



THE UNIVERSITY OF  
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# ISYS90048 Managing ICT Infrastructure

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## Teaching Session 04b

- Demonstrate an awareness of Corporate and ICT governance, their importance, maturity models, structural issues, and constructing governance frameworks

### Recommended Text:

Moeller, RR (2013) *Executive's Guide to IT Governance: improving systems processes with service management, COBIT and ITIL*, Hoboken, NJ: John Wiley & Sons

- e-book in UniMelb library



## Corporate Governance

- Corporate governance is the rules, practices and processes by which an organisation is directed and controlled
- It involves balancing the interests of an organisation's stakeholders such as shareholders, management, customers, suppliers, financiers, regulators, government & community
  - Creates a transparent set of rules and controls
  - Balances corporate reporting, risk management and internal control principles
- Numerous Corporate Governance Standards (eg: AS8000 series)
- Covered in ISYS90038



## ICT Governance

- ICT Governance is a subset of Corporate Governance, focused on ICT systems, their performance & risk management
  - One goal of ICT governance is to align an organisation's ICT operations with its business strategies
  - Defined as “the strategic alignment of ICT with the business such that maximum business value is achieved through the development and maintenance of effective ICT control and accountability, performance management, and risk management” (Webb, Polland, & Ridley)





## ICT Governance cont

- Key components include defining ICT organisational structure and processes, driving alignment of ICT goals with business goals, managing risks of ICT operations and investments, leveraging ICT resources, and ensuring ICT performance
- In the wake of Dotcom and Enron failures “Governance” generally has taken on more significance & ICT has a pivotal role to play in improving corporate governance practices
  - Management’s awareness of ICT related risks has increased
  - There is a focus on ICT costs in all organisations
  - There is a growing realisation that more management commitment is needed to improve the management and control of ICT activities
  - Sarbanes-Oxley Act of 2002



## ICT Governance Defined

- Effective ICT governance will answer three questions:
  1. Structure: What decisions must be made, by who and what responsibilities
  2. Process: What and how are the decision-making processes approved?
  3. Communication: How will the results of these processes and decisions be monitored, measured, and communicated?
- The COBIT and ITIL frameworks both have these three elements
- Just as most organisations will have a **Corporate Governance** statement, so they will also have an **ICT Governance** statement
- Good ICT governance aligns an enterprise strategically to support the evolution of an ICT architecture that delivers consistent and scalable business value



## ICT Governance Maturity Model

- Forrester Research recommends that organisations in the process of developing or evolving their current ICT governance framework conduct an IT governance maturity assessment
- Understanding where you are is extremely helpful in trying to formulate an ICT governance strategy
- Forrester's ICT Governance Maturity Model is comprised of 4 stages:

IV	<b>Best practice</b>	ICT governance has been practiced for some time and has evolved to represent best practices. Companies employing ICT governance best practices tend to have an optimised ICT portfolio
III	<b>Consistent</b>	There is a formal ICT governance process in place and practiced consistently across the enterprise
II	<b>Fragmented</b>	There has been some effort to formalise ICT governance practices, but they are fragmented across the enterprise
I	<b>Ad hoc</b>	Ad hoc governance practices are just that. There are no formal processes or mechanisms, it's essentially everyone for themselves

ITIL have their own maturity model of 5 levels and

COBIT has a capability model of 6 levels

Source: Forrester Research, Inc.



## ICT Governance Structures

- The four structural framework types are: centralised, decentralised, federated, and project-based organisations
  - Each organisational structure has a different challenge in implementing ICT governance as characterised by its decision-making process

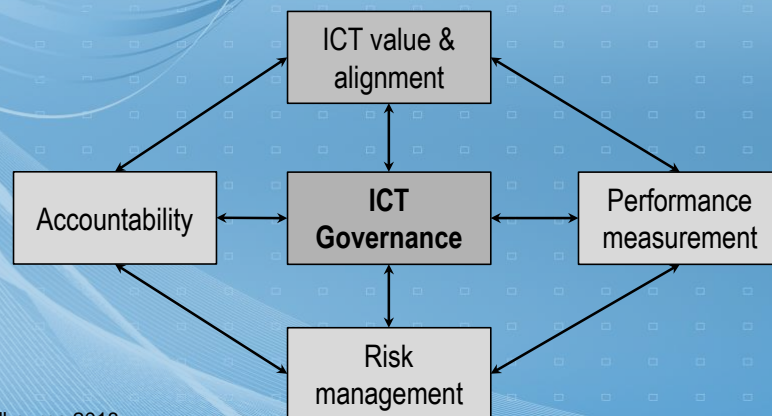
<b>Project-Based</b>	All ICT resources are centralised under a single reporting structure with centralised resource allocation (staffing). The organisational structure is built around resource pools. Line managers are replaced by resource managers. Usually professional services organisations.
<b>Federated</b>	ICT takes on a hybrid structure. These are hybrid organisations that have both centralised and decentralised components & processes.
<b>Decentralised</b>	ICT is decentralised by business unit, operating group, subsidiary, or geography. Each of these entities has its own CIO, ICT organisation, and ICT budget. There is little or no attempt to coordinate across units or with corporate. Corporate ICT supports the corporate HQ staff and perhaps some enterprise-wide applications.
<b>Centralised</b>	ICT is centralised under a single enterprise CIO. All ICT systems and budgets reside at the corporate level.





## The Four Dimensions Of ICT Governance

- There are four dimensions that drive ICT governance:
  1. ICT value and alignment between business and ICT
  2. Accountability: Governance is about accountability
  3. Performance measurement: by using a balanced scorecard
  4. Risk management: often the same for business and ICT
  - Each of these dimensions must be addressed as part of the ICT governance process



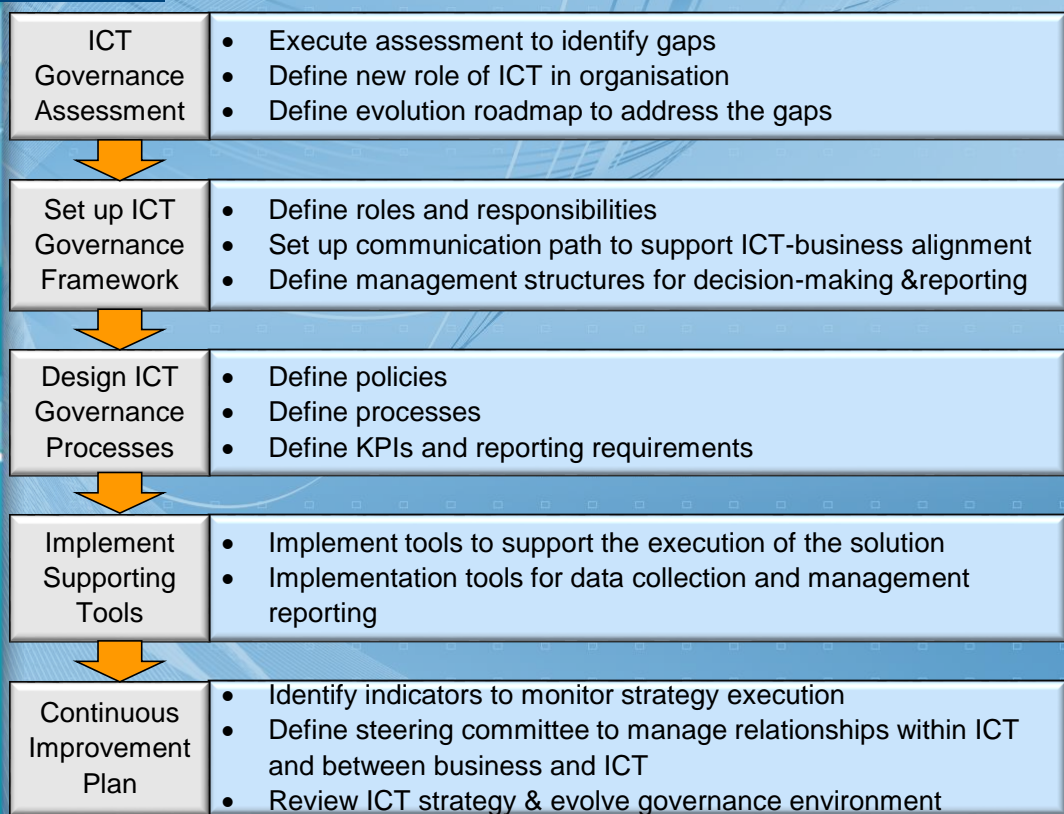


## ICT Control Frameworks

- A control framework is defined as “a recognised system of control categories that covers all internal controls expected in an organisation”
- There are three categories of control frameworks:
  1. ICT focussed controls:
    - ITIL service focused
    - ISO 2000 Quality Management
  2. Business-ICT alignment focused controls:
    - COBIT
  3. Business oriented controls:
    - COSO (Committee of Sponsoring Organisation)
    - SAS (Statement of Auditing Standards)
- And many others



## Implementing ICT Governance





## Summary

- ICT Governance consists of:
  - **Three questions:**
    1. What decisions must be made
    2. Who should make these decisions
    3. How are they made and monitored
  - **Four Dimensions:**
    1. IT value and alignment
    2. Accountability
    3. Performance measurement
    4. Risk management
  - **Four Maturity Stages:**
    - Stage 1: Ad hoc
    - Stage 2: Fragmented
    - Stage 3: Consistent
    - Stage 4: Best practices





## Summary cont

- ICT Governance consists of:
  - **Four Structural Frameworks:**
    1. Centralised
    2. Decentralised
    3. Federated
    4. Project-based
- ICT Framework is based on three major elements:
  1. **Structure**
  2. **Process**
  3. **Communication**



## Conclusion

- The main challenge for organisations is not just establishing but also maintaining a robust ICT governance
- ICT governance is considered complex in nature because it is comprised of interconnected subsystems



## References

- Craig Symons (2005). IT Governance Framework. Forrester Research, Best Practices, 16 pp.



## Videos

- ICT Governance (5.17 min)  
[https://www.youtube.com/watch?v=dg52El\\_4YR8](https://www.youtube.com/watch?v=dg52El_4YR8)
- Foundations of IT Governance (5.20 min)  
<https://www.youtube.com/watch?v=GheIMHwPNxM>
- Maturity models (3.24 min)  
<https://www.lynda.com/Tableau-tutorials/Maturity-models/420016/453453-4.html>