GEST-H510 Gourvernance of entreprise IT

> *The following is a desperate attempt to extract information from the course material.*

1. Digital transformation drivers

Organizational barriers to digital transformation in terms of:

1. Entreprise architecture
2. Program management / Project delivery
3. Vision and strategy

1.1 Enterprise architecture

Managing entreprise architecture

Systems get more complex and sophisticated

Some examples of complex systems [...]

Data pipeline

Components of entreprise architecture:

1. Business process
2. Information
3. Services
4. Applications
5. Infrastructure

Impact of IT on business operations: from fragmentation, wasted information, vulnerability, etc to integration, streamlined processes, lower costs and security.

1.2 Program management

Program management and agility

The typical transformation challenge:

- Long standing set of unfulfilled requirements
- Huge amount of stakeholders to please
- Very strong division between business and operations

- FNAO (Failure is Not An Option) culture
- No track record in innovation
- Standards seen as non-commercial

Waterfall model: big design up front

Agility: ability of firms to sense environmental changes and react to them in a timely and readily manner

Traditional approach: requirements, resources and time are plan driven.

Agile approach: ... are value driven.

A manifesto for business agility

- Clear operating model – how will we grow?
- Leadership setting vision and building capabilities
- Simple and clear Governance — strong core then innovate at edge
- Portfolio management
- Mature and modular enterprise architecture
- More IT savvy—set of practices and competencies that drive more business value (including agility) for each dollar invested

1.3 Vision and strategy

Stakeholders needs drive the value creation objective of the governance (benefits realisatin, risk optimization, resource optimization).

From aspirational through achievable to specific & tangible:

- Values: what do we stand for?
- Vision: where are we going?
- Mission: what do we do / who do we do it for?
- Strategic objectives: how are we going to progress?
- Actions and KPI (Key Performance Indicator): what do we have to do?

1.4 Key concepts and major landmarks in IT governance research

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 organisational structures and processes that ensure that the organisation's IT sustains and extends the organisation's strategies and objectives.

Goal cascade method: from management questions, to entreprise goals, to IT goals, to IT processes.

Case study 1: Seven years after the merge of two commercial banks, both organizations continued to possess two parallel data centers with virtually two IT Departments. Eventually, a TO-BE IT organization was conceived based on COBIT description of domains and processes and detailed RACI charts (Responsible, Accountable, Communicated and Informed). The team also identified new essential activities that were not previously carried out.

Case study 2: An Internet banking provider relied on a one of the largest worldwide IT services company for its 24/7 client operations. Services to clients suffered two major interruptions of 3 and 18 hours respectively. A comprehensive investigation based on COBIT highlighted major shortcomings both on the client and on the supplier level

Case study 3: A leading Financial Services organization launched two strategic projects aimed at changing the landscape of bank clearing activities on a full continent level in an outsourcing to two major systems integrators. When projects were eventually abandoned many years later, findings highlighted absence of essential processes including the oversight of the supplier as COBIT 5 would recommend.

2. Enterprise architecture

Reminders on S1 - Components of entreprise architecture:

- Business processes
- Information
- Services
- Applications (payment mgmt, inventory mgmt, etc)
- Infrastructure (on-site or cloud-based storage)

Build & run activities:

- Build include projects, software development, etc
- Run include help desks, etc

Sub-departments of IT (on avg, 5% of companies' budget, increasing):

- Data mgmt
- Security
- Software development
- Projects
- IT HR (specific HR for specific skills)
- Help desk
- IT finance
- Technical services, infrastructure, operations, etc

2.1 Business and IT pain points

- Business pain points
    - Business process outsourcing: pain because lack of supervision
    - Innovation process: where to start? How to identify some company's abilities, etc? Meetings, brainstormings -> identify IT related pain points and trigger events (positive opportunities)
- IT pain points:
    - Globalization
    - Economic pressure

2.2 Structure

An organisation has a structure

Definition of Architecture:

- "The structure of components, their relationships, and the principles and guidelines governing their design and evolution over time"
- Entreprise architects
- IT architects (with different flavours: information, software, infrastructure, etc) Why don’t organizations have the right architecture?
- Change in environment
- M&A or other strategic actions
- Architectural degradation
- No plan

How do architectures get designed:

- Example of the Winchester house (which is visual, yet an application's architecture is trickier to judge)
- Without a plan, IT and business projects stack on top of each other and the organisation becomes silo-ed

To support your strategy, define your operating model:

1. What are the core activities in your organization
2. How standardized and integrated do they need to be?

2.3 The operating model

It focuses on the “sacred transactions” of the organization – the core activities that should be second nature, provides a stable view of the organization and is more useful for guiding IT efforts

Standardization:

- simplifies operations, reduces costs, and increases efficiency
- allows measurement, comparison, and improvement
- can accelerate innovation

But:

- can limit local flexibility
- may require that local units replace perfectly good systems and processes with new standards
- may be politically difficult to implement

Integration

- links efforts through shared data
- provides transparency across the organization, and the seamless flow of information across activities
- allows an organization to present a single face to a customer, supplier, or partner

But:

- requires common data definitions
- can be time-consuming and difficult to implement
- unnecessary if units are organized around unique customer groups

2.4 Key findings

- The transition from one stage to the next is difficult and time consuming.
- Moving from one stage to the next requires a business transformation as well as a technical one. Companies that try to skip a stage are usually unsuccessful.
- Each stage involves a very different view of the value of IT and the role of IT in the organization.
- The leadership challenges are very different for each transition

The role of the CIO changes as organizations move through the stages

2.4 Conclusions

- Enterprise architecture is the organizing logic for the foundation of the organization: work processes and IT systems
- In most organizations, architecture is hindering execution and preventing innovation
- Defining the operating model is the first step in choosing the right architecture for an organization
- Transforming architecture is a difficult and time-consuming process, but the benefits begin immediately