10/05/16 IS MANAGEMENT AND GOVERNANCE

- CIO manages the IT function of an organisation - can be in house or outsourced
- Three models of IS: IS is part of the organisation, IS is the organisation and the organisation is a customer of IS (outsourcing)
- Four sourcing types: Hierarchy/Matrix, Business unit, centralised/decentralised and internal or outsourced
- Federal IT attempts to capture the benefits of centralised and decentralised organisations while eliminating the draw backs of each

Centralised vs Decentralised

- Global standards and common data
- "one voice" when negotiating supplier contracts
- Greater leverage in deploying strategic IT initiatives
- Economies of scale and shared cost structure
- Access to a larger capacity
- Better recruitment and training of IT professionals
- Better control of security and databases
- Technology may not meet local needs
- Slow support for strategic initiatives
- Us versus them mentality when problem occurs
- Lack of business unit control over overhead costs

ZARA ups

Decentralised

- Technology customised to local business needs
- Close partnership between IT and business units
- Greater flexibility
- Reduced telecoms costs
- Business Unit control over overhead costs
- Difficulty maintaining global standards and consistent data
- Higher infrastructure costs
- Difficult negotiating preferential supplier agreements
- Lack of control
- Duplication of staff and data

Lean IT

- IT responsibilities center on creating productivity and capability in support of strategy
- Management challenge - concentrating internal resources on realising value in a multi sourced environment
- Technology - networked across a range of enterprise, partner and cloud
- Organisation - leveraging business and technical skills along with sourcing partners
- Performance metrics - success measured against changes in business performance

The CIO Role

- CIO usually most senior IS executive in the enterprise
- Responsible for technology vision
- Leadership for designing, developing, implementing and managing IT initiatives
- Focus on operating effectively in a constantly changing and intensely competitive market
- Work with executive team in strategy formation phase
- Use technology as the core tool in creating competitive advantage and aligning beliefs and IT strategies
- Key responsibilities:
  - Leading - creating vision by understanding the beliefs
  - Governing - establishing an IS governance structure
  - Investing - shaping the IS portfolio
  - Managing - establishing credibility, managing IT functions and fostering change

GOVERNANCE

- "Corporate governance is the system by which companies are directed and managed. It influences how the objectives of a company of the company are set and achieved, how risk is monitored and assessed and how performance is optimized."
- Governance - a slippery concept: "All process that coordinate and control an organisations IT resources and efforts"
- 5 Goals of IT Governance
  - Value delivery
  - Risk management
  - Performance Management
  - Resource management
  - Strategic alignment
- Governance about deciding who make the decision, managers do about making the decision once decision rights have been assigned
- Forms of governance:
  - Structural Integration: formal structures are established within an organization
    e.g. reporting relationships, Direct line supervision of staff, liaison roles
  - Horizontal Integration: structural overlays that increase process coordination
    e.g. groups, committees or open plan offices

SoX Financial Controls

- Auditors must certify the underlying controls and process that are used to compile a company's financial result
- Companies must provide real time disclosure of any events that may affect a firm's stock price or financial performance within a 48 hour period
- Penalties for failing to comply range from fine to 20 years jail term
- IT plays a major role in ensuring the accuracy of financial data.

SoX IT Controls

- Five control weaknesses are repeatedly uncovered by auditors:
  - Failure to segregate duties within applications as well as failure to set up new accounts and terminate old ones in a timely manner.
  - Lack of proper oversight for making application changes, including appointing a person to make a change and another to perform quality assurance on it
  - Inadequate review of audit logs to ensure that systems were running smoothly and that there was an audit log of the audit log
  - Failure to identify abnormal transactions in a timely manner
  - Lack of understanding of key system configuration
- IT managers must assess the level of controls needed to mitigate potential risks in organisational business process

COSO

- Framework for implementing SoX
- Created 3 control objectives for management and auditors that focused on dealing with risks to internal control: Operations, Compliance, Financial Reporting
- 5 essential components control components for managers and auditors:
  - Control environment - address the overall culture of the company
  - Risk assessment - most critical risks to internal controls
  - Control processes - outline important processes and guidelines
  - Information and communication of the procedures
  - Monitoring - by management of the internal controls

10/05/16 IS MANAGEMENT AND GOVERNANCE

- SoX: • requires public companies to define their control framework
  • Recommends COSO as the internal framework for general accounting
  • Not IT specific

COBIT Standard

- Control objectives for information and related technology
- International Standard for IT governance
- It is a supporting toolset that allows managers to bridge the gap between control requirement, technical issues and business risks
- Does this by: • Making a link to the business requirement
  • Organising IT activities into a generally accepted process model
  • Identifying major IT resources to be leveraged
  • Defining the management control objectives to be considered
- Use: • Benchmark
  • Goals and Metrics
  • Activity goals
- 5 principles: • Meeting stakeholders needs
  • Covering the enterprise end to end
  • Applying a single integrated framework
  • Enabling a holistic approach
  • Separating governance from management

ITIL - Information Technology Infrastructure library

- A set of practices for IT service management that focuses on aligning IT services with the needs of business
- Comprises of procedures/tasks, practice, checklists that are not organisation specific, used for establishing integration with the organisation's strategy, delivering value and maintaining a minimum level of competence
- It allows the organisation to establish a baseline from which it can plan, implement and measure
- It is used to demonstrate compliance and to measure improvement
- Guidelines available for: Infrastructure, development, operations, security

10/05/16 IS MANAGEMENT AND GOVERNANCE

Governance mechanisms

Functional Integration mechanisms:
- Authorising authorisation procedures
- Decision making protocols - who makes it? at what level? who is consulted? financials?

Social Integration mechanisms:
- How to achieve shared understanding
- Developing shared beliefs
- Developing trust and mutual understanding (social events etc)

Supplemental/Supporting Mechanisms:
- Budgets
- Training
- Key performance indicators
- Change basics

External Controls:
- Auditors
- Review Committees
- Peer review
- Benchmarking

Oversight versus Systemic

-Oversight: •Reporting Relationships •Checklists •Process •Procedures •Forms •Authorisation level •Hierarchy •Steering group

Advantages - tighter control, better risk management, no ambiguity, clear line of authority and responsibility

Disadvantage - Bureaucratic, expensive, inflexible, disempowering, unresponsive

-Systemic: Culture, Structure, Internal economy, Methods and tools/Standards, Metrics and rewards

Sarbanes - Oxley Act of 2002
- Enacted to increase regulatory visibility and accountability of public companies and their financial health.
- All corporations under the SEC are subject to SoX requirements
- CEO's and CFO's must personally certify and be accountable for their firms financial records and accounting