IT Governance

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March 14, 2013

IT GOVERNANCE

“It’s not that I don’t appreciate the effort Jenkins, but the guys in I.T. are beginning to complain.”
Stakeholders need to know that:

• IT strategy is aligned with organization’s strategy
• Business managers and IT are effectively communicating
• The organization is structured to facilitate the implementation of its strategy and goals
• Risks and opportunities are effectively managed
• Performance against objectives are transparent

What is IT Governance?

- Specifying a framework for decision rights and accountabilities to encourage desirable behavior about the development and use of IT.
- The process of establishing visible, positive oversight of the IT practices, assets and resources to demonstrate that risks are managed and corporate objectives are supported and achieved, ensuring the proper use of IT resources.
- Not about the decisions that are made but about determining who makes these decisions, who provides inputs, and whom is accountable for the decisions made.
What is IT Governance?

- It is putting structure around how organizations align IT strategy with business strategy, ensuring that companies stay on track to achieve their strategies, goals, and implementing good way to measure IT’s performance.
- It answers the key questions like:
  - How IT department is functioning overall?
  - What are the key metrics management needs? and
  - What returns IT is giving back to the business from the investment it is making?

Literature on IT Governance; IT-Business Partnership; Decision Rights

- IT governance “...specifying decision rights and accountability framework...” ranks at the top of how companies derive value (Weill and Ross, 2004);
- Understanding decision rights allocation has profound implications for IT role in innovation and firm performance (Sambamurthy and Zmud, 1999)
- IT-Business Partnership is a key antecedent of alignment (Brown, 1994)
- Stage-based IT governance provides understanding of decision rights at functional or operations level (Xue, Liang and Boulton, 2008)
## IT Governance Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td>Information being relevant and pertinent to the business process as well as being delivered in a timely, correct, consistent and usable manner</td>
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<tr>
<td><strong>Efficiency</strong></td>
<td>Provision of information through the optimal (most productive and economical) use of resources</td>
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<tr>
<td><strong>Confidentiality</strong></td>
<td>The protection of sensitive information from unauthorised disclosure</td>
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<tr>
<td><strong>Integrity</strong></td>
<td>Relates to the accuracy and completeness of information</td>
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<tr>
<td><strong>Availability</strong></td>
<td>Information being available when required by the business process now and in the future; it also concerns the safeguarding of necessary resources and associated capabilities</td>
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<tr>
<td><strong>Compliance</strong></td>
<td>Complying with those laws, regulations and contractual arrangements to which the business process is subject, i.e., externally imposed business criteria as well as internal policies</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>The provision of appropriate information for management to operate the entity and to exercise its fiduciary and governance responsibilities</td>
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</table>

## IT Governance Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Strategic alignment</strong></td>
<td>Focuses on ensuring the linkage of business and IT plans and on aligning IT operations with enterprise operations</td>
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<tr>
<td><strong>Value delivery</strong></td>
<td>IT delivers promised benefits against the strategy, concentrating on optimizing costs and proving the intrinsic value of IT</td>
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<tr>
<td><strong>Resource management</strong></td>
<td>Is about the optimal investment in, and the proper management of, critical IT resources: applications, information, infrastructure and people</td>
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<tr>
<td><strong>Risk management</strong></td>
<td>Senior management, appetite for risk, compliance requirements, transparency about the significant risks to the organisation</td>
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<tr>
<td><strong>Performance measurement</strong></td>
<td>Tracks and monitors strategy implementation, project completion, resource usage, process performance and service delivery to achieve goals measurable beyond conventional accounting</td>
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Major IT Decisions

- IT Principles
- IT Architecture
- IT Infrastructure Strategies
- Business Application Needs
- IT Investment And Prioritization

Major IT Decisions Cont.

<table>
<thead>
<tr>
<th>IT Governance Decisions</th>
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<tbody>
<tr>
<td><strong>IT Principles</strong></td>
</tr>
<tr>
<td>High level statement about how IT is used in the business</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>IT Architecture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizing logic for data, applications, and infrastructure captured in a set of policies, relationships, and technical choices to achieve desired business and technical standardization and integration</td>
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</table>

<table>
<thead>
<tr>
<th><strong>IT Infrastructure</strong></th>
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<tbody>
<tr>
<td>Centrally coordinated, shared IT services which provide the foundations for the enterprise’s IT capability</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Business Application Needs</strong></th>
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<tbody>
<tr>
<td>Specifying the business need for purchased or internally developed IT applications</td>
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<table>
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<tr>
<th><strong>IT Investment and Prioritization</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisions about how much and where to invest in IT including project approvals and justification techniques</td>
</tr>
</tbody>
</table>
IT Governance Archetypes

- Business Monarchy
- IT Monarchy
- Feudal
- Federal
- IT Duopoly
- Anarchy

Business Monarchy Archetype

- A group of, or individual, business executives (i.e. CxOs)
- Includes committees comprised of senior business executives (may include CIO)
- Excludes IT executives acting independently
IT Monarchy Archetype

- Individuals or groups of IT executives
- IT professionals make the IT decisions
- Often involves IT professionals from both corporate teams and business units

Feudal Archetype

- Business process leaders, key process owners or their delegates
- Based on traditions of England
  - Prince and Princess
- Feudal estate typically the business unit, region, or function.
Federal Archetype

- C level executives and at least one other business group (e.g., CxO and BU leaders)
- IT executives may be additional participants.
- Equivalent to a country and its states working together.
- Attempts to balance responsibilities and accountabilities of multiple governing bodies.

IT Duopoly

- IT executives and one other group (e.g., CxOs or BU leaders)
- Two party arrangement where decisions represent agreement between IT executives and one business unit.
- Always includes IT representative.
Anarchy

- Individual users or small groups make their own decisions based only on their needs
- Different from feudal monarchy in scope and size
- Expensive to support and make secure

Governance Archetypes

![Governance Archetypes Table]

<table>
<thead>
<tr>
<th>Decision rights or inputs rights for a particular IT decision are held by:</th>
<th>CxO Level Execs</th>
<th>Corp IT and/or Business Unit IT</th>
<th>Business Unit Leaders or Process Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Monarchy</strong></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>A group of, or individual, business executives (i.e., CxOs). Includes committees comprised of senior business executives (may include CxO). Excludes IT executives acting independently.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>IT Monarchy</strong></td>
<td>Individuals or groups of IT executives.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Feudal</strong></td>
<td>Business unit leaders, key process owners or their delegates.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Federal</strong></td>
<td>C level executives and at least one other business group (e.g., CxO and BU leaders)—IT executives may be an additional participant. Equivalent to a country and its states working together.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>IT Duopoly</strong></td>
<td>IT executives and one other group (e.g., CxO or BU leaders).</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Anarchy</strong></td>
<td>Each individual user</td>
<td></td>
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</tbody>
</table>
Governance Patterns

Figure 4: How do enterprises govern?

The numbers in each cell are percentages of the 256 enterprises studied in 23 countries. The columns add to 100%.

Figure 6: Top Three Overall Governance Performers

Top Three Performers – Governance performance is the effectiveness of governance assessed by the CIO to deliver four IT objectives weighted by importance: cost effective use of IT & effective use of IT for asset utilization, revenue growth & business flexibility. Governance performance has statistically significant positive relationship with several measures of financial performance (e.g. ROA, ROE, market cap growth).
Factors of IT Governance Variation

- Strategic and performance goals
- Organizational structure
- Governance experience
- Size and diversity
- Industry and regional differences

The Alcan Case

- How would you decide the main features of IT management at Alcan in early 2006?
- Based on the Weil and Ross (2005) matrix, where was the organization situated at that time?
- What were the strengths and challenges of the IT management model in March 2006? What possible reasons were behind it?
- What are the desired features of IT governance model at Alcan?
- What main areas of action would encourage the development of IT governance at Alcan to help overcome the problems identified?
- What lessons do you learn from this case?
Lessons Learned

- IT governance model must be consistent with corporate strategy and organizational culture.
- Corporate IT must be the coordination point for all division level IT roles.
- No one-size-IT governance model will fit different firms in the same industry.
- Appropriate IT governance model can provide competitive advantage through better IT payoffs.

Guidelines for IT Governance

- Ensure that it is driven by business problems and opportunities
- Find the right flavor (no one-size-fit-all)
- Always strike a balance (not too much, not too little)
- Aim for right level of complexity
- Continually prove the value of IT governance.
Critical Success Factors

- Transparency
- Actively Designed
- Infrequently Redesigned
- Education about IT Governance
- Simplicity
- An exception-handling Process
- Governance designed at multiple organization levels
- Aligned incentives

IT Government Processes

- Integrated business and IT planning
- Architecture management
- IT investment assessment
- Project execution and decision making
- IT financial and resource allocation
- Emerging technology evaluation and adoption
- Client relationship management
- Applications and infrastructure
- Provisioning of IT services
- Outsourcing Services
- Audit and risk management
What does IT governance provide?

- Policies, processes, and strategy
- Management of IT Risks
- Business process mapping and harmonization
- Management of IT resources
- Monitoring results for IT effectiveness

Key Benefits of IT Governance

- Enables effective management and visibility of risk across main business functions.
- Delivers flexibility by supporting required variations in methodology according to requirements of business units.
- Facilitates the use of common IT best practices frameworks such as ITIL and CoBIT.
- Creates efficiency by allowing organizations to synchronize a risk program across the organization.
IT-Business Partnership (Kohli 2008)

- IT-Business partnership results from allocation of decision rights to IT (IT Monarchy) or jointly to IT and Business (Duopoly)
- IT-Business partnership occurs when
  - IT managers are involved in projects with strategic business value
  - IT managers drive projects with an IT component
- No evidence that IT-Business partnership occurs with Business monarchy i.e. when business managers drive IT projects
- Agreement on decision rights of key corporate activities and IS-Business partnership are associated with higher financial returns

Some observations on who should take responsibility of key activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Business Responsibility</th>
<th>Joint IS-Business Responsibility</th>
<th>IS Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Aligning Business-IT Strategy</td>
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<tr>
<td>Determining IT risk to business</td>
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<tr>
<td>Managing hardware and software costs</td>
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<td></td>
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<tr>
<td>Identifying strategic business opportunities</td>
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<td></td>
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<tr>
<td>Creating future business options</td>
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</table>
Implications for Organizations

- IT and Business managers are in a 3-legged race. They succeed together!
- Partnership results require a clear and mutual understanding of who will perform which activity. When no one wants to take a lead, the burden falls on IT.
- CIO’s should be in on the corporate vision...so they can see the opportunities of IT investment as well as landmines on the horizon
- Business executives don’t feel that their leadership on IT based projects leads to greater partnership

Principles of IT Governance

- Actively design governance
- Know when to redesign
- Involve senior managers
- Make choices
- Clarify the exception-handling process
- Provide the right incentives
- Assign ownership and accountability
- Design governance at multiple organizational levels
- Provide transparency and education
- Implement common mechanisms across all key assets
IT Governance Maturity Benchmark

- **Level 0 – Non-existent** – Management processes are not applied at all
- **Level 1 – Initial/Ad Hoc** – Processes are ad hoc and inconsistent
- **Level 2 – Repeatable** – Processes follow a regular pattern
- **Level 3 – Defined** – Processes are documented and communicated
- **Level 4 – Managed** – Processes are monitored and measured
- **Level 5 – Optimized** – Good practices are followed and automated

Conclusions

- IT Governance is an important aspect for effective deployment of IT.
- New laws and regulations have had a significant impact on IT.
- IT managers are struggling to implement new controls to support these regulations.
- Continuing the current mind-set, IT in the future will be controlled, standardized, and bureaucratized.