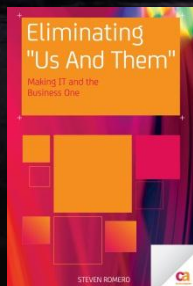


Realizing the most value from technology through business governance of IT

Steve Romero PMP, CISSP, CPM



An executive view of governance



Based on 2009 Survey of 255 Non-IT CEOs/Executives

- 50% Ranked ITG as “very important”
- 75% of businesses consider ITG to be an integral part of enterprise governance, but the overall maturity level is still relatively low
- Stronger ITG practices correlate positively with better IT outcome (ITG is more often found in organizations where IT is a significant contributor to business value)



The state of IT governance



February 24, 2011

The State Of IT Governance, Q4 2010

by [Craig Symons](#)

with [Sharyn Leaver](#), Mackenzie Cahill

A more recent Forrester study

- Firms with good IT governance outperform those without
- IT governance is an imperative
- IT governance is maturing, but slowly
- IT governance framework adoption has increased over the past five years; however, it is still not ubiquitous



Greatest single factor in realizing value from tech investments

According to Massachusetts Institute of Technology (MIT) Center for Information Research (CISR), Sloan School of Management



- MIT CISR has been asking and answering the same question for 36 years: *How do enterprises realize the most value from their investment in technology?*
- Firms with superior IT Governance had more than 20% higher profits over those that did not
- Peter Weill, Chairman of MIT CISR: *"If I was to choose one factor that most contributed to the success of IT, it is IT Governance."*



IT governance definitions - *take your pick*

- The responsibility of executives and the board of directors, and consists of the leadership, organizational structures and processes that ensure that the enterprise's IT sustains and extends the organization's strategies and objectives.
© IT Governance Institute. All rights reserved.
- “The set of processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals.”
© 2010 Gartner, Inc. All rights reserved.
- “A decision-making framework for IT investments that is designed to maximize the return of benefits while managing risk to acceptable levels.”
© 2010 Forrester Research, Inc. All rights reserved.
- Specifying the decision rights and accountability framework to encourage desirable behavior in using IT.
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The latest out of ITGI

“A governance system is all the means and mechanisms that will enable multiple stakeholders at various levels of an entity for specific purposes to have an organized say in setting direction and monitoring compliance and performance so as to create for them acceptable value, while taking acceptable risk levels and using limited resources responsibly.”

© IT Governance Institute. “Taking Governance Forward” All rights reserved.

In this definition, the enablers of governance are “framework, principles, structure, processes and practices”; the activities are “set direction and monitor compliance and performance.”



IT governance defined

- “Governance is the system by which organizations are directed and controlled. It is essentially about leadership and involves overseeing the preparation of plans, overseeing the delivery of business change, overseeing operations, and overseeing the realization of benefits.”

Basil Wood, New Zealand @bazpractice

- Simple Version - *The processes and relationships that lead to reasoned decision-making in the use of IT*
- 3 Key Questions:
 - What **decisions** need to be governed?
 - Who will be assigned accountability for governing those **decisions**?
 - How will those **decisions** be governed?



Every org addresses five key IT governance decisions

IT Principles for Digitization Decisions

Clarifying the Role for IT

Enterprise Architecture Decisions



IT Infrastructure Decisions



Business Application Decisions



IT Investment and Prioritization Decisions



© Peter Weill and Jeanne Ross, CISR MIT Sloan School of Management

ITG is based on meeting five principles

- **Ensure IT is aligned with the business** – focus on aligning with the business and collaborative solutions (#1*)
- **Ensure IT delivers value to the business** – concentrating on optimizing expenses and proving the value of IT (#2*)
- **Ensure IT manages risk** – addressing the safeguard of IT assets, disaster recovery and continuity of operations
- **Ensure IT manages resources** – realizing the optimal investment in, and proper management of, critical IT resources
- **Ensure IT manages performance** – tracking and monitoring strategy implementation, project success, resource usage, process performance and service delivery

*According to the ITGI Global Status Report of Governance of Enterprise IT 2011 Survey of 834 Business Executives and heads of IT



Latest Principle Definitions from ITGI

Strategic alignment—Achieving the goals and strategies of an enterprise through the coherent undertaking of activities by the different governance structures or management levels within an enterprise. A culture of business and IT partnership should be developed, supported by IT's interest in and understanding of the business, and sharing of technology-related issues and opportunities.

Value delivery—Creating new value for the enterprise through IT, maintaining and increasing value derived from existing IT investments, and eliminating IT initiatives and assets that are not creating sufficient value for the enterprise. The basic principles of IT value are delivery of fit-for-purpose services and solutions on time and within budget, and generating the financial and non-financial benefits that were intended.

Risk management—IT risk is the business risk associated with the use, ownership, operation, involvement, influence and adoption of IT within an enterprise. IT risk consists of IT-related events that could potentially impact the business. While value delivery focuses on the creation of value, risk management focuses on the preservation of value.

Resource management—Ensuring that the right capabilities are in place to execute the strategic plan and sufficient, appropriate and effective resources are provided. Resource management ensures that an integrated, economical IT infrastructure is provided, new technology is introduced as required by the business, and obsolete systems are updated or replaced. It recognizes the importance of people, in addition to hardware and software, and, therefore, focuses on providing training, promoting retention and ensuring competence of key IT personnel.

Performance measurement—Tracking the achievement of the objectives of the enterprise's IT-related services and solutions and compliance with specific external requirements. Without establishing and monitoring performance measures, it is unlikely that the previous focus areas will achieve their desired outcomes. It provides a link back to the other focus areas by monitoring that the required direction is being followed and creates the opportunity to take timely corrective measures, if needed.



IT governance decisions

IT Principles for Digitization - Clarifying the role of IT in the business – basis for defining IT Archetype

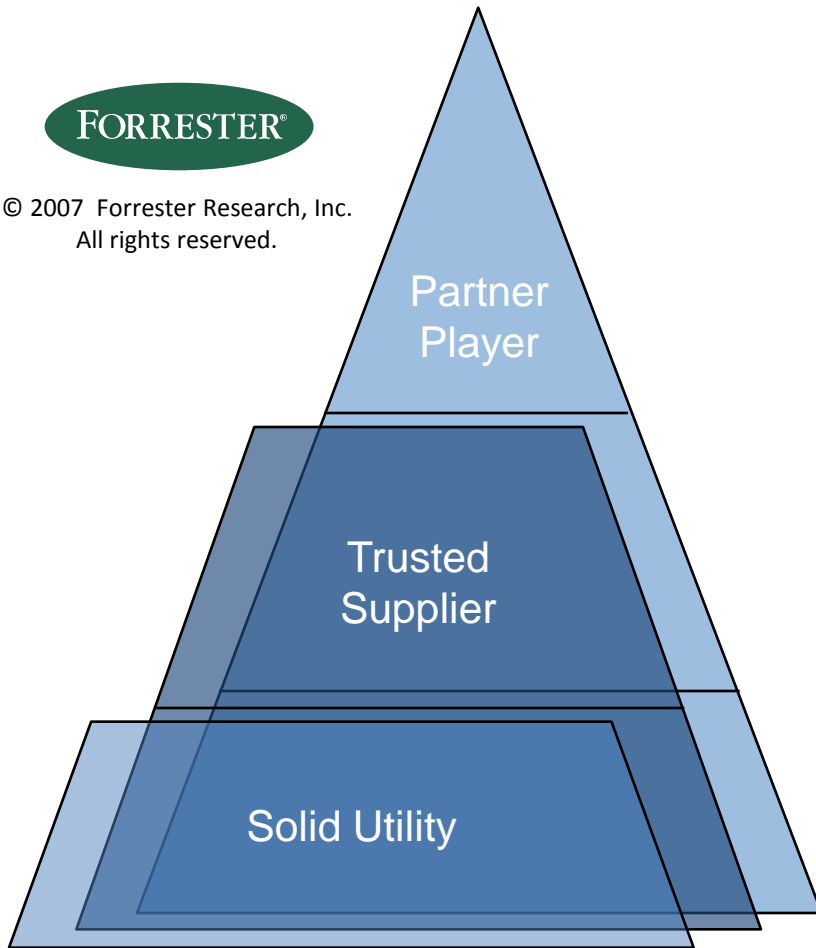


- Based on the Business Principles of the enterprise – business drives IT
- Driven by Business' expectations and industry sector constraints
- Developed by IT and business leadership
- A related set of high-level statements about how IT is used in the business
- IT Principles provide clarity and focus for the IT enterprise, establishing the direction for all other decisions

IT archetypes

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Partner Player

- ▶ IT organizations expected to create unique and competitive solutions with customers, suppliers, and internal users — plus, being a Trusted Supplier.

Trusted Supplier

- ▶ IT organizations expected to deliver app projects on time and on budget, based on operating units' requirements and priorities — plus, being a Solid Utility.

Solid Utility

- ▶ IT organizations expected to provide cost-effective, dial-tone reliability with transparent, constantly declining costs.

Approximately one-third of companies are in each of the archetypes according to the Forrester State Of IT Governance In North American And European Enterprises Report © 2008, Forrester Research, Inc. All rights reserved.

IT governance decisions

Enterprise Architecture - Defining integration and standardization requirements of a company's operating model

- Organizing logic for business processes, data, applications and infrastructure
- Captured in policies, relationships and technical choices
- Technical and data standardization
- Defines where shared infrastructure ends and applications begin
- **Supports current and future application needs – *fostering innovation***



IT governance decisions

IT Infrastructure Strategies - Determining shared and enabling services



- Foundation of planned IT capability
- Shared and reliable services used by multiple applications
- Includes infrastructure applications
- All communications pass through a security and risk capability
- **Enables rapid implementation of future business initiatives**

IT governance decisions

Business Needs and Project Deliverables - Specifying the business need for purchased or internally developed IT systems and applications

- Fundamentally improve business processes
- Enables operating efficiency
- Balance of creativity and discipline
- Willingness to sacrifice functionality for architectural integrity
- Contributes to strategic value



*75% Said IT is “failing”, especially on application delivery**

**According to the ITGI 2009 Survey of 255 Non-IT Executives*

IT governance decisions

IT Investment and Prioritization - Choosing which initiatives to fund and how much to spend

- How much do we spend?
- What do we spend it on?
- How do we reconcile the needs of different constituencies?
- Requires business-led and IT-enabled Portfolio Management
- **Ensures IT spending reflects strategic priorities**



ISO view of IT Governance

ISO/IEC 38500 is a high level, principles based advisory standard. In addition to providing broad guidance on the role of a governing body, it encourages organizations to use appropriate standards to underpin their governance of IT. *75% of businesses consider ITG to be an integral part of enterprise governance, but the overall maturity level is still relatively low.*

The objective of their standard is to provide a framework of principles for Directors to use when evaluating, directing and monitoring the use of information technology (IT) in their organizations.

In their view, governance is distinct from management, and for the avoidance of confusion, the two concepts are clearly defined in their standard.



From meeting business objectives to avoiding risk

ISO definition: *The system by which the current and future use of IT is directed and controlled. Corporate governance of IT involves evaluating and directing the use of IT to support the organization and monitoring this use to achieve plans. It includes the strategy and policies for using IT within an organization.*

Proper corporate governance of IT may assist directors in assuring conformance with obligations (regulatory, legislation, common law, contractual) concerning the acceptable use of IT.

Inadequate IT systems can expose the directors to the risk of not complying with legislation. For example, in some jurisdictions, directors could be held personally accountable if an inadequate accounting system results in tax not being paid.



Rooted in risk aversion

Processes dealing with IT incorporate specific risks must be appropriately addressed. For example, directors could be held accountable for breaches of:

- security standards
- privacy legislation
- spam legislation
- trade practices legislation
- intellectual property rights, including software licensing agreements
- record keeping requirements
- environmental legislation and regulations
- health and safety legislation
- accessibility legislation
- social responsibility standards

Directors using the guidelines in this standard are more likely to meet their obligations.



ISO/IEC 38500 is based on meeting six principles

1. **Responsibility** – Individuals and groups within the organization understand and accept their responsibilities in respect of both supply of, and demand for IT. Those with responsibility for actions also have the authority to perform those actions.
2. **Strategy** – The organization's business strategy takes into account the current and future capabilities of IT; the strategic plans for IT satisfy the current and ongoing needs of the organization's business strategy.
3. **Acquisition** – IT acquisitions are made for valid reasons, on the basis of appropriate and ongoing analysis, with clear and transparent decision making. There is appropriate balance between benefits, opportunities, costs, and risks, in both the short term and the long term.



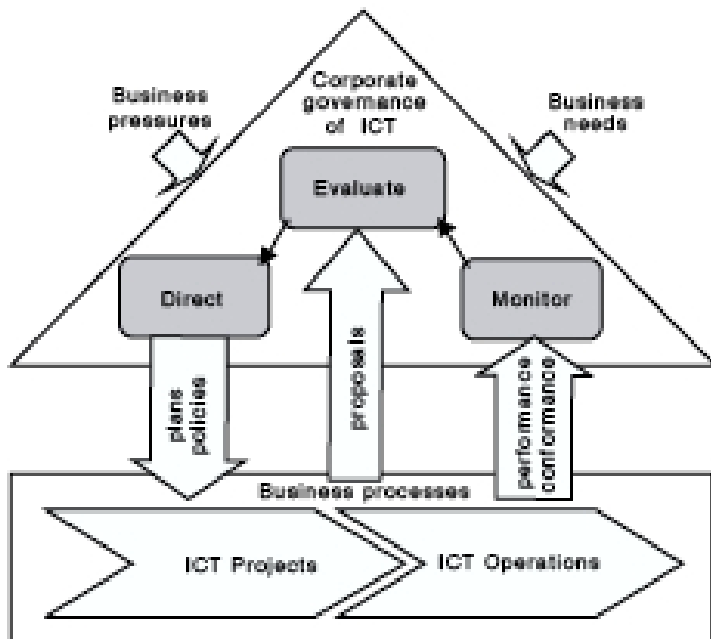
ISO/IEC 38500 is based on meeting six principles

4. **Performance** – IT is fit for purpose in supporting the organization, providing the services, levels of service and service quality required to meet current and future business requirements.
5. **Conformance** – IT complies with all mandatory legislation and regulations. Policies and practices are clearly defined, implemented and enforced.
6. **Human Behavior** – IT policies, practices and decisions demonstrate respect for Human Behavior, including the current and evolving needs of all the ‘people in the process’.



ISO/IEC 38500 Governance Model

IT is governed through 3 main tasks



1. **Evaluate** the current and future use of IT.
2. **Direct** preparation and implementation of plans and policies to ensure that use of IT meets business objectives.
3. **Monitor** conformance to policies, and performance against the plans.

The governance to management handoff

In ISO's view, and the view of many others, governance is distinct from management, and for the avoidance of confusion, the two concepts are clearly defined in their standard.

- If they are directing, then how is that distinct or separate?
- Is monitoring activities enough?
- What exactly is monitoring and ensuring?
- What happen when variances, gaps, deviations, and failure exist?

I argue that the purview of governance is not distinct from management because it goes beyond simply making decisions, or evaluating, directing and monitoring activities



ITG decisions are enabled by ITG processes

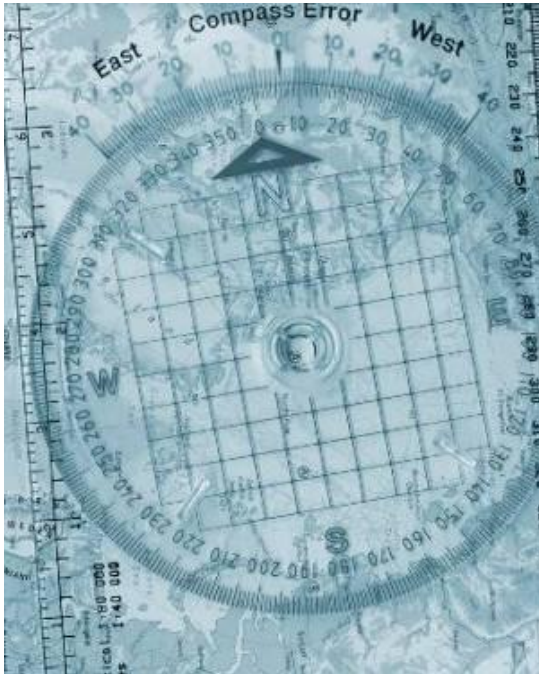
- Integrated Business & IT Planning
- Architecture Management - Standards & Review
- IT Investment Assessment, Prioritization, Funding & Benefits Realization Accountability (PPM)
- IT Financial & Resource Allocation
- Project Execution & Decision-making
- Emerging Technology Evaluation & Adoption
- Client Relationship Management
- Building & Maintaining Applications & Infrastructure
- Provisioning of IT Services
- Strategic Sourcing Services
- Audit & Risk Management

(half of Peter and Jeanne's IT Governance mechanisms)



IT governance processes

Integrated Business and IT Planning



- IT Strategy “**embedded**” in business strategy
- IT Strategic Plan based on Business Strategic Plan
- IT Tactical Plans based on IT Strategic Plan
- IT Operational Plans based on IT Tactical Plan

IT governance processes

Architecture Management

- Architecture Committee
- Defined architecture
- Policies, standards, relationships and technical choices
- Enabling future capability – fostering innovation



‘Defined technology standards’ was the most commonly cited measure used to govern enterprise architecture.

According to the ITGI Global Status Report of Governance of Enterprise IT 2011 Survey of 834 Business Executives and heads of IT

IT governance processes

IT Investment Assessment, Prioritization, Funding & Benefits Realization Accountability (PPM)

- Demand Management
- Portfolio Management
 - ❖ Project, Demand, Resource, Asset, Application, Service
- Governance or Steering Committee
- PMO Supported



IT governance processes

IT Financial and Resource Allocation



- Financial Services for IT
- Financial plans
- Budgets and forecasts
- Cost accounting
- Cost modeling and benchmarking
- Chargeback
- Resource management

IT governance processes

Project Execution and Decision-making

- Project Management
- Fact-based decision-making
- Scenarios and what-if analysis
- Monitoring, speeding, slowing, stopping, trade-offs and killing projects
- Empowered PMO - Project management best practices and center of excellence



IT governance processes

Emerging Technology Evaluation and Adoption

- Enable enterprise innovation
- Research and development
- Market side – not just supply side
- Linked to business strategy
- Hand-in-hand with enterprise architecture



*IT Management believes they provide the business with frequent info about new tech opportunities, but the biz side does not seem to receive the info**

**According to the ITGI 2009 Survey of 255 Non-IT Executives*

Almost half of business respondents report their enterprises have implemented or are planning initiatives to promote IT innovation. The IT respondents identify the primary initiatives as monitoring emerging technologies and working collaboratively with business staff.

**According to the ITGI Global Status Report of Governance of Enterprise IT 2011 Survey of 834 Business Executives and heads of IT*

IT governance processes

Client Relationship Management



- Advocate for business and IT
- Acute understanding of business needs
- Acute understanding of IT capability
- Facilitate communication and collaboration
- Speed and improve decisions
- Improve requirements processes
- Ensure value and performance

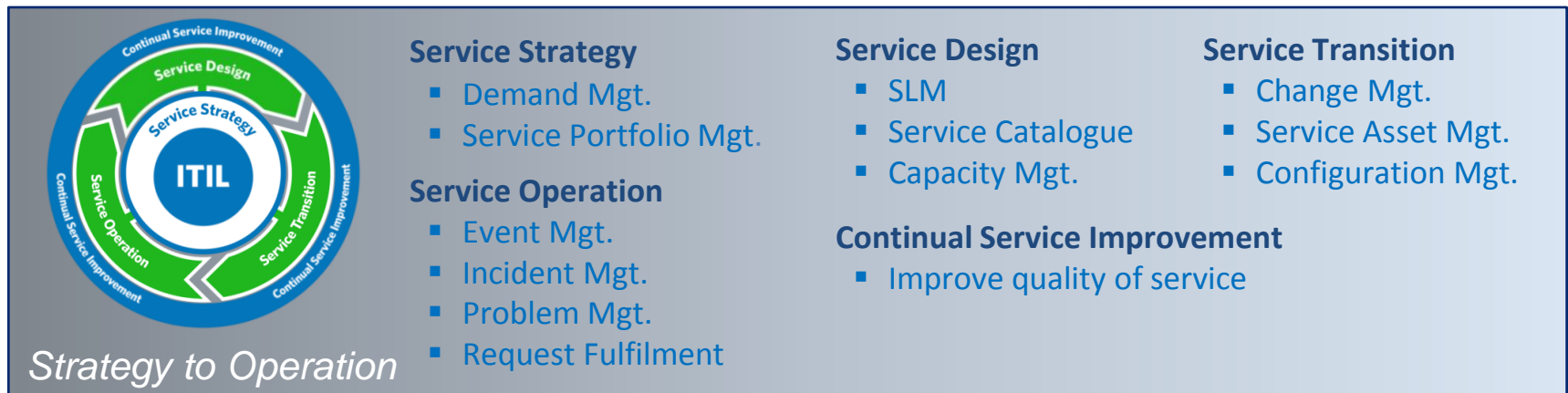
IT governance processes

Building and Maintaining Applications and Infrastructure

- SDLC – CMMI – Testing – Q&A
- ITIL Service Lifecycle

Provisioning of IT Services

- ITIL Service Lifecycle



According to ITGI's "Global Status Report on the Governance of Enterprise It (GEIT)—2011" survey of 834 business executives and heads of IT: ITIL or ISO 20000 was most often mentioned by respondents as the framework or standard on which they base their GEIT approaches.



IT governance processes

Strategic Sourcing Services



- Facilitates decision that services are better provided externally
- Fact-based price comparisons
- Vendor and contract management
- Sets clear expectations for provider performance/service levels
- Ensures architectural fit
- Ensure compliance with corporate and regulatory requirements
- Mitigate risks and prevent 'value-leakage'

IT governance processes

Audit and Risk Management

- Risk modeling and assessment
- Partner with IT Audit – COBIT
- Security
- Service continuity and disaster recovery
- Compliance
- Policies & Standards



Many Companies are undertaking ITG initiatives –what I hear

- Audit Influence
 - ISACA/IT Governance Institute
 - Audit Issues
- Risk and Compliance
 - Regulatory Requirements
 - Legal Requirements
 - Security Requirements
- Investment Decision-making - PPM
 - IT-Business Alignment
 - IT Accountability to the Business
- Increased IT Governance Awareness
- *Driven by the Board of Directors*



ITG is intended for the board of directors

Board's Ability to Govern IT

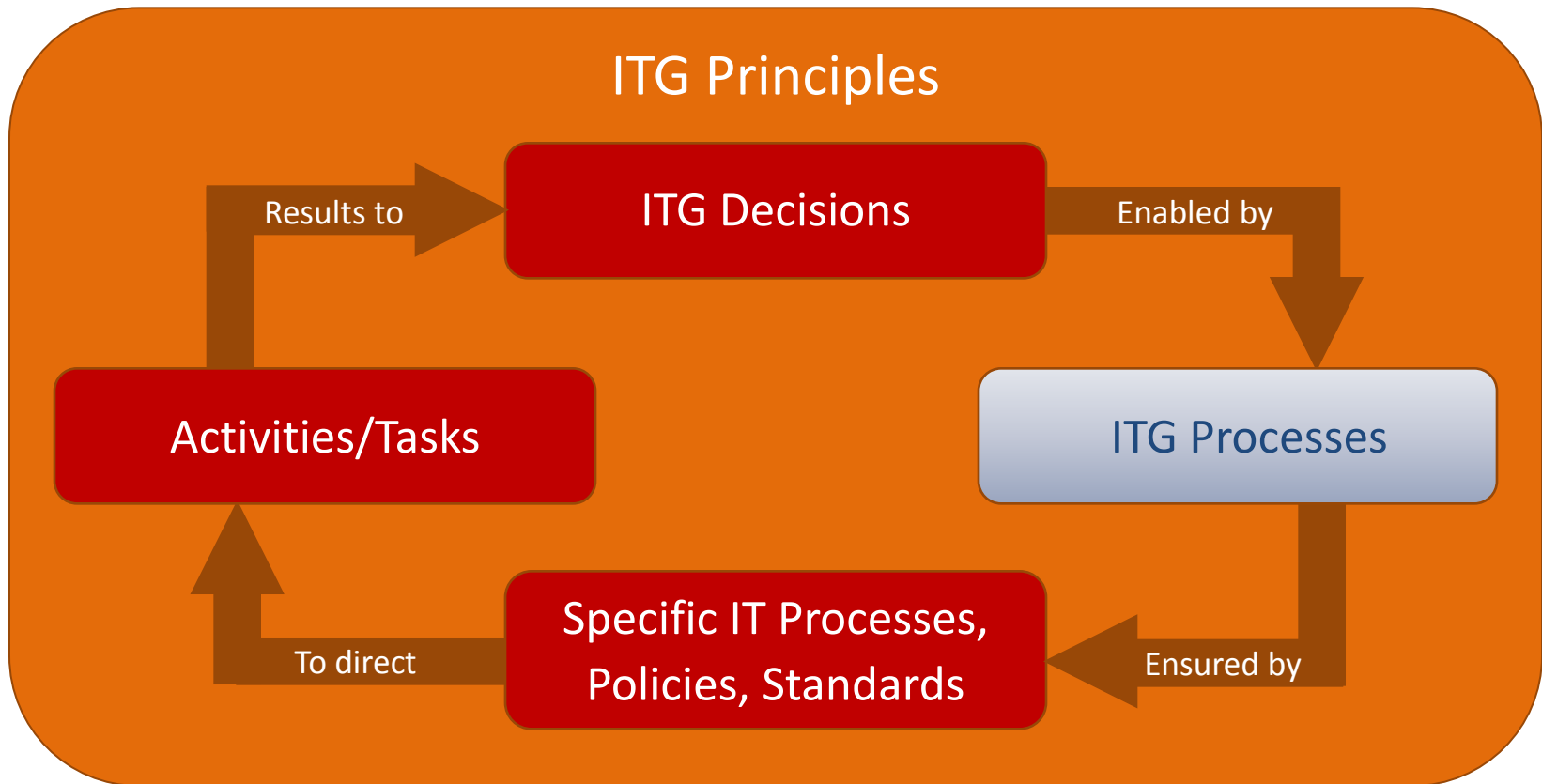
- To ensure IT is aligned with business strategy
- To ensure IT brings value to the business
- To ensure IT manages risk
- To ensure IT manages resources
- To ensure It manages performance

*IT matters are discussed predominantly on an ad hoc basis at the board level**



*According to the ITGI 2009 Survey of 255 Non-IT Executives

Why ITG? to enable IT to support business strategy



Connection between business strategy and personnel action to realize the principles of IT Governance

ITG processes require process management

Changing from a Function-centric to a Process-centric Organization



- Process design
- Process implementation
- Process management lifecycle
- Process governance
- Institutionalize processes

Organizational accountability – roles

Examples of Decision-making Bodies

Directors according to ISO and the other half of Peter and Jeanne's IT governance mechanisms

- Executive or Senior Management Committee
- IT Leadership Committee comprising IT Executives
- IT Policies & Standards Committee
- Architecture Committee
- Process Teams and Owners
- Business IT Relationship Managers
- IT Council comprising Business and IT Executives
- External service management committee



IT governance principle metrics

Strategic Alignment



- > Show how IT supports the Enterprise Strategy
- > Show how IT Operations are aligned with current Enterprise Operations

Risk Management

- > Risk Controls
- > Transferring risk
- > Risk acceptance



Performance Management

- > Show how IT measures performance (balanced scorecard, KPIs, etc.)
- > Use of automated systems providing performance data and information

Resource Management



- > Show how IT optimizes the infrastructure
- > Show how IT optimizes human resources



Value Delivery

- > Show how IT delivers appropriate quality on-time and within budget
- > Show how actual cost and ROI is managed



Strategic alignment

Focus on aligning with the business and collaborative solutions



- Show how IT supports the Enterprise Strategy
- Show how IT Operations are aligned with current Enterprise Operations

Show how IT:

- Delivers against the strategy
- Balances investments between systems that support the enterprise as is, and transforms the enterprise to create an infrastructure that enables the business to grow
- Adds value to products and services
- Improves customer satisfaction and customer retention
- Assists in competitive positioning
- Contains costs and improves administrative efficiency
- Increases managerial effectiveness



Value delivery

Optimizing expenses and proving the value of IT



- Show how IT delivers appropriate quality on-time and within budget
- Show how actual cost and ROI is managed

Show how IT:

- Is fit for purpose, meeting business requirements
- Flexible to adopt to future requirements
- Provides required throughput and response times
- Enables ease of use, resiliency and security
- Provides integrity, accuracy and currency of information



Risk management

Addressing the safeguard of IT assets, disaster recovery and continuity of operations



- Risk Controls
- Transferring risk
- Risk acceptance

Show how IT:

- Mitigates risk by implementing controls (e.g. Risk Management Systems, Audit controls, acquiring and deploying security technology to protect the infrastructure, Business Continuity Planning, Disaster Recovery, etc.)
- Transfers risk by sharing risk with partners or transfers risk to insurance coverage
- Accepts risk by formally acknowledging that the risk exists and it is being monitored



Resource management

Optimizing knowledge and IT infrastructure



- Show how IT optimizes the infrastructure
- Show how IT optimizes human resources

Show how IT:

- Manages system procurement
- Benefits from service procurement
- Manages the lifecycle of hardware, software licenses and services contracts
- Applies appropriate methods and adequate skills to manage and support IT Projects and Systems
- Improves workforce planning, recruiting and workforce retention
- Provides IT education and development



Performance management

Tracking project delivery and monitoring IT services



- Show how IT measures performance (balanced scorecard, KPIs, etc.)
- Use of automated systems providing performance data and information

Show how IT:

- Establishes and measures financial objectives
- Maps financial objectives to customer requirements and needs
- Measures process performance, effectiveness, efficiency and criticality to the business
- Addresses innovation requirements and future needs
- Determines how business executives and users view the IT department

Symptoms of poor IT Governance

- Senior executives can't describe your IT Governance
- Decisions take too long
- There is little accountability for decisions
- Senior management less than happy (IT Governance performance self-assessment is poor or varies widely by respondent)
- Sum across all projects (Project ROI Business Case – Project ROI PIR) is not close to zero
- There is ineffective IT Portfolio Management – duplication, too many applications, low percentage spend on new initiatives
- IT Governance seen as overhead and “red-tape”

PIR = Post Implementation Review

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Assess your IT Governance resilience

For each of the following assess your IT Governance on a score of 1 (strongly disagree) to 5 (strongly agree) – X 2 = Total

1. Our senior executives could accurately describe our ITG
2. Our ITG was actively designed – not a series of uncoordinated mechanisms
3. Our ITG is stable with few changes in recent years.
4. Managers who ignore the ITG are counseled to follow the guidelines
5. There are a small number of key business objectives driving our ITG design
6. We have a well defined and fast exceptions process that requires political capital to escalate
7. The ITG has a clear owner(s) and measures of success
8. The pay, incentives, and the ITG are well aligned
9. We have effective ITG at both firm wide and BU levels which are linked
10. Our CIO could leave for two months and our ITG would work well

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Maturing IT Governance requires...

- Acknowledging that governance is both decision-making *and* accountability (should be empowering, not bureaucratic)
- Linking the firm's other key assets and incentives to governance
- Recognizing the link to financial performance (firms with superior IT Governance also had more than 20% higher profits)
- Determining what should be shared at enterprise, sector and BU levels and govern at that level

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Maturing IT Governance requires...

- Relying on a few IT governance mechanisms (utilized non-IT governance mechanisms e.g., exec committee, CapEx process, etc.)
- Focusing on how each project and service contributes to a reusable digitized platform
- Centralizing for cost focus – decentralizing for innovation and growth and blended governance to achieve both
- Simplification, removing bureaucracy and more communication (job role)

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Advice when addressing IT governance

- Ensure IT Governance is driven by business problems and opportunities – not Governance for its own sake
- Transparency is the most critical aspect of IT Governance
- Design deliberately at enterprise and BU levels - No one-size-fits all – find the right flavor
- Redesign and constantly strike the balance – not too much, not too little
- Governance processes can be incredibly sophisticated and complex, or incredibly simple and should quickly address and respond to exceptions
- Assign ownerships that continually educates, engages, incentivizes, and proves the value of IT Governance – The three M's: Metrics, Measures and Marketing



IT governance critical success factors

- Absolutely requires Executive sponsorship and leadership – Vision and Enablement
- Absolutely requires Business participation – IT facilitates but the business must be a partner, if not the leader in the effort
- Business process initiative – This requires skills in process management, design, implementation – and organizational change
- Decisions require fact-based information – This requires a systematic approach to collect, integrate, analyze and provide meaningful data



Benefits of sustainable IT governance

IT Functions as a Business Partner Enabling Competitive Advantage

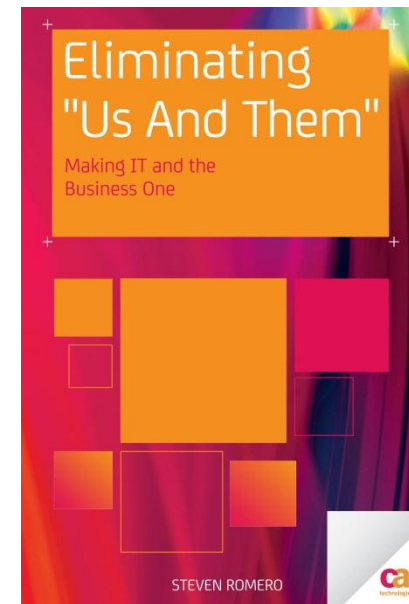
- IT freed from proving value
 - Focused on the future vision
 - Executive leadership freed from day-to-day execution
 - Exploring avenues to leverage IT for competitive advantage
- *IT's contribution to **efficiency** is deemed more important than its innovative value.*
According to the ITGI 2009 Survey of 255 Non-IT Executives
- *42% of IT orgs said that they **reported to the CFO**, and 53% of CFOs said that they would like to move to this reporting arrangement.*
According to the 2010 Gartner/FERF Technology Study
- ***Only 25%** of respondents said the CIO's primary role in innovation is to drive new business value. **Only 55%** viewed the lead IT executive as both a business and IT leader.*
According to the Diamond Consulting 2010 Survey of 724 senior business executive and IT Executives



IT governance, Process, and Organizational Behavior

“Eliminating ‘Us and Them’ – Making IT and The Business One”

- IT governance
- Process & Process Management
- Organizational Behavior



<http://www.amazon.com/Eliminating-Us-Them-Making-Business/dp/1430236442>

<http://amzn.to/qnfj77>



Thank you

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