly communicated.	Primary: PO1.2, PO1.4, PO4.4, ME4.1, ME4.2	A/R	C	C
	<i>VG2 Define and implement processes.</i> Define, implement and consistently follow processes that provide for clear and active linkage amongst the enterprise strategy, the portfolio of IT-enabled investment programmes that execute the strategy, the individual investment programmes, and the business and IT projects that make up the programmes. The processes should include planning and budgeting, prioritisation of planned and current work within the overall budget, resource allocation consistent with the priorities, stage-gating of investment programmes, monitoring and communicating performance, taking appropriate remedial action, and benefits management so there is an optimal return on the portfolio and on all IT assets and services.	Primary: PO4.1, ME1.1, ME1.3, ME4.1 Secondary: PO5.2, PO5.3, PO5.4, PO5.5, PO10.2	A	R	C
	<i>VG3 Define roles and responsibilities.</i> Define and communicate roles and responsibilities for all personnel in the enterprise in relation to the portfolio of IT-enabled business investment programmes, individual investment programmes, and other IT assets and services to allow sufficient authority to exercise the roles and responsibilities assigned. These roles should include, but not necessarily be limited to, an investment decision body, programme sponsorship, programme management, project management and associated support roles. Provide the business with procedures, techniques and tools enabling it to address its responsibilities. Establish and maintain an optimal co-ordination, communication and liaison structure between the IT function and other stakeholders inside and outside the enterprise.	Primary: PO4.6, PO4.15 Secondary: PO4.8, PO4.9, PO10.1, PO10.2	A	R	C

Empirical Analysis – Cause/Effect

- End Results
 - The on-time delivery of projects
 - Completeness of functionality delivery
 - The on-budget delivery of projects
 - Customer satisfaction
 - Benefits for end user
 - Risk-adjusted return (final project output).
 - Risk-adjusted return for a portfolio
- Drivers
 - CobiT and ValIT maturity level
 - Project size and funding model
 - Portfolio size and mix
 - Business unit size, staff and cost profile
 - Governance practices
 - Organisational structures
 - Transparency level



Empirical Analysis – Pilot results

Major IT Value Drivers

- Intelligent application of processes as defined in CobiT and ValIT
- Process maturity
- IT Intensity and project size but only in combination with the above
- Outsourcing cost

Key Findings

- CMM improvement
- Greater control over smaller projects through PMOs
- Do more risky projects but with tight risk mitigation strategies
- Full financial and risk transparency
- Factoring budget overruns and late delivery into return expectations

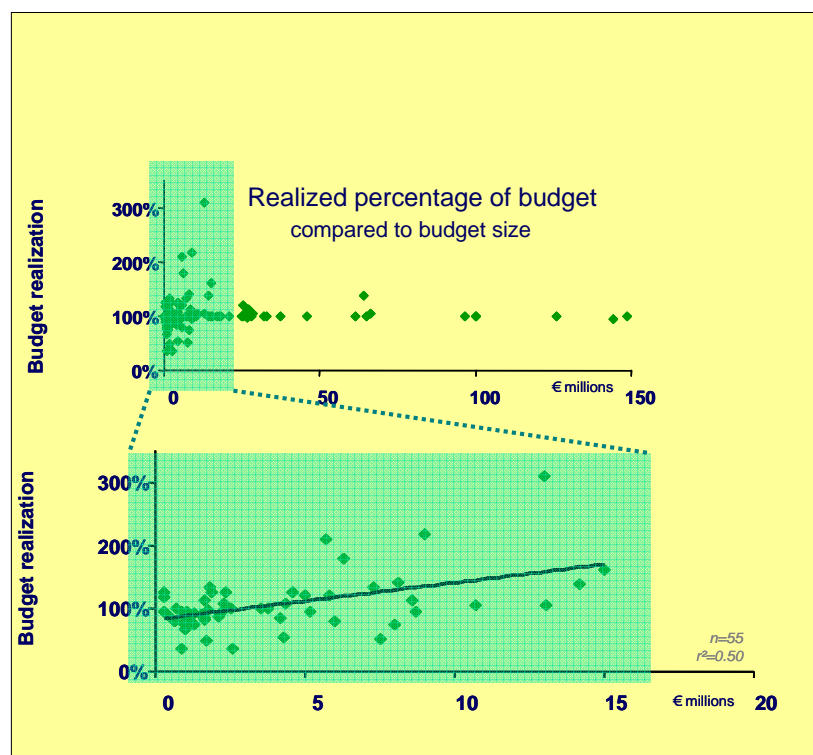
Big and risky projects do well Medium sized and informational don't

Larger projects

up to a certain size tend to overrun more.

Very large projects

are likely to be subject to greater management attention and tend to stay within budget.



Big and risky projects do well Medium sized and informational don't

High-risk IT-projects are attractive because:

- Internal Rate of Return is high
- Business demand is high
- Innovativeness of the solution is high
- Strategic impact is high

The risk of failure or budget overrun is lowered by:

- Fit with strategy
- Synergy with existing infrastructure
- Commitment of top management

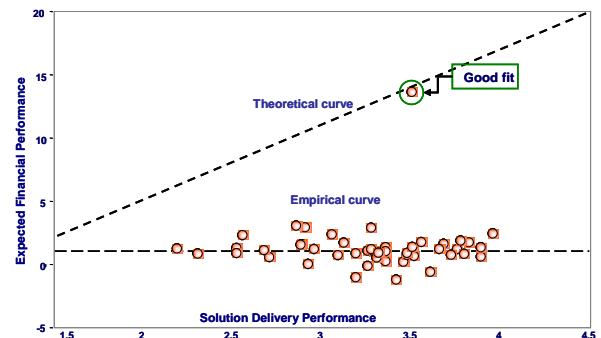
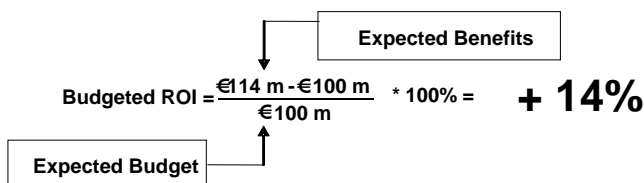
Correlation coefficient

+0.28
+0.29
+0.53
+0.48

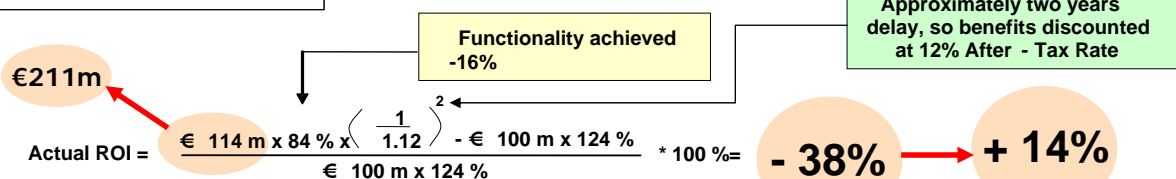
-0.10
-0.32
-0.22

We don't learn from our past

ROI as expected in the Business Case



Actual ROI allowing for typical solution delivery performance





Why is it not being done?

- We are good at apportioning blame after the fact for the bad things that we did not plan to happen.
- We are bad at assigning accountability beforehand for the good things we do plan to happen.

What do CIOs say?



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Val IT Principles

Results
CIO
Interviews

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



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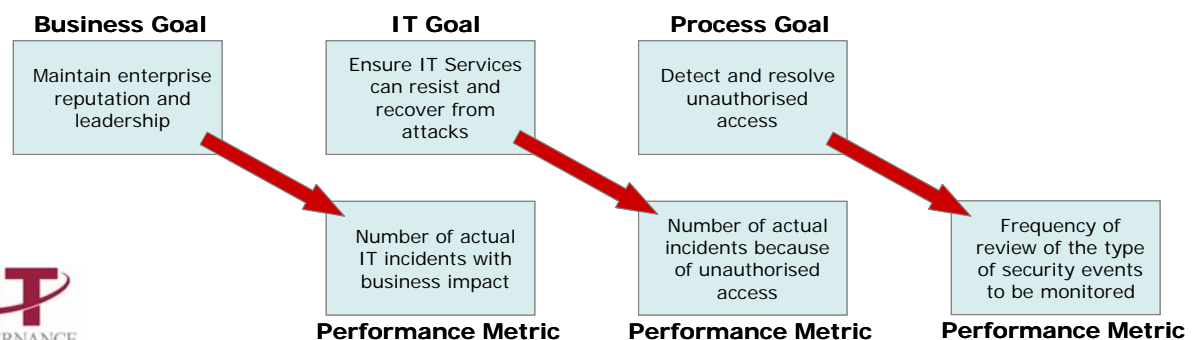
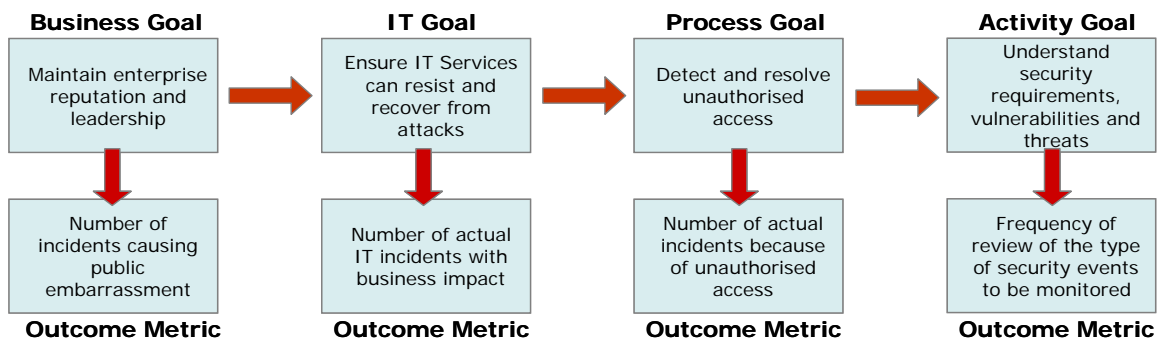
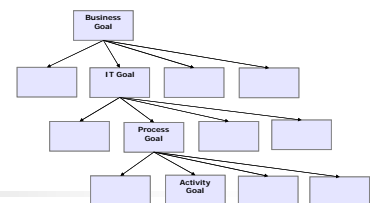


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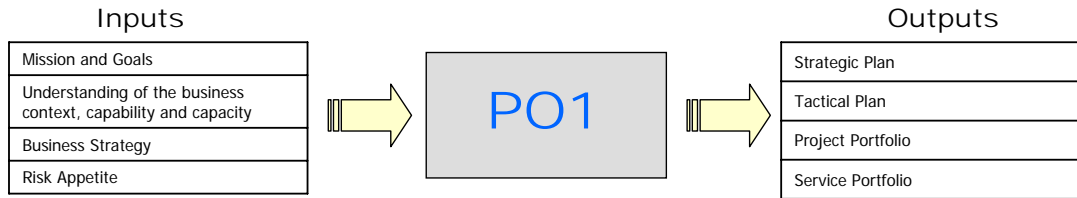
Goals and Metrics



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Process Relationships and RACI Charts

Process inputs and deliverables describe the activity flow and process relationships



Major activities and associated responsibilities are added with a RACI Chart.

RACI Chart

Key Activities

- 1 Link business goals to IT goals
- 2 Identify critical dependencies and current performance
- 3 Build IT strategic plan
- 4 Build IT tactical plans
- 5 Analyze and manage project and service portfolios

	CEO	CFO	Business Exec	CIO	Business Sr Mngmt	Head Operations	Chief Architect	Head Development	Head IT Admin	PMO	CARS
1	C	I	A/R	R	C						
2	C	C	R	A/R	C	C	C	C	C		C
3	A	C	C	R	I	C	C	C	C	I	C
4	C	I		A	C	C	C	C	C	R	I
5	C	I	I	A	R	R	C	R	C	C	I

PO1



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COBIT - The Emerging IT Governance Framework

CobiT4.0 is providing a better interface to the business and IT Governance layer of the enterprise but also to the operational layer with a better interface to operational standards and practices

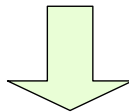
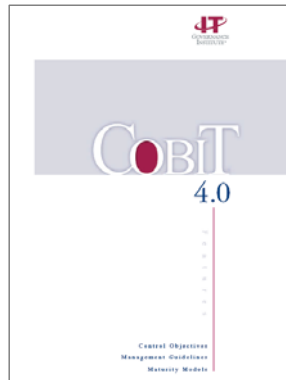
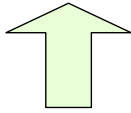
- **Full IT governance framework** and IT governance best practices to foster compliance and increase the value of IT
- **Stronger business focus** and more specificity on process ownership and responsibilities, enabling strategic alignment and making implementation easier
- Easier to **design IT scorecards** with goals and metrics material with greater focus on process performance via the key activities
- Better understanding of **scope and purpose of IT processes** with process definitions, relationships, activities and responsibilities
- Key elements remain **Control Objectives, Control Practices and Maturity Models**



eg26042006-60

COBIT4.0

IT Governance



- Portfolio Management
- IT Steering Committees
- Investment Decision Making
- Business cases
- Risk Tolerance

Implementation

- Process relationships
- Key activities and RACI charts
- Goals and metrics towards a Balanced Scorecard
- Detailed Control Practices

IT Governance

The IT Governance Institute

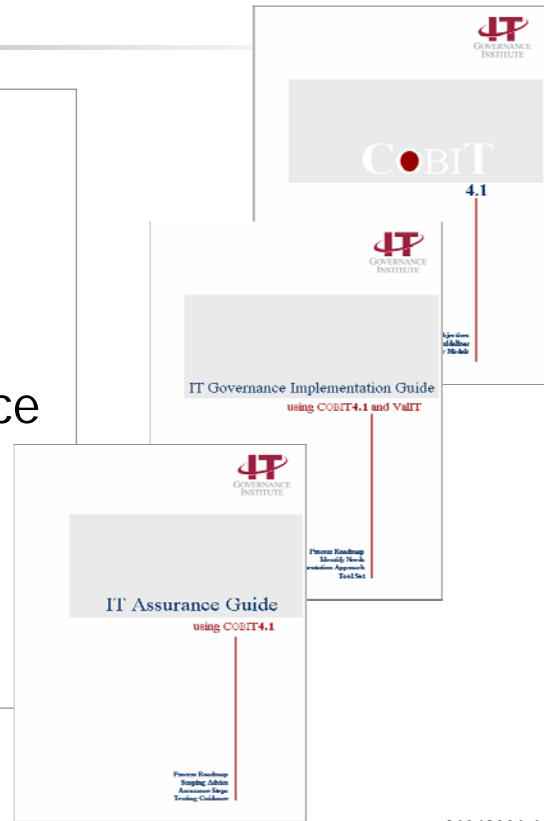
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COBIT4.1

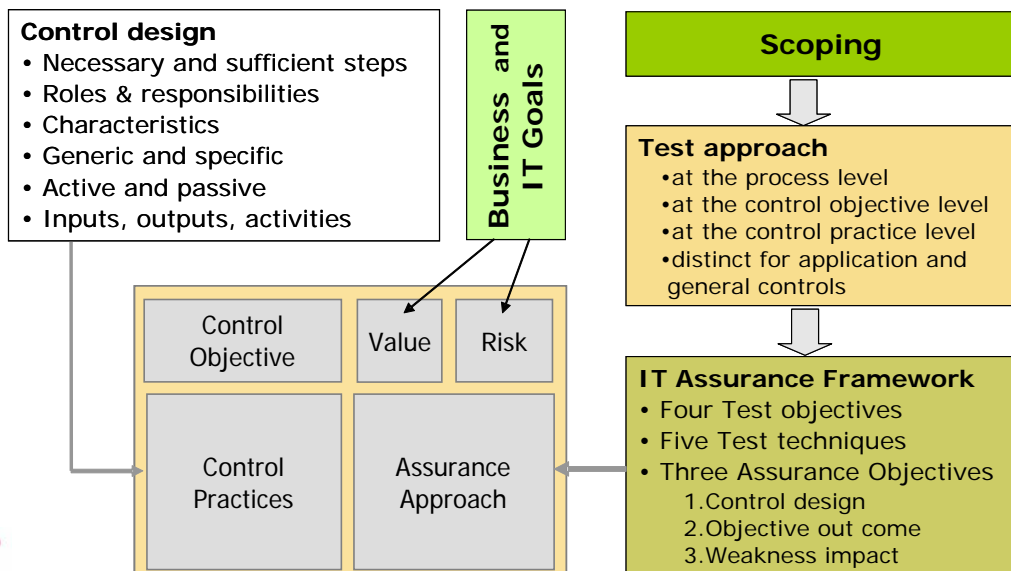
- New control practices
- Control design and assurance framework
- Detailed assurance steps
- Extensive assurance advice
- Implementation and Assurance Processes Aligned
- IT Control scoping



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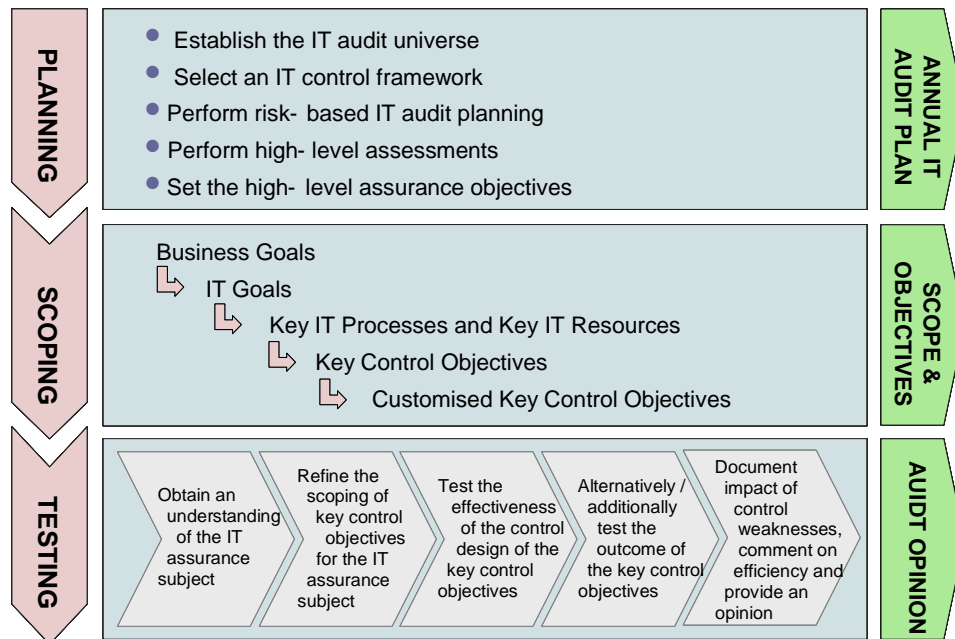
COBIT4.1

IT Control Practices and Assurance Steps

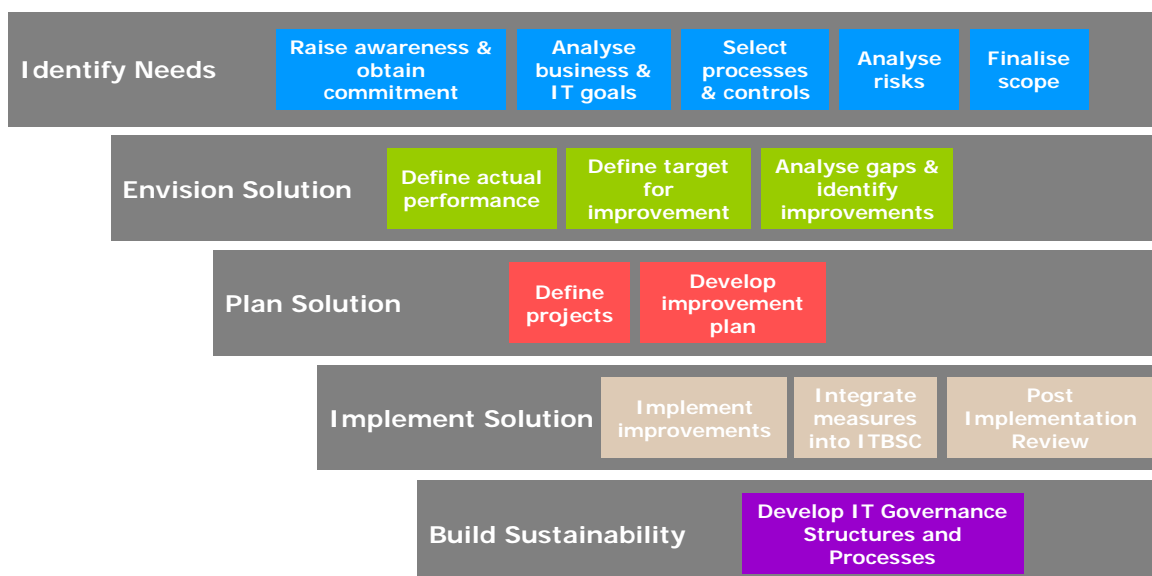


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COBIT4.1 – IT Assurance Roadmap



COBIT4.1 – Implementation Roadmap





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Five IT governance questions for the Board

	IT Governance Concerns	Where you are	1	2	3	4	5	Where you want to be
1	VALUE	2	It is viewed as a cost				IT is a value enabler	2
2	TRANSPARENCY	1	Uncertainty about risks and value outcome				Risk and value outcomes are predictable	1
3	PERFORMANCE	4	IT issues create aggravation				Comfortable about IT's abilities and performance	4
4	ENABLEMENT	5	IT is largely a technical problem				IT primarily seen as a business opportunity	5
5	AGILITY	3	IT is inflexible				IT is agile and responsive	3
		1,5						1,5



eg26042006-68

Ten process questions for Management

< Process Name >		Status	1	2	3	4	5
1	Is the IT process important to the success of the enterprise?		Critical	Very significant	Makes things easier	Can survive without it if need be	Not at all
2	Is it clear who is ultimately accountable for the end-result?		Everyone knows	Person knows and accepts	Person knows	Person suspects	Not clear at all
3	Is the process being performed in a formal manner?		All aspects documented	All aspects repeatable	Some aspects documented	Some aspects repeatable	Not at all
4	Is the process being performed well?		All is done well always	Parts are always done well	All aspects sometimes	Some aspects sometimes	Some aspects rarely
5	Is it clear who is responsible for the process?		Everybody knows; responsible fully accepts	Most people know; responsible largely accepts	Some know; responsible partially accepts	Some know; responsible knows but does not accept	Nobody knows
6	Does the process have clear direction and goals?		Integrated in performance measurement	Communicated not linked to measures	Documented but not communicated	Known by senior management; not documented	Not at all
7	Is the process measured?		Integrated and linked to IT and business goals	Efficiency and effectiveness, not linked to goals	Some effectiveness measures	Some financial measures	Not at all
8	Is the process audited?		Risk based and results always actioned	Part of risk based plan and results regularly actioned	Regularly & results occasionally actioned	Ad hoc	Not at all
9	Does the process have known control weaknesses?		Continuously monitored and mitigated	Regularly monitored and many under control	Recognised but not yet treated	Aware we need to do something about it	Don't know if there are weaknesses
10	Does the technology used have vulnerabilities?		Continuously monitored and mitigated	Regularly monitored and many under control	Recognised but not yet treated	Aware we need to do something about it	Don't know if there are vulnerabilities
Overall Assessment		0					

INSTITUTE

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Ten Value Questions To Ask the Executive

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?

Four Elaborate Questions to ask Business and IT Management

Are we doing the right things?

The *strategic* question. Is the investment:

- In line with our vision
- Consistent with our business principles
- Contributing to our strategic objectives
- Providing optimal value, at affordable cost, at an acceptable level of risk

Are we doing them the right way?

The *architecture* question. Is the investment:

- In line with our architecture
- Consistent with our architectural principles
- Contributing to the population of our architecture
- In line with other initiatives

Are we getting them done well?

The *delivery* question. Do we have:

- Effective and disciplined delivery and change management processes
- Competent and available technical and business resources to deliver:
 - The required capabilities
 - The organizational changes required to leverage the capabilities

Are we getting the benefits?

The *value* question. Do we have:

- A clear and shared understanding of the expected benefits
- Clear accountability for realizing the benefits
- Relevant metrics
- An effective benefits realization process



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IT Governance

The IT Governance Institute

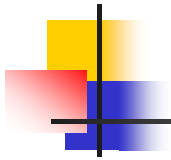
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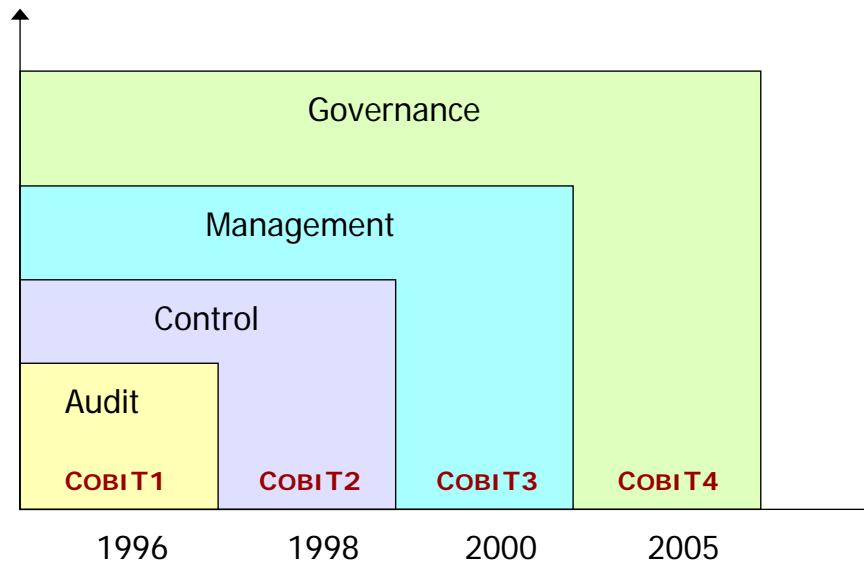


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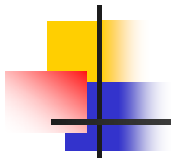
COBIT - The Emerging IT Governance Framework

Evolution



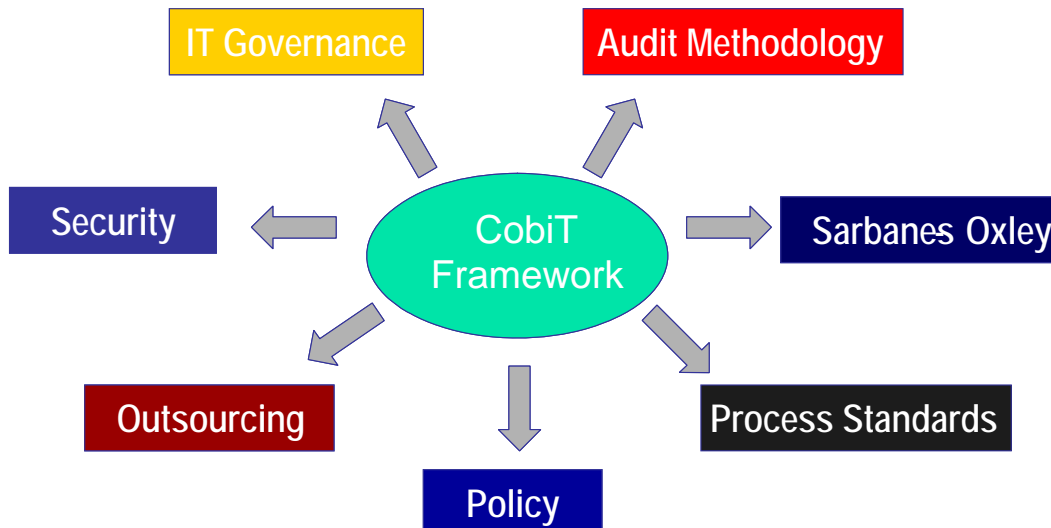
An open standard at www.isaca.org

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COBIT - The Emerging IT Governance Framework

How is it being used?

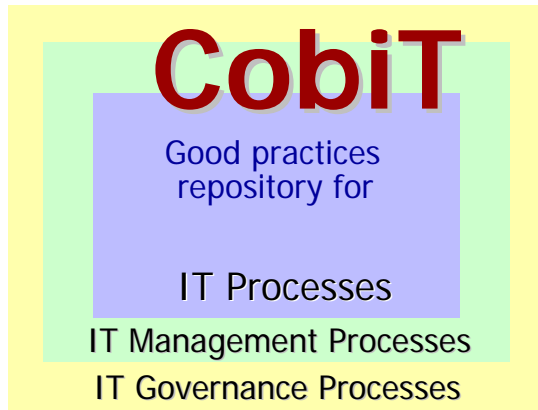


"COBIT is the framework that gives a clear end-to-end view of IT."

Simon Shapiro, CIO, Univest

eg26042006-74

COBIT - The Emerging IT Governance Framework



Value

- Internationally accepted good practices, a de facto standard
- Is management oriented
- Is supported by tools and training
- Freely available
- Sharing knowledge and leveraging expert volunteers
- Continually evolves
- Maintained by reputable not for profit organisation
- Maps 100% onto COSO
- Maps strongly onto all major related standards

COBIT - The Emerging IT Governance Framework



Limitations

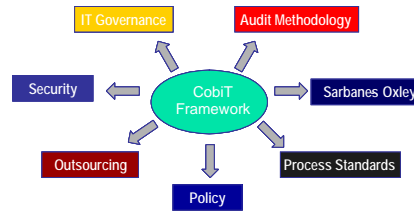
- It is a reference, a set of best practices, not an "off-the-shelf" cure
- Enterprises still to need to analyse its control requirements and customise based on its
 - Value drivers
 - Risk profile
 - IT infrastructure, organisation and project portfolio

Support

- Implementation Guide, performance metrics, control practices

COBIT - The Emerging IT Governance Framework

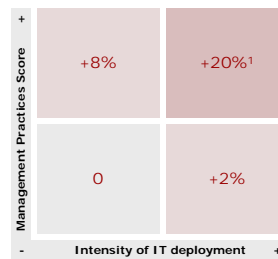
- IT governance needs a control framework that
 - Is strategically aligned
 - Engages the executive level
 - Can be reused for synergy



- IT governance begins with the Board asking some tough questions about IT



- IT Governance has a high return on investment



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Conclusion

Support for the CIO: World-class IT

Fortune 500 CIO's

- Aligned with the business and providing transparent value
- Top management attention through appropriate IT Governance mechanisms
- Engaged in performance measurement
- Committed to continuous improvement



COBIT : A free download at www.itgi.org

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**The 2006 European
Conference of Internal Audit**
Helsinki, 8 September 2006

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For more information...

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