Implementing IT Governance: A Practical Guide to Global Best Practices in IT Management

Book · December 2008

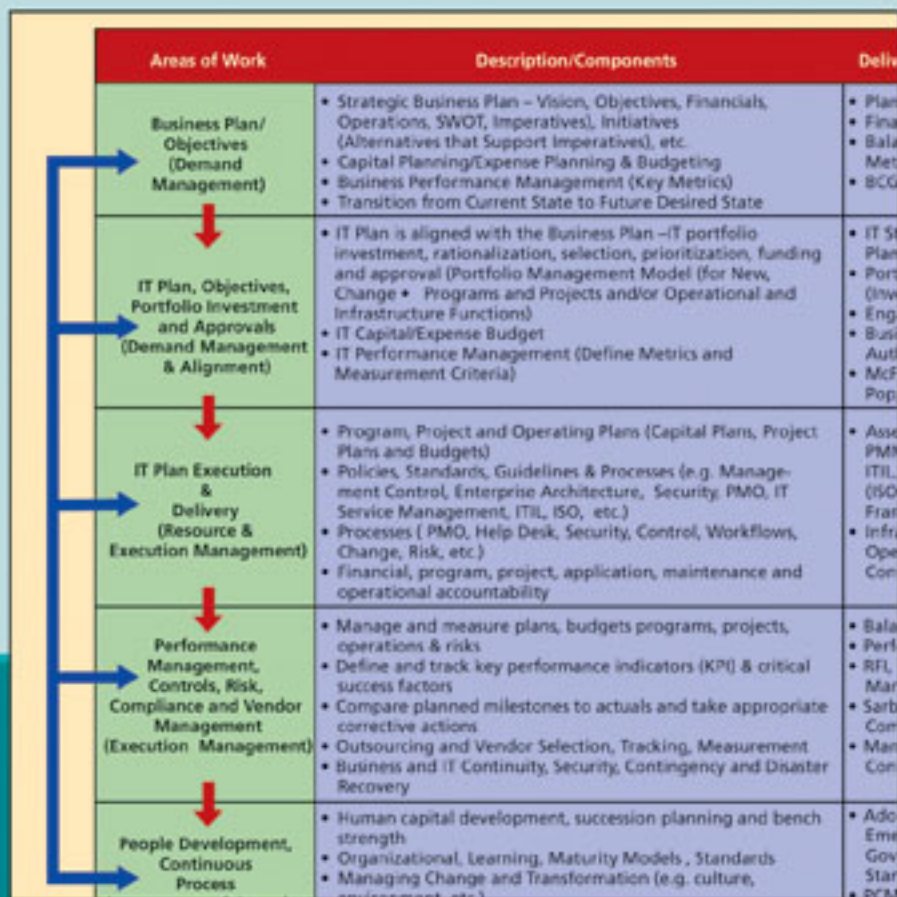**2 authors**, including:

Gad J Selig
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92 PUBLICATIONS   **252** CITATIONS

IMPLEMENTING
IT Governance

A Practical Guide to Global Best Practices in IT Management

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Areas of Work	Description/Components	Deliv
Business Plan/ Objectives (Demand Management)	• Strategic Business Plan – Vision, Objectives, Financials, Operations, SWOT, Imperatives), Initiatives (Alternatives that Support Imperatives), etc. • Capital Planning/Expense Planning & Budgeting • Business Performance Management (Key Metrics) • Transition from Current State to Future Desired State	• Plan • Fina • Bala Met • BCG
IT Plan, Objectives, Portfolio Investment and Approvals (Demand Management & Alignment)	• IT Plan is aligned with the Business Plan –IT portfolio investment, rationalization, selection, prioritization, funding and approval (Portfolio Management Model (for New, Change • Programs and Projects and/or Operational and Infrastructure Functions) • IT Capital/Expense Budget • IT Performance Management (Define Metrics and Measurement Criteria)	• IT St Plan • Port (Inve • Enga • Busi Auth • McF Pop
IT Plan Execution & Delivery (Resource & Execution Management)	• Program, Project and Operating Plans (Capital Plans, Project Plans and Budgets) • Policies, Standards, Guidelines & Processes (e.g. Management Control, Enterprise Architecture, Security, PMO, IT Service Management, ITIL, ISO, etc.) • Processes (PMO, Help Desk, Security, Control, Workflows, Change, Risk, etc.) • Financial, program, project, application, maintenance and operational accountability	• Asse PMN ITIL, (ISO Fran • Infra Ope Cor
Performance Management, Controls, Risk, Compliance and Vendor Management (Execution Management)	• Manage and measure plans, budgets programs, projects, operations & risks • Define and track key performance indicators (KPI) & critical success factors • Compare planned milestones to actuals and take appropriate corrective actions • Outsourcing and Vendor Selection, Tracking, Measurement • Business and IT Continuity, Security, Contingency and Disaster Recovery	• Bala • Perf • RFI, Mar • Sarb Com • Man Cor
People Development, Continuous Process	• Human capital development, succession planning and bench strength • Organizational, Learning, Maturity Models , Standards • Managing Change and Transformation (e.g. culture, environment, etc.)	• Ado Eme Gov Stan • PCM

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Implementing IT Governance

A Practical Guide to Global Best Practices in IT Management

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1 Introduction to IT/business alignment, planning, execution and governance

On Change and Innovation:

"Never be afraid to try something new.
Remember, amateurs built the Ark,
Professionals built the Titanic!"

<div align="right">- Anonymous</div>

1.0 What is covered in this chapter?

This chapter contains:
- an overview and execution summary of the key IT/business alignment, planning, execution, governance issues, constraints and opportunities and processes
- discussion of the roles of the Board, and responsibilities of executive management and the CIO
- a review of the value propositions for IT governance
- an overview of IT demand management, decision rights, Balanced Scorecard metrics and how much governance is required
- identifying the steps in making IT governance real
- discussion of an assessment technique to determine the current level of IT governance maturity in an organization, and illustration of a blueprint of an ideal, future target state of IT governance

1.1 Overview

The issues, opportunities and challenges of aligning information technology more closely with an organization, and effectively governing an organization's information technology (IT) investments, resources, major initiatives and superior uninterrupted service, is becoming a major concern of the Board and executive management in enterprises on a global basis. Information technology (IT) has become a vital function in most organizations, and is fundamental to support and sustain innovation and growth.

Therefore, a comprehensive top-down approach, with bottom-up execution of IT governance, which includes all the activities of business/IT alignment, planning, execution and governance of IT, as well as the leadership of those entrusted with the task, is critical to achieve a cost effective solution. Effective 'management' includes the activities of planning, investment, integration, measurement and deployment, and providing the services required to manage a complex strategic asset.

None of this is easy, or obvious, and this pragmatic and actionable 'how to' guide is intended to draw from about 200 current and emerging best practice sources, and over 20 IT governance best practice case studies, some of which are featured in the book.

The purpose of the book is not to repeat in greater detail, what has been published previously. Instead, it aims to describe each of the major IT governance components as part of an overall comprehensive framework and roadmap, in sufficient detail for executives, managers and professionals; to serve as a guideline and starting point for any organization in any industry; to develop and tailor a workable and realistic approach to its environment, strategies, priorities, capabilities and available resources; and to transition IT organizations to a higher level of maturity, effectiveness and responsiveness.

Today's business challenges

The pace of change is accelerating on a global basis. Reducing costs, increasing speed to market, continuous improvements and innovation, greater compliance, more effective accountability, globalization, and more demanding and sophisticated customers, are some of the many pressures facing business and IT executives.

Figure 1.1 illustrates select pressures and trends that organizations must deal with, in a rapidly and dynamically changing global environment.

The pace of change is accelerating
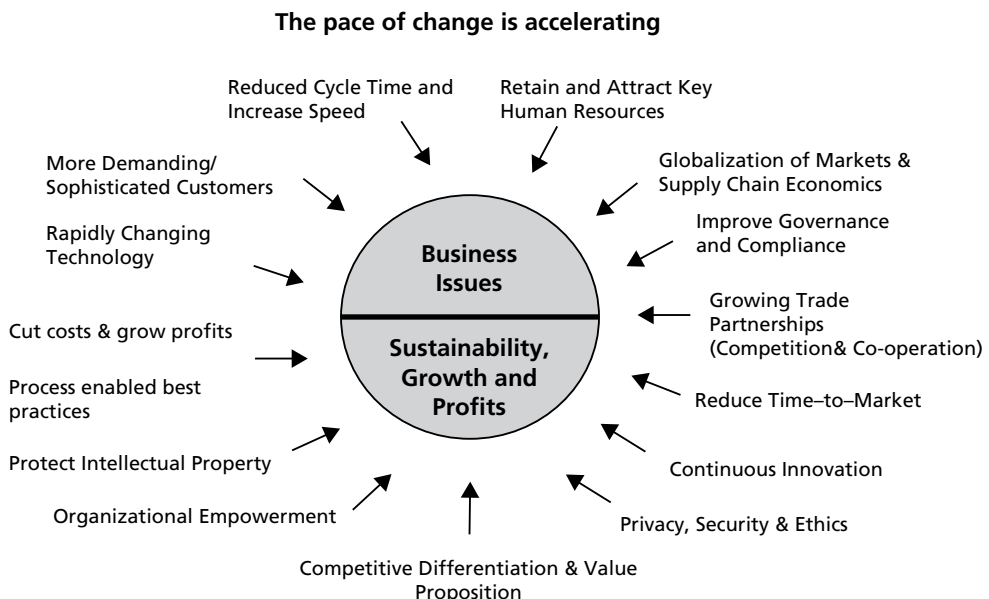
Figure 1.1   Today's business challenges

Scope and definition of enterprise governance and its relationship to business and IT governance

According to the International Federation of Accountants (IFAC),

"enterprise governance constitutes the entire accountability framework of the organization."

- International Federation of Accountants (IFAC)

Enterprise governance is the set of responsibilities and practices exercised by the Board and executive management, with the goal of providing strategic direction, ensuring that plans and objectives are achieved, assessing that risks are proactively managed, and assuring that the enterprise's resources are used responsibly.

Enterprise governance deals with the separation of ownership and control of an organization, while business governance focuses on the direction and control of the business, and IT governance focuses on the direction and control of IT. Figure 1.2 compares and differentiates the key characteristics of enterprise versus business versus IT governance.

Enterprise Governance	Business Governance	IT Governance
Separation of Ownership & Control	Direction & Control of the Business	Direction and Control of IT
• Roles of Board and Executives • Regulatory Compliance • Shareholder Rights • Business Operations & Control • Financial Accounting & Reporting • Risk Management	• Business Strategy, Plans & Objectives • Business Processes & Activities • Innovation and Research • Intellectual Capital • Human Resource Management • Performance Metrics and Controls • Asset Management	• IT Strategy, Plans & Objectives • Alignment with Business Plans and Objectives • IT Assets and Resources • Demand Management • Value Delivery and Execution Management (PM and ITSMD) • Risk, Change & Performance Management

Figure 1.2   Enterprise governance versus business governance versus IT governance

The Board's role in IT governance

Historically, the Board of Directors of public companies has focused, through committees, on such issues as audit, executive compensation, executive succession and planning.

With the growing importance of IT in an increasing number of organizations, the Board is becoming a committee that focuses on IT strategy, investments and governance as well. Based on a report by the IT Governance Institute,

"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 organizational structures and processes that ensure that the organization's IT function sustains and extends the organizations strategies and objectives."

- IT Governance Institute, 2003

Major challenges and issues faced by IT

In our research, we compiled a list of IT challenges and issues, identified by multiple independent sources. There appears to be a common thread running through these issues and therefore, we have summarized them into strategic, value enhancing and execution questions.

Board and executive questions for IT:
- Does the IT strategy align with the business strategy?
- Is the IT investment justified, based on its contributions to the business?
- How likely will IT meet or exceed its plans, objectives and initiatives?
- Is IT being managed prudently or effectively? How is it measured?
- How is IT delivering value? Is there a consistent IT business case format used for justifying IT investments?
- Is IT developing and maintaining constructive relationships with customers, vendors and others?
- Is IT delivering projects and services on time, within scope, within budget and with high quality?
- Is IT staffed adequately, with the right skills and competencies?
- Is there a standard measurement for IT investment across the firm?
- How does IT management and operations compare to other best practice organizations?
- How is IT managing and planning for contingencies, disasters, security, and back-up?
- How is IT measuring its performance? What are the key performance measures?
- How effectively is IT communicating its progress and problems to its constituents?
- What controls and documentation have been instituted in IT? Are they sufficient?
- Does the Board review and possibly approve the IT strategy?
- Is a risk management policy, assessment and mitigation practice followed for IT?
- Is IT compliant to federal, state, country (for global organizations) regulations, and to internal policies and controls?
- Are IT audit policies, procedures and processes in place and followed?
- Is there a succession plan in place for the CIO and key direct reports?

Top issues identified and ranked by over 100 CIOs in a CIO Magazine survey completed in 2006 (CIO Magazine, 2006):
1. align IT strategy with the business strategy and governance
2. meeting the business needs effectively
3. infrastructure and Service Management (reliability and scalability)
4. coping with accelerating change (and become one of the key drivers of innovation)
5. dealing with senior management and the Board (get a seat at the 'C' table)
6. managing costs, budgets and resources (internal and external)
7. keeping up with technology
8. recruiting and retaining staff
9. executing projects effectively (time, cost and resource management)
10. maintaining skills and knowledge (continuous learning)

Select issues addressed by a panel of CIOs of global organizations, such as Pepsi, GE, Ogilvy and Mather and Footstar, at a recent Society for Information Management (SIM) Chapter meeting (Selig, March 15, 2007):

- How do you align the IT strategy with the business strategy? What processes and tools are used? Who is involved? What worked? What did not?
- How, and in what areas, is IT delivering value to your organizations? How is it measured?
- How do you ensure that IT delivers on its plans and commitments, and executes effectively? Program/project management? IT Service Management and delivery? Security? Business and IT continuity? Performance metrics? Other?
- How is IT developing/sustaining constructive and positive relationships with its customer community? Executive management? Vendors?
- What IT controls, governance and compliance frameworks, processes, tools and techniques are being used? What worked? What did not?
- Has your business aligned itself with technology, innovation, the customer, and is it open to managing accelerating change?
- How is IT performance measured? What KPIs are used at CIO level? Above CIO Level? Below CIO level?
- How effective is IT in marketing and communicating its progress and performance results to its constituents? What tools and techniques are used? How often?
- How do you sustain continuous improvement initiatives to increase the level of IT maturity and effectiveness, staff development, constituent ownership and decision rights?
- How are you sustaining compliance processes and reporting?
- Does the Board/operating committee/senior business leadership, review and approve the IT strategy, priorities and funding? Major changes to plan, programs and budgets?

Summary of key strategic, value enhancing and execution questions:

Strategic questions - Are we doing the right thing?
Is the investment in IT:
- in line with our business vision and strategy?
- consistent with our business principles, plan and direction?
- contributing to our strategic objectives, sustainable competitive differentiation and business continuity support?
- providing optimum value at an acceptable level of risk?
- representing a long-term view (roadmap)
- including an architectural roadmap, based on a detailed analysis of the current state or condition of IT?

Value questions – Are we getting the benefits?
Is there:
- a clear and shared understanding and commitment to achieve the expected benefits?
- clear accountability for achieving the benefits, which should be linked to MBOs and incentive compensation schemes, for individuals and business units, or functional areas?

Are they:
- based on relevant and meaningful metrics?
- based on a consistent benefits realization process and sign-off?

Delivery and execution questions – Are we deploying well and effectively? How do we measure our results?

Metrics include:

- scalable, disciplined and consistent management, governance, delivery of quality processes
- appropriate and sufficient resources available with the right competencies, capabilities and attitudes
- a consistent set (of metrics) linked to critical success factors (CSFs) and realistic key performance indicators (KPIs)
- succession planning

Figure 1.3 summarizes the major IT challenges being addressed by a large, global software organization, as part of its IT planning and governance process.

Major IT challenges must be dealt with as part of an IT planning and governance process

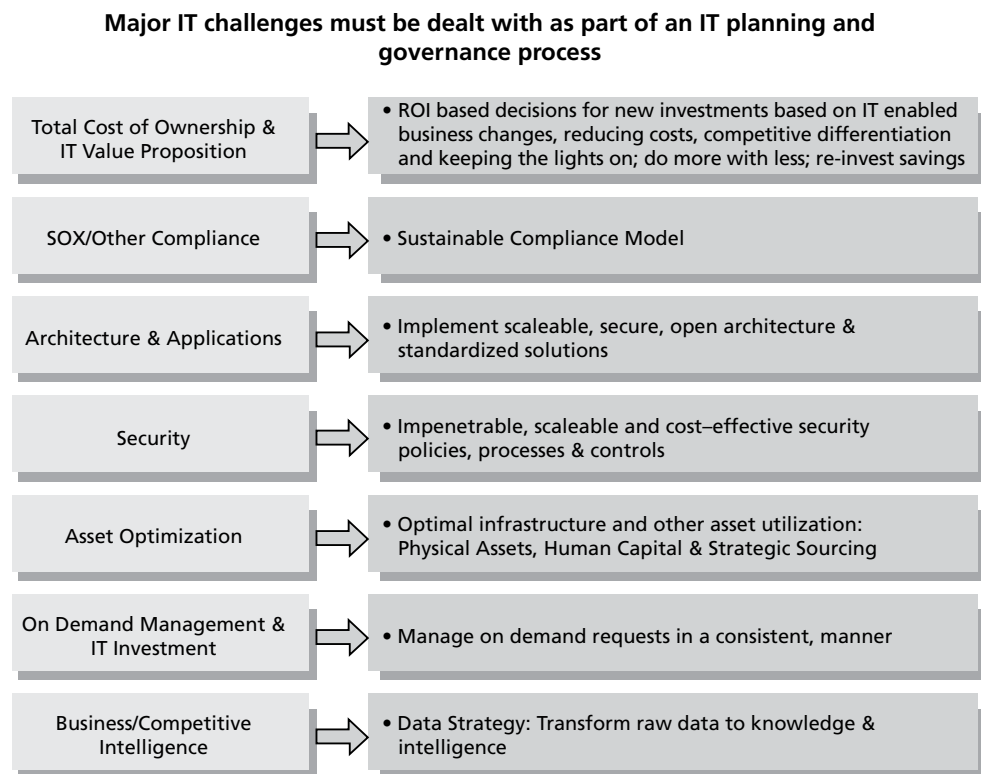|	
Total Cost of Ownership & IT Value Proposition	• ROI based decisions for new investments based on IT enabled business changes, reducing costs, competitive differentiation and keeping the lights on; do more with less; re-invest savings
SOX/Other Compliance	• Sustainable Compliance Model
Architecture & Applications	• Implement scaleable, secure, open architecture & standardized solutions
Security	• Impenetrable, scaleable and cost–effective security policies, processes & controls
Asset Optimization	• Optimal infrastructure and other asset utilization: Physical Assets, Human Capital & Strategic Sourcing
On Demand Management & IT Investment	• Manage on demand requests in a consistent, manner
Business/Competitive Intelligence	• Data Strategy: Transform raw data to knowledge & intelligence

Figure 1.3   Major challenges for IT

Basically, it comes down to the need for a plan that can be executed. At the same time, the role of the CIO is also undergoing significant change. Successful CIOs recognize that IT has become far more than a means of increasing efficiency and reducing costs. Rather, they see IT as a prime stimulus for, and enabler of, business innovation – and themselves as key collaborators in a process that develops business and IT strategies in unison. Throughout the book, we address many of these challenges and issues.

1.2   Definition, purpose and scope of IT governance

Definition of IT governance:
Governance formalizes and clarifies oversight, accountability and decision rights for a wide array of IT strategy, resource and control activities. It is a collection of management, planning and performance review policies, practices and processes; with associated decision rights, which establish authority, controls and performance metrics over investments, plans, budgets, commitments, services, major changes, security, privacy, business continuity and compliance with laws and organizational policies.

Purpose of IT governance
IT governance:
- aligns IT investments and priorities more closely with the business
- manages, evaluates, prioritizes, funds, measures and monitors requests for IT services, and the resulting work and deliverables, in a more consistent and repeatable manner that optimize returns to the business
- maintains responsible utilization of resources and assets
- establishes and clarifies accountability and decision rights (clearly defines roles and authority)
- ensures that IT delivers on its plans, budgets and commitments
- manages major risks, threats, change and contingencies proactively
- improves IT organizational performance, compliance, maturity, staff development and outsourcing initiatives
- improves the voice of the customer (VOC), demand management and overall customer and constituent satisfaction and responsiveness
- manages and thinks globally, but acts locally
- champions innovation within the IT function and the business

Scope of IT Governance:

Key IT governance strategy and resource decisions must address the following topics:
(Modified from Weill and Ross, 2004; Popper, 2000)

- **IT principles** – high level statements about how IT is used in the business (eg scale, simplify and integrate; reduce TCO (Total Cost of Operations) and self fund by re-investing savings; invest in customer facing systems; transform business and IT through business process transformation; strategic plan directions, PMO (project management office), sustain innovation and assure regulatory compliance, etc.)
- **IT architecture** – organizing logic for data, applications and infrastructure captured in a set of policies, relationships, processes, standards and technical choices, to achieve desired business and technical integration and standardization
- **SOA architecture** – service oriented architecture (SOA) is a business-centric IT architectural approach that supports the integration of the business as linked, repeatable business tasks or services; SOA helps users build composite applications that draw upon functionality from multiple sources within and beyond the enterprise to support business processes
- **IT infrastructure** – centrally co-ordinated, based on shared IT services that provide the foundation for the enterprise's IT capability and support

- **business application needs –** specifying the business need for purchased or internally developed IT applications
- **IT investment and prioritization –** decisions about how much and where to invest in IT (eg capital and expense), including development and maintenance projects, infrastructure, security, people, etc.
- **people (human capital) development –** decisions about how to develop and maintain global IT leadership management succession and technical skills and competencies (eg how much and where to spend on training and development, industry individual and organizational certifications, etc.)
- **IT governance policies, processes, mechanisms, tools and metrics –** decisions on composition and roles of steering groups, advisory councils, technical and architecture working committees, project teams; key performance indicators (KPIs); chargeback alternatives; performance reporting, meaningful audit process and the need to have a business owner for each project and investment

Who benefits from effective and sustainable IT governance?

Everyone in an organization benefits from effective IT governance. According to Charles Popper (Popper, January 2003), the following audiences benefit:

- What executives get
  - business improvements that result from knowledgeable participation in IT decision-making from an enterprise perspective
  - ensures that key IT investments support the business and provide optimum returns to the business
  - ensures compliance with laws and regulations
- What mid-level business managers get
  - convinces senior business managers that their combined business-IT resources are being managed effectively
  - helps to communicate with peers in IT to ensure that business services for which they are responsible will meet commitments
- What senior IT managers get
  - obtains sponsorship and support and a clear focus on important strategic and operational initiatives
  - improves customer relationships by delivering results in a more predictable and consistent manner, with the involvement of the customer
- What program/project and operations managers get
  - helps in resolving issues, reviewing progress and enabling faster decisions
- What everyone gets
  - facilitates communications about how IT contributes to the business
  - improves co-ordination, co-operation, communications and synergy across the organization
  - less stress

Value propositions from best-in-class companies on business and/or IT governance

Based on primary and secondary market research, it is possible to identify a number of benefits attributed to major organizations relating to improved governance business and/or IT structures and environments (Selig, March 15, 2006):

Effective and sustainable governance:
- lowers cost of operations by accomplishing more work consistently in less time and with fewer resources without sacrificing quality (General Motors)
- provides better control and more consistent approach to governance, prioritization, development funding and operations (Kodak)
- develops a better working relationship and communications with the customer (Nortel)
- provides for a consistent process for more effectively tracking progress, solving problems, escalating issues and gate reviews (Cigna)
- aligns initiatives and investments more directly with business strategy (GE)
- improves governance, communications, visibility and risk mitigation for all constituents (Robbins Gioia)
- facilitates business and regulatory compliance with documentation and traceability as evidence (Purdue Pharma)
- increases our customer satisfaction by listening proactively to the customers and validating requirements on an iterative and frequent basis (Johnson and Johnson)
- reuse of consistent and repeatable processes helps to reduce time and costs and speeds up higher quality deliverables (IBM)

Successful IT governance is built on three critical pillars – leadership, organization and decision rights, scalable processes and enabling technologies

Effective IT governance is built on three critical pillars. These pillars include: leadership, organization and decision rights, flexible and scalable processes, and the use of enabling technology (Luftman, 2004; Board Effectiveness Partners, 2004; Melnicoff, 2005; Pultorak and Kerrigan, 2005):

- **Leadership, organization and decision rights -** define the organization structure, roles and responsibilities, decision rights (decision influencers and makers), a shared vision and interface/ integration touch points and champions for proactive change:
  - roles and responsibilities are well defined with respect to each of the IT governance components and processes, including the steering and review hierarchies for investment authorizations, resolution of issues and formal periodic reviews
  - clear hand-off and interface agreements and contracts exist for internal and external work and deliverables
  - motivated leaders and change champions with the right talent, drive and competencies
  - meaningful metrics
  - CIO is a change agent who links process to technology within the business, and provides the tools for enablement and innovation

- **Flexible and scalable processes -** the IT governance model places heavy emphasis on the importance of process transformation and improvement: (eg planning, project management, portfolio investment management, risk management, IT Service Management and delivery, performance management, vendor management, controls and audits, etc.):
  - processes are well defineßd, documented, measured
  - processes define interfaces between organizations and ensure that workflow spans boundaries and silos including organization, vendors, geography, technology and culture
  - processes should be flexible, scalable and consistently applied, with common sense

- **Enabling technology -** leverage leading tools and technologies that support the major IT governance components:
  - processes are supported by software tools that support the IT imperatives and components (eg planning and budgeting, portfolio investment management, project management, risk and change management, IT Service Management and delivery processes, financial, asset and performance management and scorecards, etc.)
  - tools provide governance, communications and effectiveness metrics to accelerate decisions, follow-up and management actions

If any one of the above pillars is missing or ineffective, the IT governance initiative will not be effective or sustainable. In addition, over dependence on one dimension over the others will result in sub-optimal performance.

Results of ineffective IT governance can be devastating

A number of negative impacts may result from poor IT governance. These include the following (IT Governance Institute, *The CEO's Guide to IT Value and Risk*, 2006):

- business losses and disruptions, damaged reputations and weakened competitive positions
  - Nike lost an estimated $200 million, while running into difficulties installing a supply chain software system
  - Hershey attempted to install SAP several years ago and at that time, was not successful; it cost the company significant money and lots of embarrassment
  - Whirlpool ran into significant trouble in attempting to implement a supply chain management system, which did not provide accurate inventory counts at various inventory stages
- schedules not met, higher costs, poorer quality and unsatisfied customers
- core business processes are negatively impacted (eg SAP and other enterprise resource planning systems impact many critical business processes) by poor quality of IT deliverables
  - an operational meltdown of the Southern Pacific-Union Pacific merger was traced largely to the inability to co-ordinate their IT systems
- failure of IT to demonstrate its investment benefits or value propositions

Poor regulatory compliance procedures, controls, audits and/or unethical executive business practices resulted in the demise of such companies as Enron and Andersen, and the jailing of former heads of Tyco and Worldcom. Others such as Parmalat and Global Crossing have also been impacted by compliance issues.

The simple fact is that a poorly executed IT operation will result in the business not working. In addition, business and IT continuity and resumption plans have become critical.

The implications of Sarbanes Oxley Act (SOX) and other regulations on IT governance

In general, governance should be the responsibility of the Board of Directors and executive management in organizations. In order to develop an effective compliance program, executives must understand that compliance can and does involve more than just SOXs. It can involve multiple national, international, local and industry specific regulations, as well as best practices, guidelines and frameworks.

Compliance with a growing number of regulations and laws, regarding financial disclosure, privacy, environmental conformance and others, etc. developed by the SEC, FDA, EPA, Sarbanes-Oxley, HIPPA, Basel II and specific industry-focused regulations, in banking, insurance, brokerage, healthcare, pharmaceutical and others, are creating new and greater IT reporting and systems support requirements for organizations. Much like IT governance, to achieve sustainable compliance, this complex and confusing mix can be approached most effectively as a single comprehensive compliance program that addresses people, process and technology (Sun Microsystems and Deloitte, 2006).

Regulatory, audit and management requirements generally determine the level of management and administrative controls that a company deploys. As an example, Section 302 of Sarbanes-Oxley requires CFOs and CEOs to personally certify and attest to the accuracy of their companies' financial results. Section 404 of Sarbanes-Oxley focuses on financial controls and requires IT to be able to document and trace a company's financials (eg profit and loss, balance sheet, etc.) back to the systems, software and operational processes and sources of the transactions that comprised the numbers. A company has to demonstrate a documented audit trail to be in compliance, and to further demonstrate how an organization plans to sustain that compliance effort. Within IT, the Sarbanes-Oxley Act:

- improves financial reporting/disclosures – new requirement to report on internal controls for financial statements – Section 404
- expands insider accountability – new requirements for code of ethics for executive management and protection for whistleblowers
- means that the external auditors can insist that any gaps in IT controls must be addressed before an overall opinion is reached on the effectiveness of the internal company controls
- requires a back-up for all 'financially significant files, storage of those files and periodic restoration of back-up files'
- requires IT change management tracking and documentation for financial systems
- requires the maintenance of logs for user access to financial data bases, security logs, administrative logs, problem and incident logs, as well as an independent review of the logs to detect any activities that could adversely impact financials
- requires systems documentation and verification that data is properly handed off from one system to another
- strengthens overall corporate governance

In a growing number of companies subject to SOXs, the CIO must internally certify the accuracy of the information audit trial each quarter to support the CEO/ CFO SOX certifications.

There is a growing library of books, articles and documents that provide recommendations on how to deal with these regulatory and legal requirements (Anand, 2006; Ernst and Young, 2005; Forrester Research, March 14, 2004; Protivity, December 2003), In addition, Appendix 1 provides an illustration of a template, used by a manufacturing company as a guideline to help the company track SOX compliance activities and reports.

1.3   Linking the CEO role to achieving business growth, improving profitability and creating an effective governance and compliance environment

The role of the CEO and the executive management team is complex, and requires a balance between sustaining growth and profitability while optimizing organizational effectiveness and complying with the growing and confusing number of regulatory requirements.

Executing enterprise-wide strategic initiatives and managing effective business operations is a complex undertaking that requires effective corporate and IT governance to play a growing role in how the CEO and the executive team deploy the organization's strategy.

As Michael Cinema, President and CEO of Etienne Aligner Group stated, "*The Board of Directors is well aware of its role to oversee the company's organizational strategies, structures, systems, staff, performance and standards. As President, it is my responsibility to ensure that they extend that oversight to the Company's IT as well, and with our growing reliance on IT for competitive advantage, we simply cannot afford to apply to our IT anything less that the level of commitment we apply to overall governance.*"

<div align="right">- IT Governance Institute, 2003</div>

Figure 1.4 identifies the attributes that must be addressed for effective growth and profitability. Effective governance is a prominent component for both.

How much governance is required and when is enough, enough?

There are few, if any, standards or guidelines developed that identify and clearly lay out in more detail what level of governance is required for either management or regulatory compliance by an organization. Generally, it is dependent on a number of variables such as:

• investment $ (capital and expense) criticality to the organization (mission critical)
• degree of business dependency on technology
• strategic corporate value proposition and alternatives for focus (eg growth centric, customer centric, process centric, cost centric, etc.)
• management philosophy and policy (eg first mover versus follower)
• program/project and/or operational importance
• complexity, scope, size and duration of initiative

Executing enterprise–wide strategic initiatives & effective business operations is a complex undertaking that requires a balance between growth, effectiveness and efficiency

Growth (Maximize Value Proposition)		Optimize Effectiveness & Efficiency

CEO Role

- Speed (reduce time) to market
- Minimize risks and uncertainty
- Flawless execution
- Facilitation of best practices
- Reduce costs
- Reduce Capital Expenditures
- Reduce obstacles
- Reduce defects
- Increase customer loyalty
- Governance & Key performance indicators
- Code of Ethics

Growth (Maximize Value Proposition)
- Earnings per share
- Growth and sustainability
- Increase revenues and profitability
- New products/services innovation
- Mergers/acquisitions/joint ventures
- New market entry
- Outstanding customer service
- Breakthrough innovations
- Focus on high value customer retention
- Portfolio Investment Management
- Financial Management
- Effective Asset Utilization & Optimization
- Program/Project Management
- **Governance**

Optimize Effectiveness & Efficiency
- Continuous process improvement and quality management
- Cost reduction, containment, and avoidance
- Effective supply chain management
- Enabling enterprise wide technology and systems
- Service Management
- Change management
- Outsourcing
- Value chain optimization
- Human resource motivation, training, and life time learning
- **Governance**

- Increase management/ employee competency/ training
- Implement strategic change in a planned, co-ordinated, and controlled manner
- Improve outcomes of implementation efforts
- Enhance team building dynamics and enterprise behavior
- Compliance

Critical Success Enablers include: superior leadership skills and motivated change agents, flexible and scalable processes, pragmatic and realistic metrics, a clear governance policy and structure, and the use-enabling technologies.
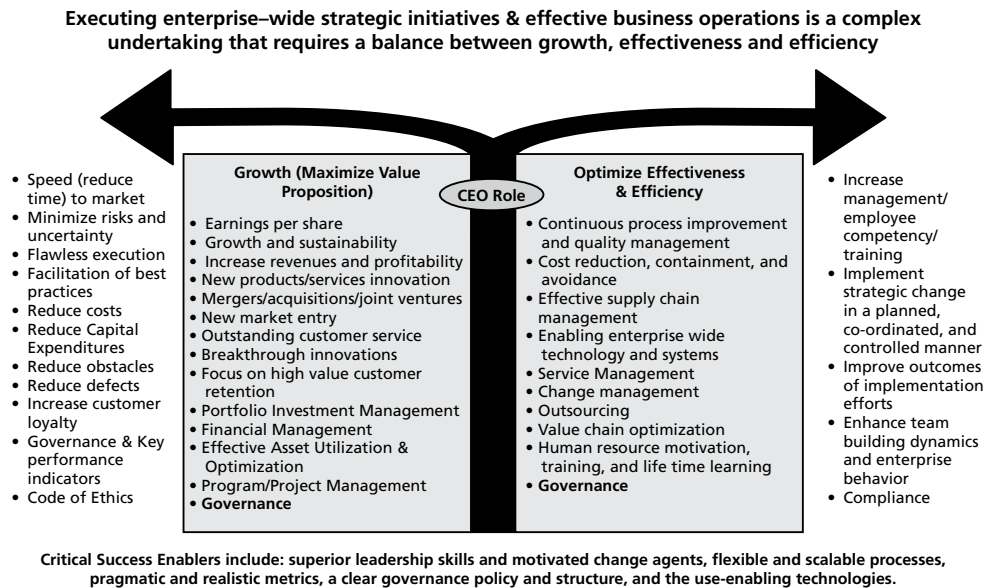
Figure 1.4   Linking the role of the CEO to the success of strategic enterprise initiatives and governance

- number of interfaces and integration requirements with business
- degree of risk and potential impact (of doing or not doing)
- number of organizations, departments, locations and resources involved
- customer or sponsor requirements
- regulatory, legal, control and compliance required
- degree of accountability desired and required
- level of security required or desired
- audit, documentation and traceability requirements

Chapter 2 discusses many of the current and emerging standards, guidelines and frameworks either developed or being developed, that help improve the overall IT alignment, execution, governance, control, strategic sourcing and outsourcing management and performance management processes.

1.4   Overview of the integrated IT governance framework, major components and prerequisites

Grounded in industry best practice research and required to plan, develop, deploy and sustain a cost effective approach to IT governance, the blended and integrated governance framework consists of five (5) critical IT governance imperatives (which leverage best practice models and are 'must do's') and address the following work areas:

- **business strategy, plan and objectives (demand management)** - this involves the development of the business strategy and plan which should drive the IT strategy and plan
- **IT strategy, plan and objectives (demand management)** – this should be based on the business plan and objectives, and will provide the direction and priorities of the IT functions and resources; this should also include portfolio investment management investments, a prioritization scheme and identify the decision rights (who influences decisions and who is authorized to make the decisions) on a wide variety of IT areas; in addition, the CIO is responsible for the infrastructure investments such as servers, networks, systems software and management
- **IT plan execution (execution management)** – this encompasses the processes of program and project management, IT Service Management and delivery (including ITIL – IT Infrastructure Library), risk and threat management, change management, security, contingency plans and others
- **performance management and management controls (execution management)** – this includes such areas as the Balanced Scorecard, key performance indicators, CobiT, and regulatory compliance areas; more details on these topics are provided in Chapters 2 and 8
- **vendor management and outsourcing management (execution management)** – since companies are increasing their outsourcing spending, selecting and managing the vendors and their deliverables has become critical
- **people development, continuous process improvement and learning** - it is critical to invest in people, knowledge management, and sustain continuous process improvement and innovation initiatives

For each IT governance imperative, a description of the key components are provided and further detailed in subsequent chapters. Step one for a new CIO is to assess the current IT governance environment and what shape IT is in.

Figure 1.5 illustrates each of the major work areas or components of the IT governance framework, including a short description of each component and provides select references.

Key work breakdown areas required to plan and manage an IT governance initiative

Today, many companies start on a narrow path or shot gun approach without developing a more comprehensive framework, with a prioritized roadmap based on the highest value delivery to the organization. A good place to start the IT governance initiative is to decompose it into manageable and assignable work packages - as in a work breakdown structure - and assign these work packages to champions and owners responsible for them.

Figure 1.6 illustrates such a work breakdown for the major and key work areas of IT governance, including planning, execution and performance management.

IT governance – decision rights and authority

Peter Weill and Jeane Ross (Weill and Ross, 2004) identified the concept of IT decision rights as an important component of effective IT governance. The purpose of a decision rights matrix is to identify the IT decision influencers and decision makers in an organization, to clarify the

**Identifies the major areas that must be addressed on the journey to a
higher level of IT governance maturity and effectiveness**

Areas of Work	Description/Components	Deliverables/References
Business Plan/ Objectives (Demand Management & Alignment)	• Strategic Business Plan – Vision, Objectives, Financials, Operations, SWOT, Imperatives (Must Do's), Initiatives (Alternatives that Support Imperatives), etc. • Capital Planning/Expense Planning & Budgeting • Business Performance Management (Key Metrics) • Executive and Other Steering & Review Councils; Organization Structure	• Plan Document • Financials • Balanced Scorecard Metrics • BCG; Porter; Hamel
IT Plan, Objectives, Portfolio Investment and Approvals (Demand Management & Alignment)	• IT Plan is aligned with the Business Plan – IT Capital/Expense Budget • IT portfolio investment, rationalization, selection, prioritization, funding and approval (Portfolio Management Model (for New, Change Programs and Projects and/or Operational initiatives and Infrastructure Functions) • Fund major Initiatives • IT Performance Management (Define Metrics and Measurement Criteria)	• IT Strategic/Tactical Plan/ Metrics • Portfolio Mgt. Model (Investment Criteria); ITIM • Engagement Model - Roles • Business Rules & Authorization • McFarlan, Cash; Luftman; Popper; Selig
IT Plan Execution & Delivery (Resource & Execution Management)	• Program, Project and Operating Plans (Capital Plans, Project Plans and Budgets) • Policies, Standards, Guidelines & Processes (e.g. Management Control, Enterprise Architecture, Security, PMO, ITIL, Enterprise Architecture, etc.) • Processes (PMO, Help Desk, Security, Administrative SOPs, Workflows, Change, Risk, etc.) • Financial, program, project, application, maintenance and operational accountability	• Assess Implications of PMMM, PMBOK, CMMI, ITIL, SDLC, CoBit, Security (ISO 17799), Prince2 ,eSCM Frameworks • Infrastructure & Operational Integrity, Continuity & Security
Performance Management, Controls, Risk, Compliance and Vendor Management (Execution Management)	• Manage and measure plans, budgets programs, projects, operations & risks • Define and track key performance indicators (KPI) • Compare plans to actuals and take appropriate corrective actions • Outsourcing and Vendor Selection, Tracking, Measurement • Business and IT Continuity, Security, Contingency and Disaster Recovery	• Balanced Scorecard & KPIs • Performance Management • RFI, RFQ, RFP and Contrac Management; • Sarbanes-Oxley ++ Compliance • Management Controls/ COBIT
People Development, Continuous Process Improvement & Learning	• Human capital development • Organizational, Project & Operational Maturity Models and Standards • Managing Change and Transformation (e.g. culture, interoperability) • Training and Certification (e.g. Individual and Organization)	• Adopt Current and Emerging Industry and Government Best Practices Standards & Guidelines • PCMM; ITSM; ISO; ITIM • Career Development and Certification

Figure 1.5   Integrated IT governance framework

**The IT Governance Initiative must be decomposed into manageable and accountable
work packages and deliverables and assigned to owners for planning, development,
execution and continuous improvement**

Establish a comprehensive initiative and annual calender of key Governance activities

Manage Governance Initiative

Manage Planning	**Manage Execution**	**Manage Performance**
• Develop Roadmaps • Develop Strategic & Annual Plan and Budget • Portfolio Invest. Management	• Manage Programs/ Projects • Manage Demand (Service Requests, Service Mgt. & Delivery	• Develop and Measure Key Performance Indicators (KPI's) – Discretionary – Mandatory (Keep Lights on)

Define key performance Indicators (KPIs) for each function, establish targets and monitor performance using balanced scorecards

Ensure development of high quality strategic / operating plans and critical success factors that are comprehensive and mutually consistent

Manage Value Creation
• Manage Business Initiatives and Operations

Ensure that program/project budgets are established and quality business cases are developed and tracked for each program/project

Launch programs/projects as specified in roadmaps, and ensure they are completed on time and on budget by managing demand from business users

Assure that IT Service Management & Delivery is documented and KPIs (e.g. SLAs, other) are monitored to assure appropriate service levels for business
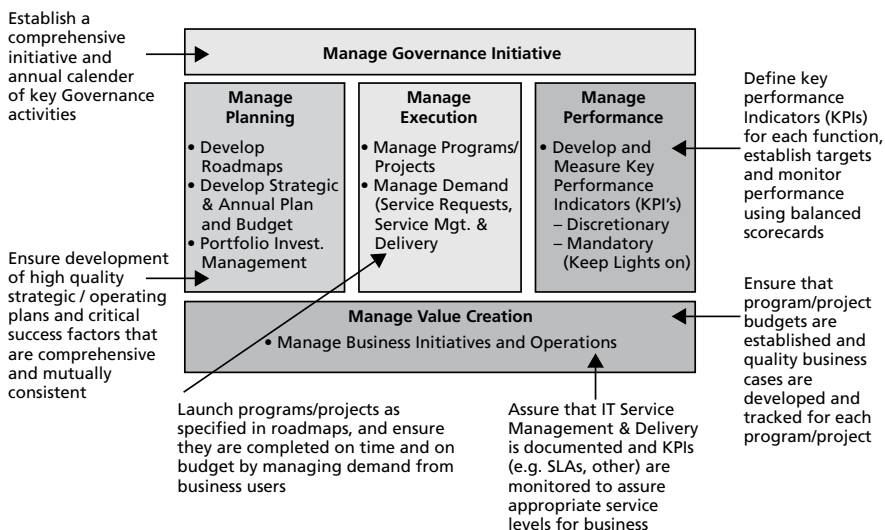
Figure 1.6   Key work breakdown areas for IT governance

decision roles and authority levels for the major IT areas. It eliminates confusion, identifies accountability and clearly defines decision roles and scope.

Figure 1.7 provides an illustrative example of a partial IT governance decision rights matrix for a financial services organization.

A decisions rights matrix identifying decision influencers and decision makers is necessary to clarify decision roles and authority levels for the major it governance components

IT Governance Component	Input to Decision	Decision Authority	Comments/Examples (Varies by Organization)
IT Principles (High value statements about how IT will be used to create business value)	Business Units	IT Senior Leadership Group & CIO; Executive Officer Group	• Scale, simplify, integrate • Reduce cost of IT & self fund • Re-engineer/consistent processes • Invest in customer facing systems • Investment $ Threshold Approvals • Key Performance Indicators/CSFs
IT Investment, Plan, Prioritization, Critical Success Factors and Key Performance Indicators (KPIs)	Business Units	IT Steering Committee (ITSC) (Business & IT Executives), Projects over $500K:	• ITSC recommends priority to CEO for any projects requiring over $500K • Identify, track and measure critical success factors and associated KPIs
Business Applications	Business Units and Corporate Functional Unit Heads	IT Steering Committee	Significant business application spend must be approved during the annual budgel process, and if over $500K, approved by ITSC
IT Infrastructure and Architecture; Outsourcing & Vendor Management; +++Others	IT Steering Committee IT Steering Committee + Business Units	IT Architecture/Technology Review Board (and Business Units (for related applications) Senior leadership (Depends on scope)	Significant infrastructure spend must be approved during the annual budget process, and if over $500K, approved by ITSC. Significant outsourcing initiative should be recommended by ITSC & approved by Executive Officer Group

Figure 1.7   IT governance decision rights (financial service organization)

IT/business steering and governance boards, working committees and roles

Many top performing companies have established multi-level and multi-disciplinary business/IT steering and governance boards and working committees, with clear roles and responsibilities, to ensure appropriate commitments, sponsorship, escalation, ownership, more effective communications and more formal visibility and commitment of the Board, executive management and other constituents.

Why are they important?

They:
- help to ensure alignment across all of the parts of an organization; it is recognized that the demand for IT resources will exceed available resources/budget, and establishing organization wide and business unit priorities is essential
- provide a forum for investment decision-making which is synchronized with the business
- build an enterprise view and help to eliminate stovepipe systems, processes, and duplication of effort across the organization

What (charter) should they focus on?

Boards should aim:
- to review and approve strategic plans, major programs/projects and establish priorities among competing requests for resources to ensure that everyone is aligned on those initiatives with highest 'value add' to the organization as a whole
- to establish and support processes where needed, to effectively fulfill the charge outlined
- to conduct formal periodic reviews of major initiatives, and operational service performance

Roles and responsibilities:

They:
- review and approve overall IT plans
- review, prioritize, approve major IT investments
- conduct formal periodic project progress and performance reviews
- final escalation point for major IT/business issues resolution
- support and sponsor IT governance policy and process improvement programs impacting the Executive Steering Board membership organizations, and help deploy them in their organizations

Other steering and working committees:
- Successful IT governance requires multi-level and multi-functional participation. Many organizations establish additional business/IT working committees at the business unit level, as well as major functional areas such as supply chain management, global financials, marketing and sales, research and development, and others as necessary.
- Program and projects working groups focus on specific initiatives.

Figure 1.8 illustrates an example of the IT/business steering and governance boards and roles at multiple levels for a large organization.

IT demand management - sources and classifications

Typically, requests for IT services should be identified and accommodated for in the strategic and tactical plans and budgets. If they are not, they are classified as 'out-of-plan'. Therefore, each request should be evaluated on its own merits against consistent evaluation criteria discussed in more detail in Chapter 3.

Demand for IT services generally comes in several flavours — mandatory ('must do's' such as addressing service interruptions, standard maintenance, keeping the lights on and/or regulatory compliance) and discretionary ('could do's' if aligned, feasible, cost justified, strategic and/or

Board/CEO

Business and IT Executives:
*Multi-Level – Enterprise, SBUs &
Major Functions – Supply Chain,
Marketing & Sales, Customer
Service, R&D, Finance, etc.*

**Executive & SBU
Steering Boards**

- Business/IT Plans – Alignment
- IT Plan Review & Approval
- Investment Portfolio
  Management Selection,
  Prioritization, Funding and
  Authorization
- Formal Periodic Progress &
  Performance Reviews
- Fianl escalation points for
  issues resolution

CIO Operating/Technical Board
Department-wide

*Architecture, Infrastructure,
Security, Risk, Continuity, etc*

**PROGRAM/TECHNOLOGY/ARCHITECTURE/
INFRASTRUCTURE/OPERATIONS
MANAGEMENT/WORKINGBOARD(S)**

*Plans, Budget, PMO,
Performance Metrics,
Financials, etc*

- Multi-level management
  and working boards with
  different focus areas –
  Architecture, Technology
  Interoperability, COBIT,
  PM, Security and
  ITL Processes and
  Effectiveness

Program/project repository,
Systems and Operations
Documentation Repository

Roles and Responsibilities must be
defined for each Project and Service
and will vary by as defined in a
Responsibility Assignment Matrix

Program/Project/Operations
Managers: Day-to-Day
Management of the
Program/Project and
Operations/Infrastructure

**PROGRAM/
PROJECT/OPERATIONS/
ARCHITECTURE/
INFRASTRUCTURE TEAMS**

PROGRAM/PROJECT &
ITIL MANAGEMENT
OFFICE (PMO/ITIL) – **CIO
and in each Directorate**.
Policy, process, tools,
training, facilitation,
tools, training, facilita-
tion, audit, certification,
reporting (Certer of
Excellence)

Working Groups,
Subteam Management

**Vendor Sourcing
& Outsourcing**

**APPLICATION &
TECHNICAL
SUBTEAMS**

**USER
SUBTEAMS**

Subteams:
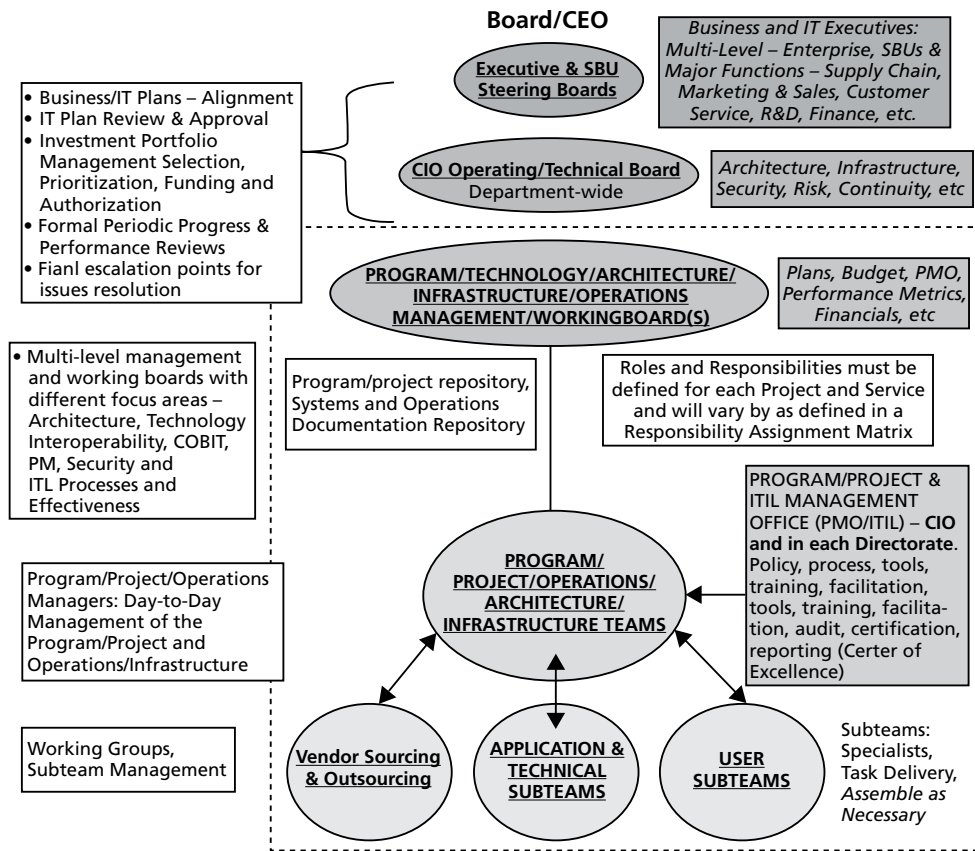Specialists,
Task Delivery,
*Assemble as
Necessary*

Figure 1.8   IT/business steering and governance boards, committees and roles

requested by executive management). Both mandatory and discretionary requests should be approved by the business/IT leadership in the IT strategic and operating plans, or in accordance with an organization's decision rights and approval authority guidelines established for IT.

The following considerations will further help prioritize business needs with IT:

- clearly define and relate the value (eg cost reduction, containment and avoidance; increased revenues; faster access to information; shorter time to market etc.) that IT provides in support of the business
- identify value adding activities (eg value chain and other business models/attributes) and strategies that would enhance then through IT.
- focus on listening to the voice of the customer
- ensure that all IT initiatives are evaluated using a consistent, but flexible set of investment selection, prioritization and review criteria, to assure a strong link to the business plan, project implementation and on-going operations

- develop a strategic IT plan that identifies major initiatives, technical/architecture, operational, organizational, people development and financial objectives and measurements in support of the business

Figure 1.9 illustrates a demand management chart for a major bank.

Classification	Type of Request or Demand Mgt.	Comments/Description
Mandatory or Core (Business Enablement)	**Service Interruption (Break & Fix)**	A problem caused the disruption of IT service and must be fixed and restored as soon as possible
	Maintenance	Scheduled maintenance must be performed to keep applications and infrastructure operating efficiently
	Keep the Lights On and Legal/ Regulatory	The costs and resources required to support the basic steady state operations of the business, including some components of infrastructure
Discretionary* (Require ROI)	**Major New/Change (Complex) Initiatives (Full Risk Mitigation)**	Complex new initiatives or major changes (major enhancements or modifications) to systems, processes or infrastructure that provide new or additional functionality or capacity
	Fast Track (New/Change) (Simple or Limited Scope)	Simple new initiatives and minor changes that do not required the rigor and discipline of a complex initiative and be fast tracked.
	Standard (Repetitive) Request	Describe product/ service (functions, features and price in a product/service catalogue)
Strategic	**Major initiative – Realistic ROI may not be doable – too early**	A strategic initiative may fall into several categories – first market mover (new product or service); R & D; competitive advantage, etc.

* Note: Criteria for differentiating between complex or fast track initiatives or service catalogue listings will vary for each organization.

Figure 1.9   IT demand management: classifications

IT demands generally come in several flavors – mandatory or core, discretionary and strategic – These should be identified and resourced in the IT strategic and operating plan and budgets - If they are not in the plan, each request should be evaluated on its own merits against consistent alignment, investment and service criteria. A steady state (normalized and repeatable) service could be included in a service catalogue.

Business/IT governance performance management and the Balanced Scorecard

A performance management plan must be developed for IT. The development of the performance management plan should be a collaborative effort between the business and IT. It should be based on a number of objectives, such as strategic, financials, customer, quality, process innovation, operational and service effectiveness which, in turn, support an organization's business vision, mission, plans, objectives and financials.

It is important to measure the performance of IT in terms that can be understood by the business. It is equally important to have two types of reporting systems based on critical success factors and key performance indicators: those that are developed by IT for the external (out of IT) environment, such as executive management, the Board and the business managers, and those developed for internal use by IT management.

The execution of these plans and objectives must be monitored and measured by a combination of Balanced Scorecard key performance indicators (KPIs), as well as formal and informal status review meetings and reports (eg report cards, dashboards). Figure 1.10 illustrates high level business and IT Balanced Scorecard categories and related metrics. The outcomes should link critical success factors to KPIs that are measurable, part of a standard reporting system and linked to a governance component. If one cannot measure the result, they do not count. Chapter 8 provides more details on performance management, controls, Balanced Scorecard and other metrics.

Should link Critical Success Factors (CSFs) to Key Performance Indicators (KPI's) for Business and IT (Illustrative Example)

Balanced Score Card – Key Performance Measures – Business*
- Financial (including compliance) – revenue &, profit growth, budgets/expenses, ROA, ROI, NPV, cost reduction, etc.
- Strategic/Customer – new product/service development, intellectual property, asset management , portfolio valuation, customer satisfaction, etc.
- Internal/External Processes – process and/or technology innovation and transformation in sales and marketing, productivity, regulatory compliance, human resources, operations, engineering, manufacturing, customer service, IT, purchasing, vendor management, etc.
- Learning and Growth – people development, education, training, certification, job rotation, mentoring, R+D investments, etc.

Link Business to IT Metrics

Balanced Score Card – Key Performance Indicators - Information Technology*
- Financials – revenue and profit growth, cost reduction & self funding, budgets/actuals/variances, ROI, Payback, NPV, cost per IT customer, % of IT budget to revenue
- Strategic – competitive positioning, business value, alignment, differentiation through technology, growth, etc.
- Customer (User) Satisfaction – ownership, commitment, involvement, part of team, level of service
- Employee Satisfaction/People Development – training, certification, productivity, turnover
- Program/Project Management Process* – time/schedule, budget/cost, deliverables, scope, quality, resources, number of risks, number of changes, key issues, earned value, % of rework, etc.
- Service (Operations) Process*– service levels, uptime, service delivery, reliability, redundancy, availability, problem reporting and control, scalability, back-up & disaster recovery plans, mean time to repair, response times, amount of errors and rework, etc.

* (Note: For each category, more granular metrics are available, depending what needs to be measured))
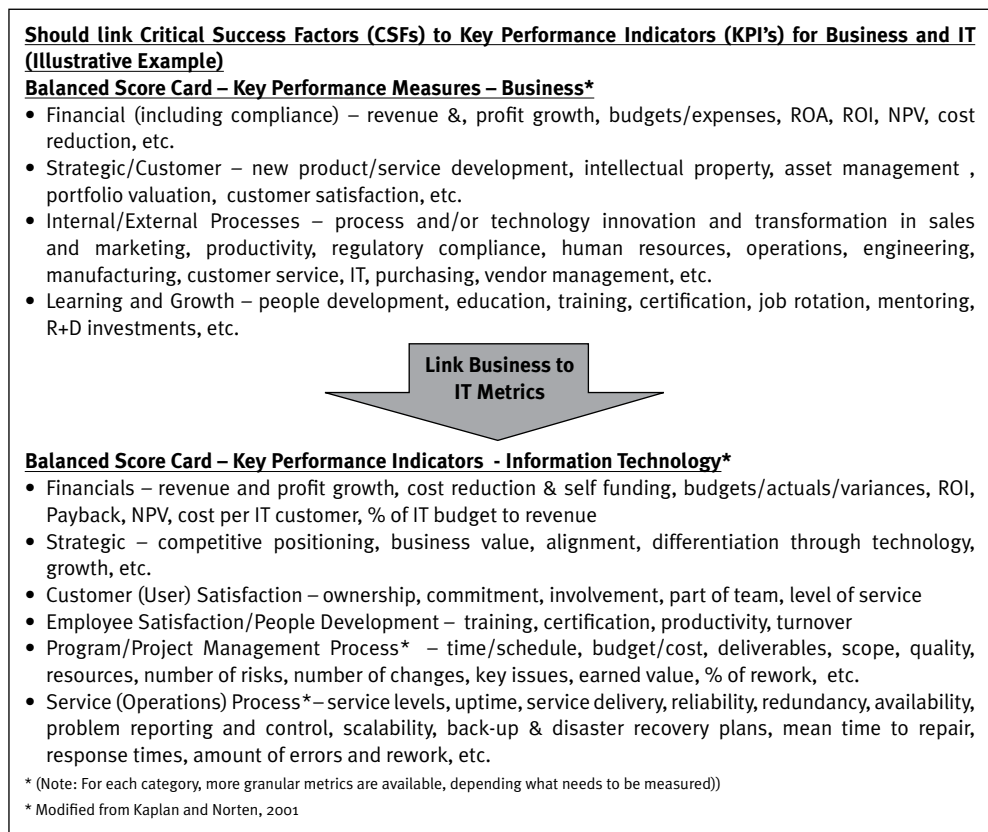
* Modified from Kaplan and Norten, 2001

Figure 1.10   Select Balanced Scorecard metrics for business and IT governance

1.5 Steps in making IT governance real

IT governance represents a journey towards continuous improvement and greater effectiveness. The journey is difficult, but can be facilitated by the following steps:

- must have a corporate mandate from the top - the Board and the executive team (including the CIO) are committed to implementing and sustaining a robust governance environment
- must have dedicated and available resources - identify executive champion and multi-disciplinary team (to focus on each IT governance component)
- do homework – educate yourself on past, current and emerging best practices
- market the IT governance value propositions and benefits to the organization - develop and conduct a communications, awareness and public relations campaign
- develop a tailored IT governance framework and roadmap for your organization based on current and emerging industry best practices
- assess the 'current state' of the level of IT governance maturity, or other frameworks that relate to specific IT governance components, such as project management maturity model (PMMM), vendor management (eSCM), performance management (Balanced Scorecard) and others, as a reference base (where are we today?), using a leading industry best practice framework such as CMMI or another framework that may apply to a specific component of IT governance
- develop a 'future state' IT governance blueprint (where you want to be) and keep it in focus
- decompose the IT governance components into well defined work packages (assign an owner and champion to each process component)
- develop an IT governance action plan, identify deliverables, establish priorities, milestones, allocate resources and measure progress
- sponsor organizational and individual certifications in the IT governance component areas, where they are available (eg PMP, ITIL, IT Security, IT Audit, BCP, Outsourcing, eSCM, COP, etc.)
- identify enabling technologies to support the IT governance initiative
- establish a 'web portal' to access IT governance policies, processes, information, communications and provide support
- market and communicate the IT 'value proposition' and celebrate wins
- plan for and sustain IT governance process improvements and link to a reward and incentive structure; create a 'continuous IT governance improvement' group to sustain the framework
- do not focus on specific ROI as a measure of success - use TCO (Total Cost of Operations) and business innovation and transformation metrics as measures of improvement

Avoiding IT governance implementation pitfalls

To avoid IT governance implementation pitfalls, key factors to remember include the following:

- treat the implementation initiative as program or project with a series of phases with timetables and deliverables
- remember that implementation requires cultural change and transformation, which requires:
  - marketing of the value proposition and overcoming resistance to change
  - managing culture change and transformation

- – obtaining executive management buy-in and ownership
- – mobilizing commitment for change at multiple organization levels
- manage expectations of all constituents – IT governance takes time and represents a series of continuous improvement processes
- demonstrate measurable and incremental improvements in the environment and communicate them to the constituents

A first step - assess current maturity level of key IT governance components

As an organization develops its IT governance strategy, IT is useful to assess the level of maturity of the IT governance. An industry standard methodology that is useful for this purpose is SEI's Capability Maturity Model Integrated (CMMI®) framework (Software Engineering Institute, 2002 and 2005). The model consists of five levels of maturity and can be used to analyze the current state of the major IT governance components, as well as to establish a targeted future state maturity level for each major IT governance component:

The framework consists of five levels of maturity:

1. **Initial level**: The IT governance processes are characterized as ad hoc and occasionally even chaotic. Few processes are defined and success depends on individual efforts.
2. **Repeatable level**: Basic IT governance processes are established. The necessary discipline is evolving to repeat earlier successes.
3. **Defined level**: The IT governance processes are documented, standardized, and integrated into the management policies and procedures. All governance processes are implemented using approved, versions as part of the IT governance policy and framework.
4. **Managed level**: Define, collect and make decisions based on each IT governance component's measurements. IT governance processes and metrics are quantitatively understood, reported and controlled on an enterprise level.
5. **Optimizing level**: Continuous process improvement is enabled by quantitative feedback from the process, from piloting innovative ideas and from adopting external industry best practices and standards.

Figure 1.11 provides an illustration of the CMMI® model levels and illustrates an insurance company's current state maturity level and its objective for a targeted future state maturity level.

Figure 1.12 was developed by Luftman suggesting an overlay framework to the CMMI model that focuses on assessing an organization's maturity based on the following six factors: communications, value, governance, partnership, architecture and skills (Luftman, 2004).

IT governance - current and future state transformation roadmap

In order to develop and/or improve the IT governance process, an organization must assess its current and future governance state and develop a transition roadmap for its IT transformation.

Figure 1.13 illustrates a roadmap for an organization to follow, as IT transitions from its current state to its desired future state or environment.

Illustrates an organization's current and future targeted state of IT governance maturity. All organizations require a roadmap and plan to move up to higher levels of maturity and effectiveness
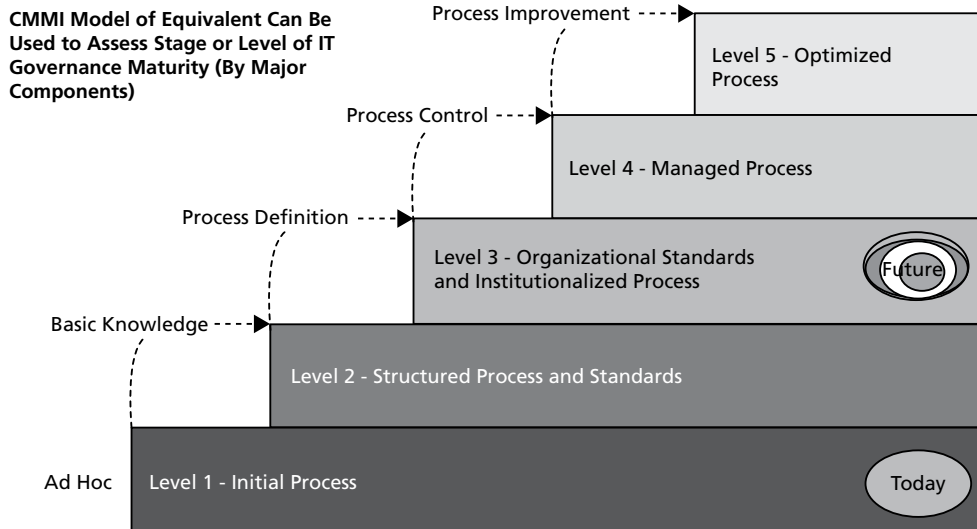
CMMI Model of Equivalent Can Be Used to Assess Stage or Level of IT Governance Maturity (By Major Components)

Process Improvement ----▶

Level 5 - Optimized Process

Process Control ----▶

Level 4 - Managed Process

Process Definition ----▶

Level 3 - Organizational Standards and Institutionalized Process

Future

Basic Knowledge ----▶

Level 2 - Structured Process and Standards

Ad Hoc | Level 1 - Initial Process

Today

Figure 1.11   High level assessment of current state and targeted future state based on the CMMI® model

Future state of IT governance – a blueprint concept

When all is said and done, most organizations would like to have an effective IT governance process and environment. Figure 1.14 identifies a blueprint of the 'ideal' future state and the key components that are necessary for effective governance deployment and strategic planning (business/IT alignment driven), application and infrastructure development (metrics driven) programs and projects and IT service support and delivery (metrics driven). Other components that should be added include architecture, security, business continuity, back-up and disaster recovery and related areas.

Key components of managing large scale enterprise change successfully, and providing the appropriate leadership and environment

As organizations transition to a more mature and effective governance environment, a 'sea change' has to occur, either through incremental and/or radical change that could involve large scale change, depending on an organization's level of maturity, management philosophy and cultural readiness.

John Kotter, a Harvard University professor, is a recognized expert on leadership and managing change successful. According to Kotter (with some modification by the author), the four key principles for managing large scale change successfully include (Kotter, 1996):

• engage the top and lead the change
  – create the 'value proposition' and market the case for change
  – committed leadership
  – develop a plan and ensure consequence management

Relates IT/business alignment criteria to assist enterprises to evaluate their level of maturity and set a direction to improve, in six areas.

Level 5 • Optimized process
- COMMUNICATIONS: Informal, pervasive
- COMPETENCY/VALUE: Extended to external partners
- GOVERNANCE: Integrated across the org & partners
- PARTNERSHIP: IT-business co-adaptive/improvisational
- ARCHITECTURE: Evolve with partners
- SKILLS: Education/careers/rewards across the organization

Level 4 • Improved/ managed process
- COMMUNICATIONS: Bonding, unified
- COMPETENCY/VALUE: Cost effective; some partner value; dashboard managed
- GOVERNANCE: Managed across the organization
- PARTNERSHIP: IT enables/drives business strategy
- ARCHITECTURE: Integrated with partners
- SKILLS: Shared risk & rewards

Level 3 • Established focused process
- COMMUNICATIONS: Good understanding; emerging relaxed
- COMPETENCY/VALUE: Some cost effectiveness; dashboard established
- GOVERNANCE: Relevant process across the organization
- PARTNERSHIP: IT seen as an asset; process driver; conflict seen as creative
- ARCHITECTURE: Integrated across the organization
- SKILLS: Emerging value service provider; balanced tech & business hiring

Level 2 • Committed process
- COMMUNICATIONS: Limited business/IT understanding
- COMPETENCY/VALUE: Functional cost efficiency
- GOVERNANCE: Tactical at Functional level, occasional responsive
- PARTNERSHIP: IT emerging as an asset; process enabler
- ARCHITECTURE: Transaction (e.g., ESS, DSS)
- SKILLS: Differs across functional organizations

Level 1 • Initial/Ad-Hoc process
- COMMUNICATIONS: Business/IT lack understanding
- COMPETENCY/VALUE: Some technical measurements
- GOVERNANCE: No formal process, cost center, reactive priorities
- PARTNERSHIP: Conflict; IT a cost of doing business
- ARCHITECTURE: Traditional (e.g., acctng, email)
- SKILLS: IT takes risk, little reward; technical training
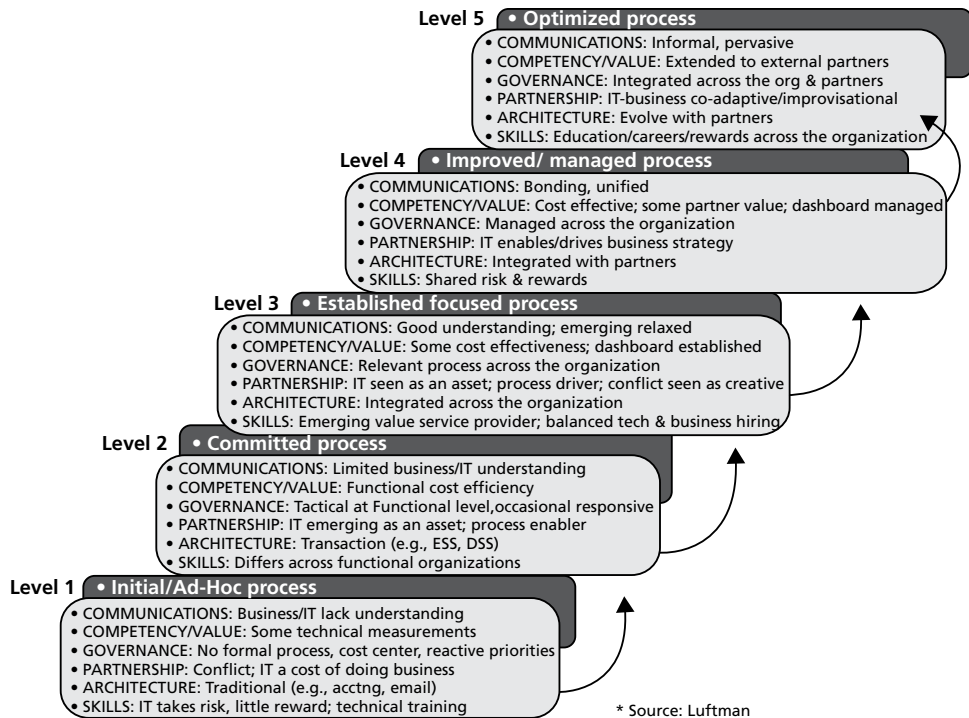
* Source: Luftman

Figure 1.12   IT/business alignment maturity assessment model

- cascade down and across the organization and break down barriers including silos
  - create cross-functional and global teams (where appropriate)
  - compete on 'speed'
  - ensure a performance driven approach
- mobilize the organization and create ownership
  - role out change initiative
  - measure results of change (pre-change versus post-change baselines)
  - embrace continuous learning, knowledge and best practice sharing
- attributes of effective change teams and agents
  - strong and focused leader
  - credibility and authority (charter) to lead the initiative
  - 'chutzpa', persistent and change zealots
  - ability to demonstrate and communicate 'early wins' to build the momentum
  - create a sense of urgency and avoid stagnation
  - knock obstacles out of the way, diplomatically or otherwise

By applying Kotter's principles to facilitating the transition to a successful IT governance culture and environment, the following steps can be followed:

IT Governance Process Improvement Flow - In order to develop and/or improve a governance process (business or IT), an organization must assess its current & future IT governance state and develop a plan to transform IT.
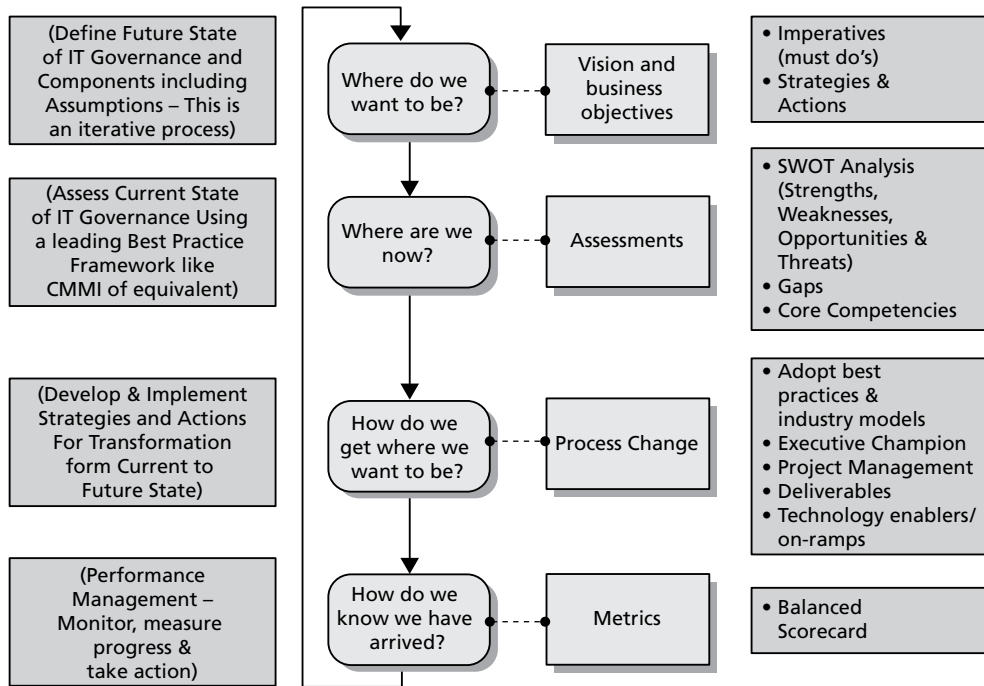
(Define Future State of IT Governance and Components including Assumptions – This is an iterative process)	Where do we want to be? --- Vision and business objectives	• Imperatives (must do's) • Strategies & Actions
(Assess Current State of IT Governance Using a leading Best Practice Framework like CMMI of equivalent)	Where are we now? --- Assessments	• SWOT Analysis (Strengths, Weaknesses, Opportunities & Threats) • Gaps • Core Competencies
(Develop & Implement Strategies and Actions For Transformation form Current to Future State)	How do we get where we want to be? --- Process Change	• Adopt best practices & industry models • Executive Champion • Project Management • Deliverables • Technology enablers/ on-ramps
(Performance Management – Monitor, measure progress & take action)	How do we know we have arrived? --- Metrics	• Balanced Scorecard

Figure 1.13   IT governance – current and future state transformation flow

- **proactively design and manage the IT governance program –** requires executive management sponsorship, an executive champion and creating a shared vision that is pragmatic, achievable, marketable, beneficial and measurable; link goals, objectives and strategies to the vision and performance evaluations
- **mobilizing commitment and provide the right incentives** – there is a strong commitment to the change from key senior managers, professionals and other relevant constituents; they are committed to make it happen, make it work and invest their attention and energy for the benefit of the enterprise as a whole; create a multi-disciplinary empowered 'Tiger Team' representing all key constituents to collaborate, develop, market and co-ordinate execution in their respective areas of influence and responsibility
- **make tradeoffs and choices and clarify escalation and exception decisions –** IT governance is complex, and requires tradeoffs and choices, which impact resources, costs, priorities, level of detail required, who approves choices, to whom are issues escalated, etc.; at the end of the day, a key question that must be answered is, 'when is enough, enough?'
- **making change last, assign ownership and accountability –** change is reinforced, supported, rewarded, communicated (the results are through the web and intranet), and recognized and championed by owners who are accountable to facilitate the change so that it endures and flourishes throughout the organization
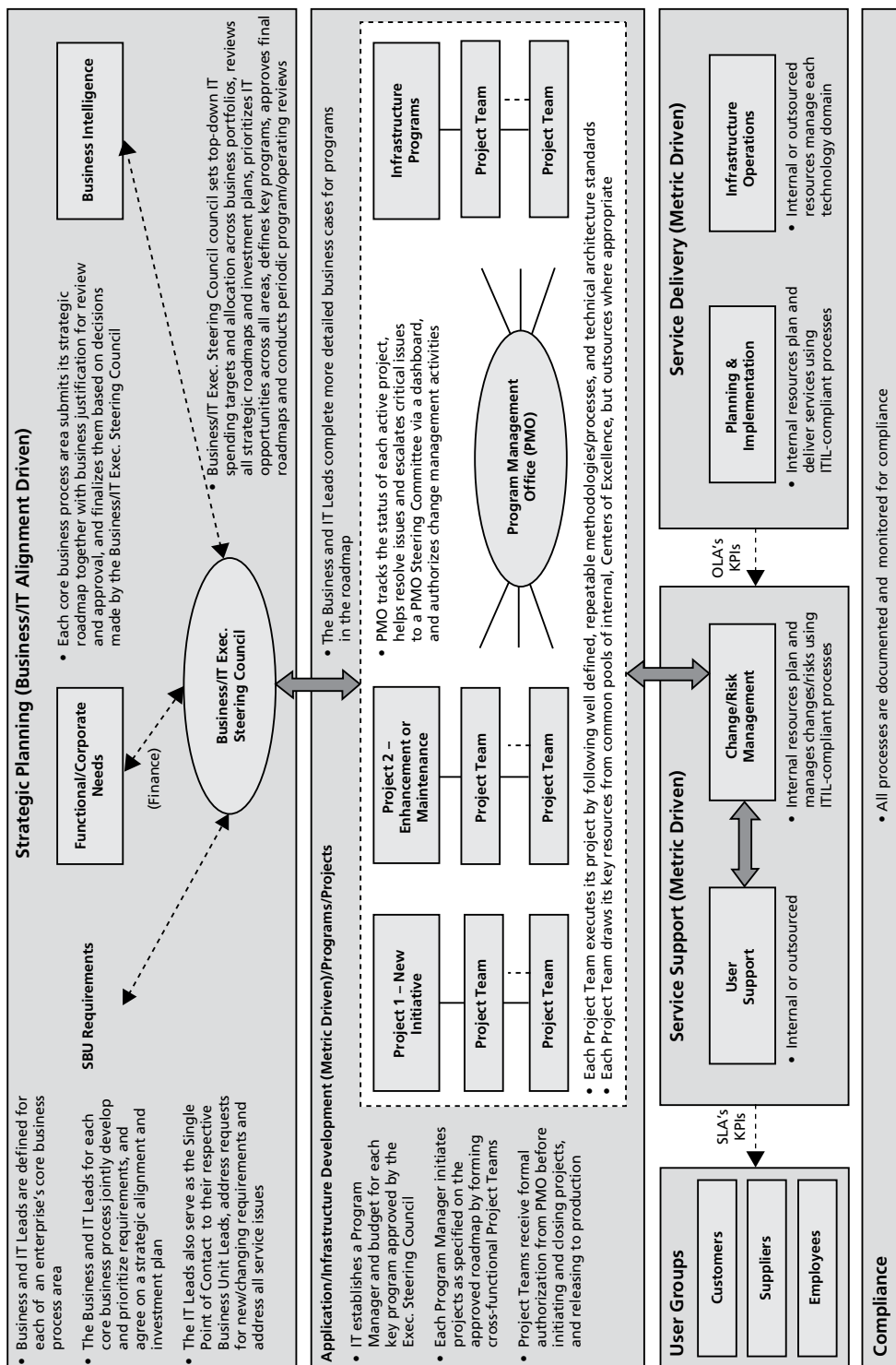
Strategic Planning (Business/IT Alignment Driven)

- Business and IT Leads are defined for each of an enterprise's core business process area
- The Business and IT Leads for each core business process jointly develop and prioritize requirements, and agree on a strategic alignment and investment plan
- The IT Leads also serve as the Single Point of Contact to their respective Business Unit Leads, address requests for new/changing requirements and address all service issues

SBU Requirements

Functional/Corporate Needs

(Finance)

Business Intelligence

- Each core business process area submits its strategic roadmap together with business justification for review and approval, and finalizes them based on decisions made by the Business/IT Exec. Steering Council
- Business/IT Exec. Steering Council council sets top-down IT spending targets and allocation across business portfolios, reviews all strategic roadmaps and investment plans, prioritizes IT opportunities across all areas, defines key programs, approves final roadmaps and conducts periodic program/operating reviews

Business/IT Exec. Steering Council

Application/Infrastructure Development (Metric Driven)/Programs/Projects

- IT establishes a Program Manager and budget for each key program approved by the Exec. Steering Council
- Each Program Manager initiates projects as specified on the approved roadmap by forming cross-functional Project Teams
- Project Teams receive formal authorization from PMO before initiating and closing projects, and releasing to production

Project 1 – New Initiative

Project Team

Project Team

Project 2 – Enhancement or Maintenance

Project Team

Project Team

Infrastructure Programs

Project Team

Project Team

- The Business and IT Leads complete more detailed business cases for programs in the roadmap
- PMO tracks the status of each active project, helps resolve issues and escalates critical issues to a PMO Steering Committee via a dashboard, and authorizes change management activities

Program Management Office (PMO)

- Each Project Team executes its project by following well defined, repeatable methodologies/processes, and technical architecture standards
- Each Project Team draws its key resources from common pools of internal, Centers of Excellence, but outsources where appropriate

Service Support (Metric Driven)

User Support

- Internal or outsourced

Change/Risk Management

- Internal resources plan and manages changes/risks using ITIL-compliant processes

Service Delivery (Metric Driven)

Planning & Implementation

- Internal resources plan and deliver services using ITIL-compliant processes

Infrastructure Operations

- Internal or outsourced resources manage each technology domain

OLA's KPIs

SLA's KPIs

User Groups

Customers

Suppliers

Employees

Compliance

- All processes are documented and monitored for compliance

Figure 1.14   Future state IT governance: a blueprint concept

- **monitoring progress, common processes, technology and learning** – develop/ adapt common policies, practices, processes and technologies which are consistent across the IT governance landscape and enable (not hinder) progress, learning and best practice benchmarking; make IT governance an objective in the periodic performance evaluation system of key employees and reward significant progress

1.6   Case study – global consumer goods company

A number of IT governance case studies are included in the book, representing mid-size to large global organizations in a variety of industries, including consumer products, manufacturing, financial services, pharmaceuticals, entertainment and other diversified industries. The identities of the organizations have been kept confidential. The data for each of the case studies was collected through interviews with CEO's, CIOs, direct reports to the CIOs and other executives and professionals, as well as a review of appropriate plans, budgets, metrics, controls and processes and has been disguised to protect the identity of the participating organizations.

The format of the case studies is consistent with Figure 1.15, which represents an IT governance case study for a global consumer goods organization.

1.7   Summary and key take aways

Summary
IT governance is a broad and complex topic with many parts. IT governance represents a journey. It is not a one time event, and to achieve higher levels of IT maturity, IT governance should be persistently and relentlessly pursued, both from a top-down and a bottom-up perspective. Creating and sustaining a more effective IT governance environment will take time and resources, and should be focused on achieving incremental IT governance successes in priority areas, based on their value proposition or reduction of major 'pain point' to the organization.

It is critical to break down or segment the IT governance initiative into manageable, assignable and measurable components or work packages, with targeted deliverables. It is important to define clear roles for the Board, executive management and the IT governance project team, including ownership and accountability for each component and the overall initiative.

IT governance requires all three critical pillars to succeed: leadership, organization and people, scalable and flexible processes and enabling technologies.

Key take aways
The approach to IT governance must be consistent, but yet scalable, and tailored to each organization's environment and management style, key issues, opportunities, level of maturity, audit/legal requirements, available resources and cultural readiness. Remember, IT governance represents a journey, hopefully, towards higher levels of IT maturity, effectiveness and integration with the business.

Figure 1.15 – Case Study - Global Consumer Goods Organization

Environment	Approach
• Annual Revenue range – $8 – 12 Billion • Number of Employees – 40,000 – 50,000 • Number of IT Employees –1,200 – 2,000 • IT spend as a % of revenues – 2 – 3% • Very competitive industry with operations in 50 –70 countries • Brand management driven with strong focus on marketing and sales • CIO reports to CEO and is a member of the Executive Management Team & Seats at the "C" table • Company is transitioning from a decentralized environment to a more coordinated regional & global management environment to take advantage of operating synergies	• Company has been moving towards a more coordinated global and regional operating environment by establishing various steering committees that focus on the specific functional/ process areas such as Supply Chain, Marketing and IT to assist in working and creating synergies across global regions • Senior IT management representatives are members of each of the key business councils • Recently, IT is establishing a strategic planning process, which will link to the portfolio investment process, capital and expense budget process and program/project execution process • IT established a global architecture group to coordinate consistent hardware and software (e.g. Operating Systems, Major Application Packages, etc.)
Issues and Challenges • IT strategic plan process is new & not yet linked to annual operating plan & budget • IT has many disparate applications, operating systems and hardware inherited from a historical decentralized environment that is slow and difficult to change. Global IT consistency is a challenge • Tensions of a matrix organization Regional IT Managers report into regional business heads with dotted line to CIO	• Established a strong Project Management Office, which is in the process of developing a uniform and consistent process which will be rolled out globally across all regions in a coordinated and collaborative manner • Involved the business owner to assure closer alignment between the business and IT.
Results - Alignment • CIO sits on the Executive Management Operating Council and is an equal peer/partner with business & assures a closer alignment of IT support for business • A 3 year financial plan is developed for IT, about 50% is dedicated to supporting the business unit applications (charged back) and 50% to infrastructure and keeping the lights on • IT portfolio investment management is a rolling process & identifies IT capital spend by geography and functions. It is prioritized based on discretionary and mandatory criteria with top down and bottom up input • Balanced scorecard and report card metrics are linked to critical success factors of business and IT(financials, cost performance, quality, etc.) • Established an customer/IT engagement (single point of contact) model to improve relationships, build trust and focus on priorities of major business functions	**Results - IT Service Management & Delivery** • A variety of metrics and tools are used to measure the efficiency, capacity and availability, utilization and service-ability of the operations and infrastructure assets and group • Elements of ITIL processes have been and are being implemented in the IT operations and infrastructure area • The IT infrastructure (Operations and Telecommunications) are centralized through the CIO organizations with strong dotted line coordination throughout the globe

Results - Program/Project Management • Established a PMO center of excellence • Developing a flexible and scalable PM process to handle fast track and complex projects • Implementing a global Portfolio/Project Management tool (Nikku)	
Results – Performance Management & Management Controls • Select IT metrics are included in the IT monthly status report (e.g. key line items designated as green, yellow and red) • An annual user satisfaction survey is conducted by IT measuring 8 areas of IT delivery: communications, responsiveness, up-time, alignment, business process transformation, IT process transformation (streamline IT process), project, relationship mgt. and application support • A monthly Serbanes Oxley report is issued & tracks a number of required categories • A narrative IT annual report is issued reporting news, strategies, etc.	**Lessons Learned** • IT governance is a journey towards continuous improvement • Cultural and organizational transformation is difficult, but necessary to survive • Involve local, regional and corporate management employees in direction setting and execution initiatives in a spirit of cooperation, communications, trust and partnership • Establish global centers of excellence (located in multiple regions) for IT and let them lead by example: Web/e-business, Core center applications, Infrastructure, PMO/SDLC, Enterprise Data Architecture, Advanced Technology, Etc.

IT Mission & Key Management Principles – Consumer Goods Organization (Illustrative Example)

IT Mission
• **Enable business growth** • **Advance Business Transformation** • **Increase the productivity of associates and Sales Representatives** • **Support our global operating model**

Growth Enablers		
Maintain a deep understanding of our business	**Achieve business alignment**	**Deliver contemporary business solutions**
• Anticipate business needs • Proactively identify how information and technology can drive the direct selling business model • Partner with the business to implement hard to do transformation • Leverage our cross-functional and cross-geography view	• IT strategy in step with business strategy • Forge strong relationships with business partners • Communicate early, frequently and simply • Ensure IT talent is aligned with growth strategies	• Champion integration and collaboration • Reduce the number of solutions while supporting business differences across markets • Provide information for business decision-making • Affordable and suitable alternatives
Operational Levers		
Lead through process discipline	**Provide the best value**	**Maintain Service Excellence**
• Comply fully with our project management and software development methodologies • Adhere to IT Governance policies and procedures • Ensure adequate controls and KPIs • Sponsor appropriate certifications	• Implement make vs buy decisions that deliver speed, competitive advantage, affordability • Leverage worldwide IT resources • Effectively manage services and assets	• Systems are rellable and available to optimize revenue and representative service • The enterprise is secure, controlled and protected • Disciplined problem, change & risk management

Figure 1.15   Case study: global consumer goods company

Colophon