Enterprise Architecture

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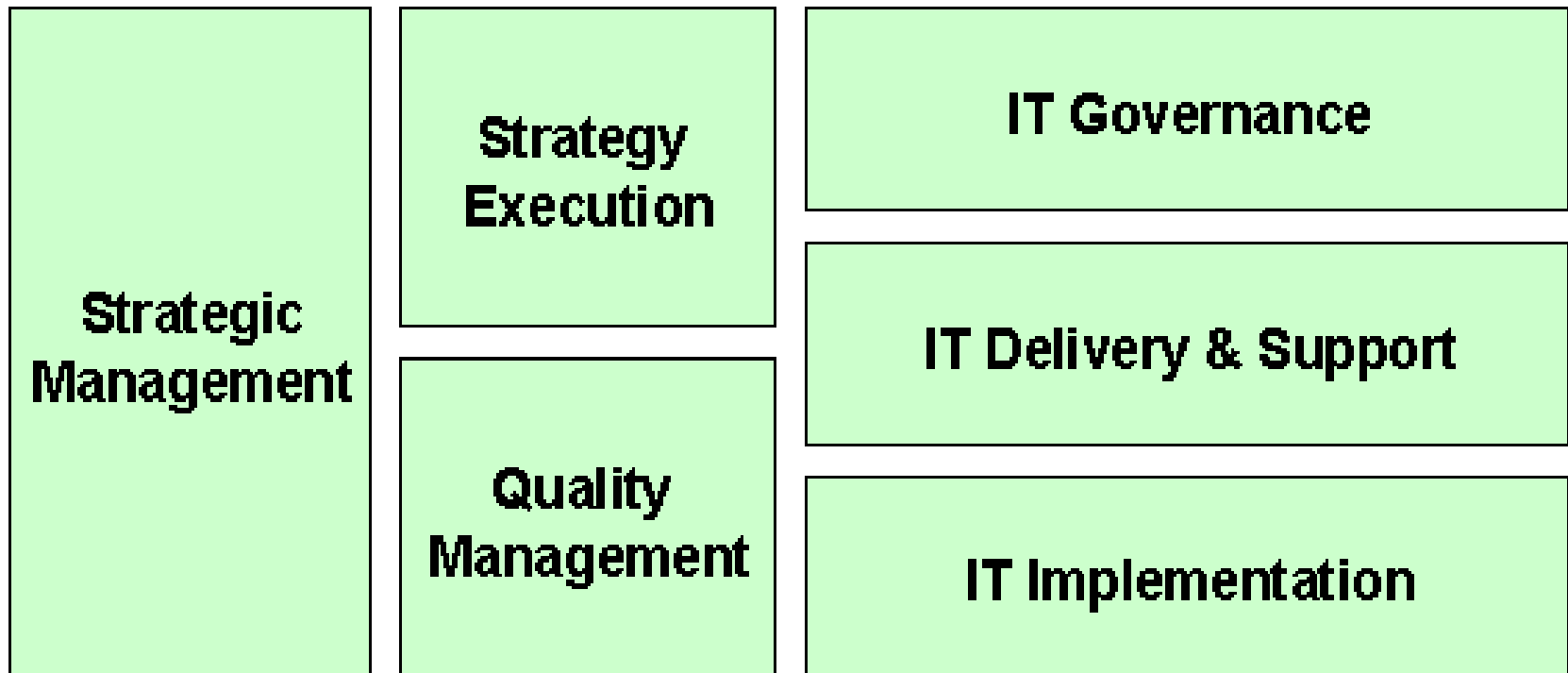King AbdulAziz University - Jeddah

Overview

- **Enterprise Architecture and Other Governance Instruments**

- **Methods and Frameworks for the Development of EA**

- **Description Languages for Illustration of EA**

- **Suitability of Description Languages for Enterprise Architecture**

Enterprise Architecture Governance Instruments

How enterprise architecture is positioned within the context of corporate and IT governance by relating it to a number of well known best practices and standards in general and IT management?

- Strategic Management: the Balanced Scorecard (BSC)
- Strategy Execution: EFQM
- Quality Management: ISO 9001
- IT Governance: COBIT
- IT Delivery and Support: ITIL
- IT Implementation: CMM and CMMI

Management areas relevant to enterprise architecture

Strategic Management

Balanced Scorecard (BSC):

- A Management System introduced in 1992 by Kaplan & Norton

- Helps enterprises to implement, its vision and strategy

- BSC views an enterprise with four perspectives

  - ✓ Customer
  - ✓ Financial
  - ✓ Internal Business Processes
  - ✓ learning and growth perspectives

Strategic Management

For each of the four perspectives the BSC proposes a three-layered structure:

- **Mission** (to become the customers' preferred supplier)

- **Objectives** (to provide the customers with new products)

- **Measures** (percentage of turnover generated by new products)

Strategy Execution

The European Foundation for Quality Management (EFQM)

- Introduced in 1992 as a framework
- Focuses on quality management
- Provides overall management framework for performance and excellence of the entire organization

The EFQM model consists of nine criteria for excellence, five of which are 'enablers', covering what an organization does, and four are 'results', covering what that organization achieves. Figure next slide….

Strategy Execution
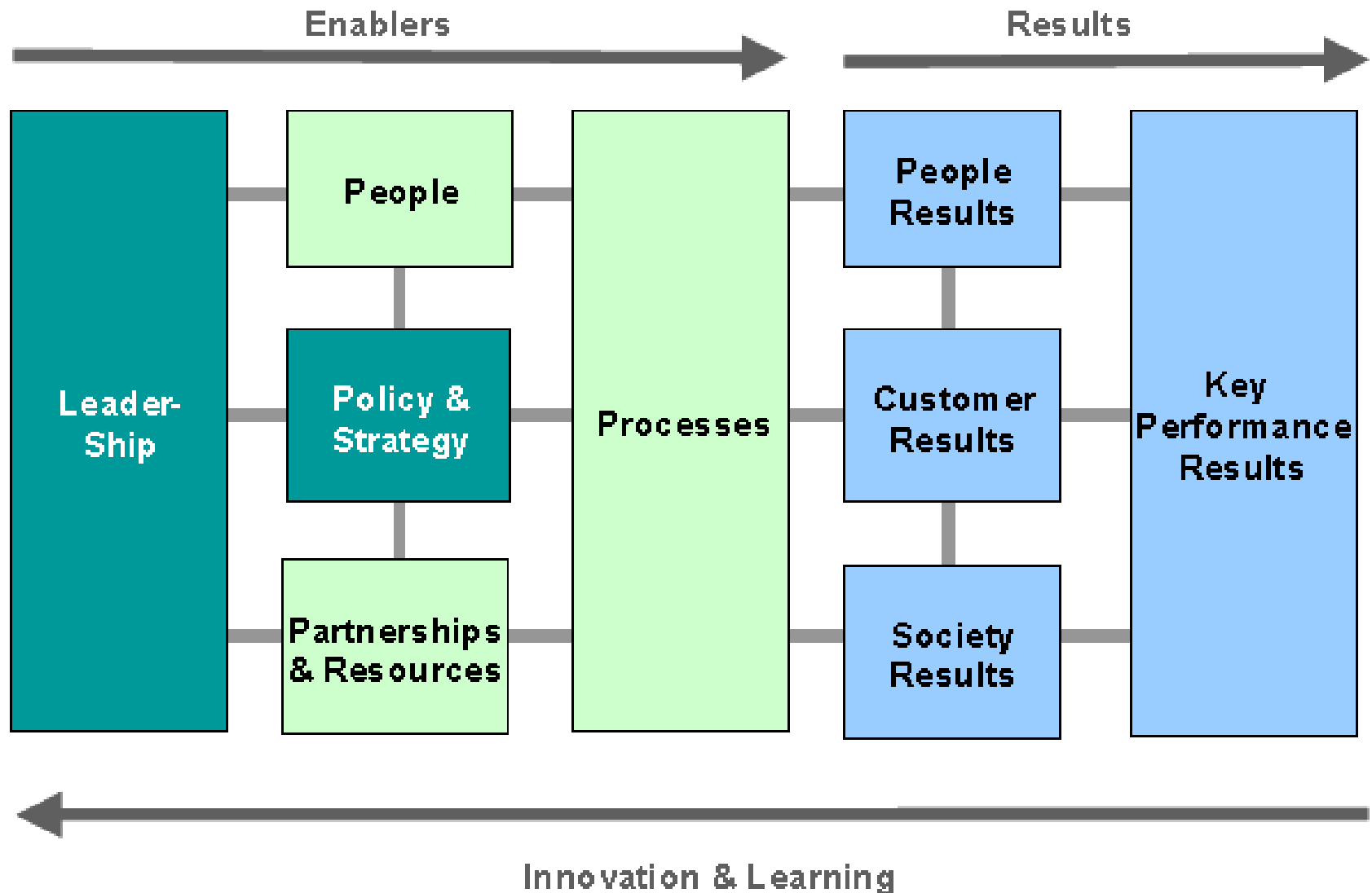
Quality Management

The ISO 9001:2000 standard (ISO 2000) of the International Organization for Standardization (ISO)

- Outlines criteria for a good quality management system (QMS)
- QMS controls how processes are performed

EA contributes in integrated design, management and documentation of business processes, and their supporting IT systems. A well-designed and documented enterprise architecture helps an organization to conform to the ISO 9001 requirements on process identification and documentation

IT Governance

COBIT (Control Objectives for Information and related Technology) is a standard for IT governance

- Published first in 1996 by the Information Systems Audit and Control Association

- Internationally accepted IT control framework

- Core of COBIT are identified IT processes

- Grouped into four domains:
    - ✓ planning and organization
    - ✓ acquisition and implementation
    - ✓ delivery and support
    - ✓ monitoring

IT Delivery and Support

- ITIL (IT Infrastructure Library) is the most widely accepted set of best practices in the IT service delivery domain.

- Developed by the UK Office of Government Commerce (OGC)

- Has process-oriented approach to service management

- ITIL consists of two broad groups of processes:

- <u>Service Delivery</u>, comprising service-level management, availability management, financial management for IT services, IT service contingency management, and capacity management

- <u>Service Support</u>, covering problem management, incident management, service desk, change management, release management, and configuration management.

IT Implementation

Capability Maturity Model for Software (CMM) is a model for judging the maturity of an organization's software engineering processes.

- CMM was upgraded to CMMI (Capability Maturity Model Integration)

- CMMI provides guidelines for maturity of an organization and improvements needed

- Conform to organization-wide standards and guidelines

Summary

- You should be able to:

  - Identify Governance Instruments

  - Standards and frameworks availability for Governance

  - Differentiate between General Management Tools and IT Management Tools