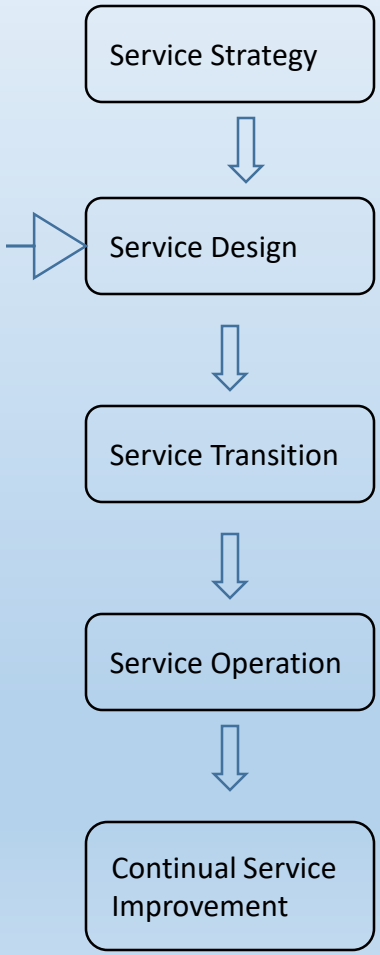
L6 Service Design



- Introduction
  - Objectives of service design
  - Different design aspects
- Delivery options
  - Delivery strategies
- Supporting processes
  - Service catalogue management, capacity management
  - Service level management, availability management
  - IT service continuity management, supplier management
  - Information security management
- Techniques used
  - Business impact analysis
  - KPIs
- Connections with other lifecycle elements

Learning outcome:

Student will be able to:

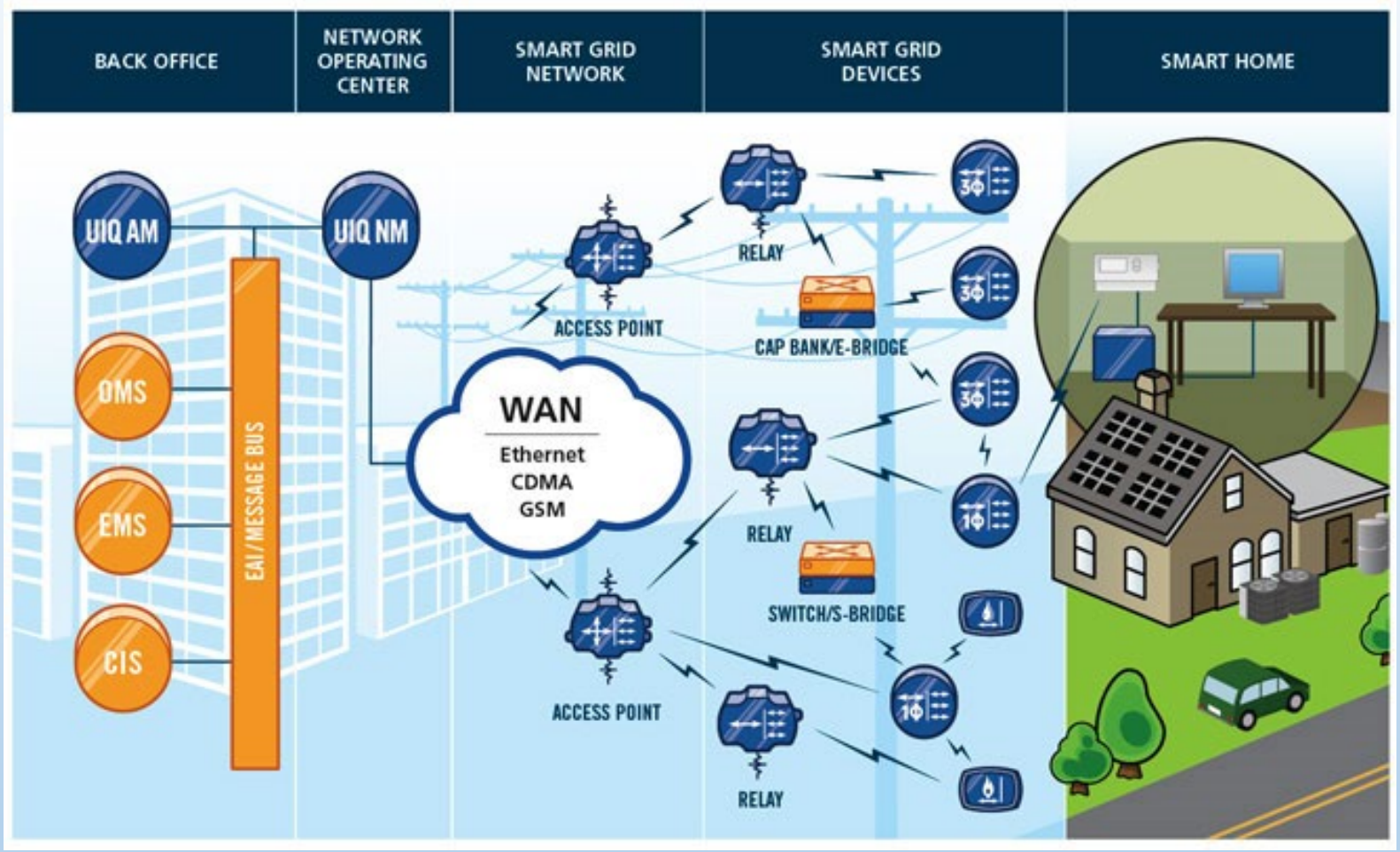
- Describe the aims of service design
- Describe the concept of service design aspects
- Describe the key considerations during service design
- Describe different types of service delivery options
- Describe the 7 key processes within service design
  - Service catalogue management (SCM)
  - Service level management
  - Capacity management
  - Availability management
  - IT service continuity management
  - Information security management
  - Supplier management
- Relationships with other service lifecycle phases

*Objectives of service design :

To design new or modified services for introduction into a production environment .

Including the following but not limited to :

- contribute to the business objectives
- save time and money
- minimize or prevent risk
- satisfy the current and future market needs
- assess and improve effectiveness and efficiency of IT services
- support development of policies and standards of IT services
- contribute to the quality of IT services

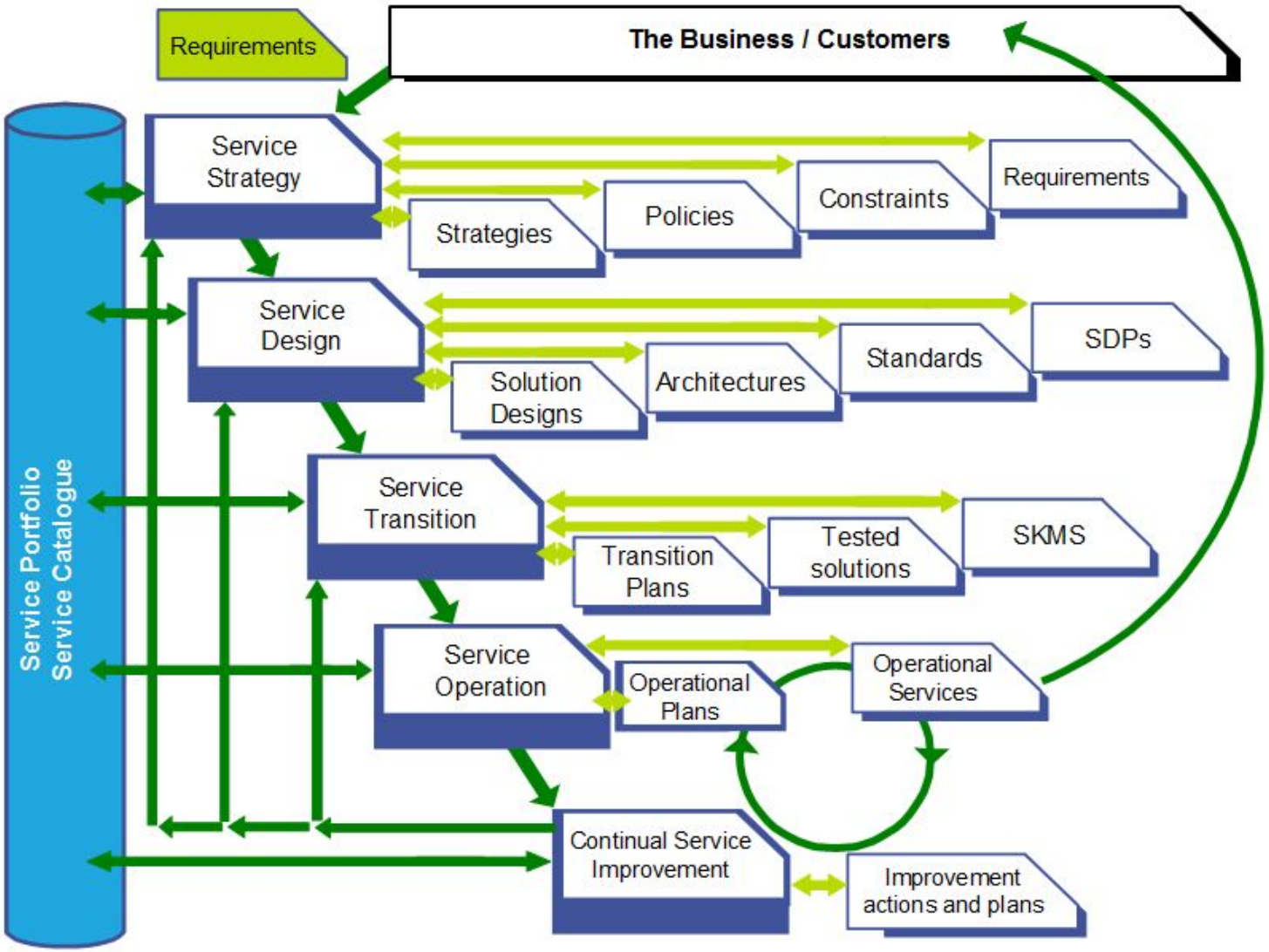

BACK OFFICE
NETWORK OPERATING CENTER
SMART GRID NETWORK
SMART GRID DEVICES
SMART HOME
UIQ AM
UIQ NM
OMS
EMS
CIS
EAI / MESSAGE BUS
WAN
Ethernet
CDMA
GSM
ACCESS POINT
ACCESS POINT
RELAY
RELAY
RELAY
CAP BANK/E-BRIDGE
SWITCH/S-BRIDGE
3Φ
3Φ
3Φ
1Φ
1Φ

*Service design aspects

To attain the highest possible quality, the following five areas should be considered:

- Service solution
- Service portfolio
- Architecture
- Processes
- Measurement systems and metrics

IT Service Lifecycle



Key Service design aspects

- **Service solution design**
  Should consider the following :
  - analysis of business requirements
  - revision of existing IT services & infrastructures
  - evaluate cost alternatives
  - monitor services in light of overall strategies
  - ensure corporate & IT governance are satisfied
  - decide on desired solutions and results
- **Service portfolio design**
  - Most critical management system to support all processes
  - Specifies service delivery in terms of values for customer
- **Architecture design**
  - Involve development and maintenance of IT policy, strategy, architecture, design & processes of all IT services
  - Include blueprint to develop IT infrastructures, applications and data.
- **Processes design**
  - Adopt PDCA approach
  - Include design of process controls
- **Measurement systems and metrics for processes**
  - 4 assessment elements – progress, fulfillment, effectiveness & efficiency

*Service design considerations:

- An overview of the available IT capacities and equipment should be made are:
  - Business drivers and demands
  - The scope and capability of the current service provider
  - The requirements and goals of the new service
  - The scope and capability of current external eservice provider
  - The maturity of the organizations and their processes
  - The culture of the organizations
  - IT infrastructure, applications, data services and other components
  - The level of corporate and IT governance
  - Available budget and resource
  - Staff levels and available skills

*Delivery options for IT services

- The most common delivery options are:
  - In-sourcing
  - Outsourcing
  - Co-sourcing
  - Multi-sourcing
  - Business Process Outsourcing (BPO)
  - Application service provision
  - Knowledge process outsourcing

In-sourcing

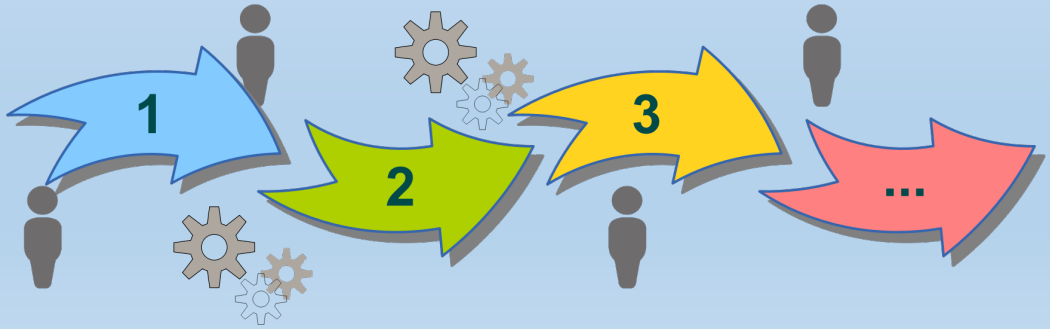
- Internal capacities are used for the design, development, maintenance, execution, and/or offer of support for the service
- Advantages
  - Direct control
  - Freedom of choice
  - Familiarity with internal processes
- Disadvantages
  - Cost and time for delivering services
  - Dependence on internal resources and competencies

Outsourcing

- Engaging an external organization for the design, development, maintenance, execution, and/or offering of support of the service
- Advantages
  - Focus on core competencies
  - Reducing long-term costs
- Disadvantages
  - Less direct control
  - Unfamiliarity with the skills of the supplier

Business Process Outsourcing

- An external Organization takes over business process, or part of one, at a cheaper location, eg. a call center
- Advantages
  - One-counter functionality
  - Access to specialized skills
- Disadvantages
  - Loss of knowledge
  - Loss of relationship with the business



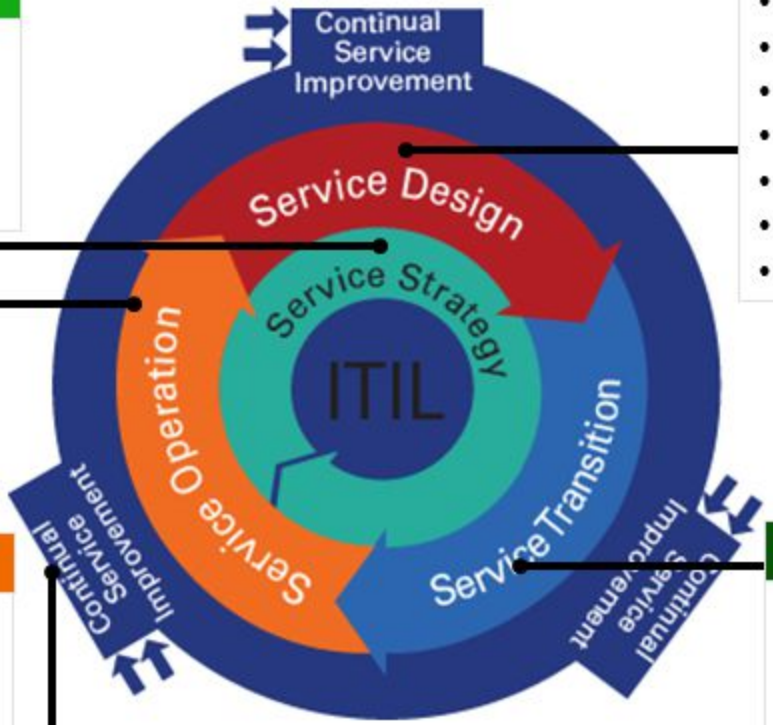
ITIL processes

SERVICE STRATEGY

- Financial Management
- Return on Investment
- Service Portfolio Mgmnt
- Demand Management

SERVICE DESIGN

- Service Catalogue Management
- Service Level Management
- Capacity Management
- Availability Management
- IT Service Continuity Management
- Information Security Management
- Supplier Management



SERVICE OPERATION

- Event Management
- Incident Management
- Request Fulfilment
- Problem Management
- Access Management

CONTINUAL SERVICE IMPROVEMENT

- 7-Step Improvement Process

SERVICE TRANSITION

- Transition Planning and Support
- Change Management
- Service Asset & Configuration Management
- Release & Deployment Management
- Service Validation
- Evaluation
- Knowledge Management

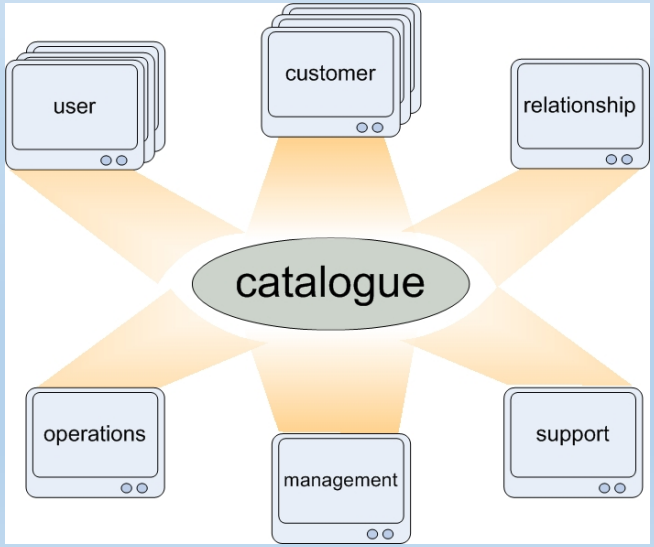
ca technologies

*Supporting Processes

- In order to develop effective and efficient services that satisfy the customer's needs, 7 tightly connected processes in the Service Design phase are needed :
  - Service catalogue management (SCM)
  - Service level management
  - Capacity management
  - Availability management
  - IT service continuity management
  - Information security management
  - Supplier management

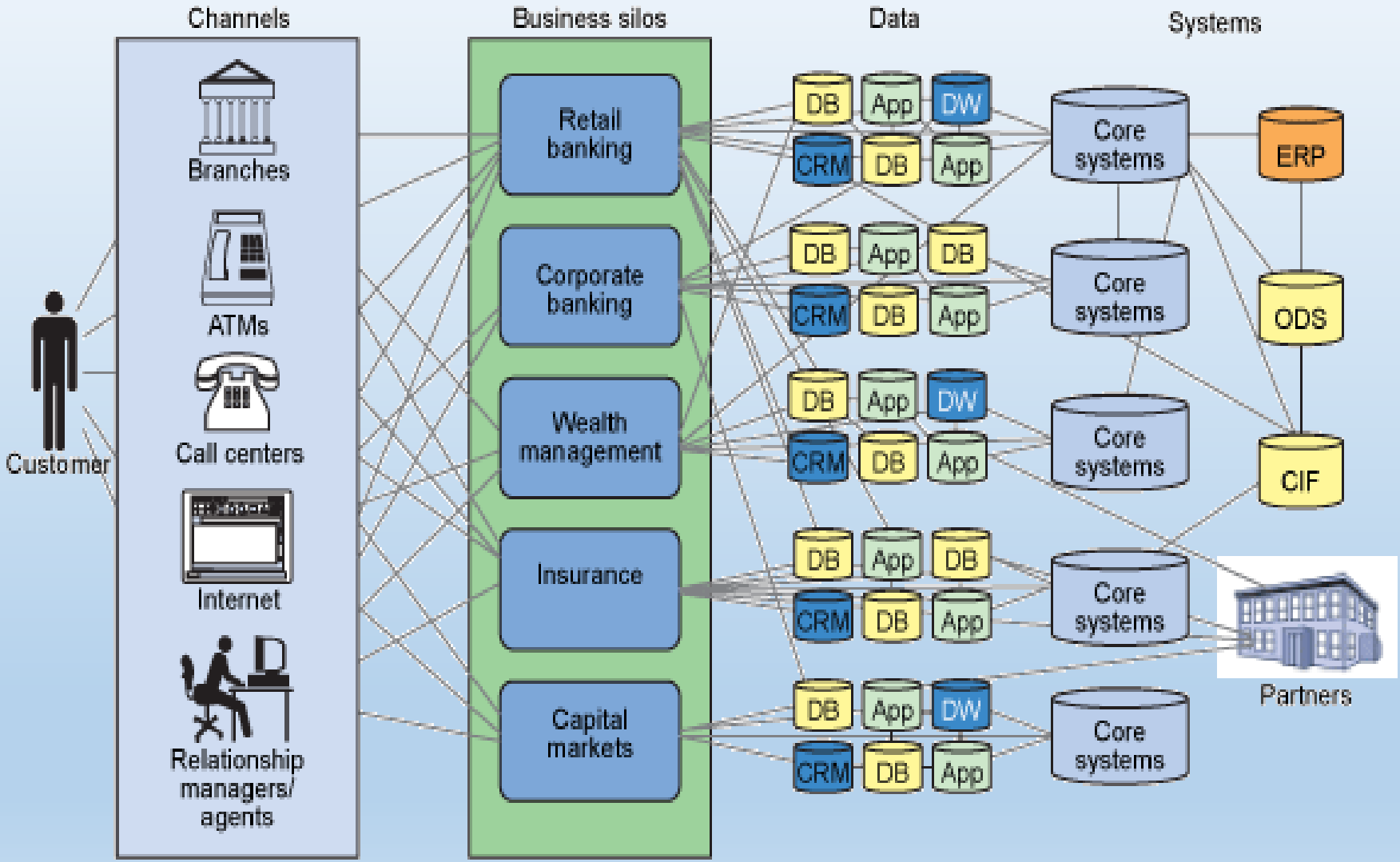
*Service Catalogue Management (SCM)

- Goal of the service catalogue management is the **development and maintenance** of a service catalogue that includes all of the accurate details and the status of all existing services and business processes they support, as well as those in development.
- An important component of the service portfolio



*Service Level Management (SLM)

- An SLA is written established agreement between a service provider and customer that **record the goals and responsibilities of both parties**
- The goals of this process is to take responsibility for **ensuring that the levels of IT service delivery are achieved**, both for existing services and future services in accordance with the agreed targets
- SLM includes **Planning, Coordinating, Providing, Agreeing, Monitoring, Reporting** of service level agreement (SLA) and **revision** of attained service delivery


Channels
Business silos
Data
Systems
Customer
Branches
ATMs
Call centers
Internet
Relationship managers/ agents
Retail banking
Corporate banking
Wealth management
Insurance
Capital markets
DB
App
DW
CRM
Core systems
ERP
ODS
CIF
Partners

*Capacity management

- Goal of capacity management is to ensure that the capacity corresponds to both the existing and future needs of the customer
- The requirements that the customer pose are recorded in the SLA (service level agreement)
- To synchronize between capacity management and the service portfolio and SLM within the existing and future resource

*Availability Management

- Goals of this process is to ensure that the availability level of both new and modified services corresponds with the levels as agreed with customer
- To achieve the goals, availability management can implement both proactive and reactive activities that include monitoring and reporting of availability metrics
- Affect the entire process of designing, implementing, assessing, managing and improving IT services and the components

*IT Service Continuity Management (ITSCM)

- Goal of ITSCM is to support business continuity by ensuring that the required IT facilities can be restored within the agreed time
- This process focus on occurrences that can be considers as disaster
- plays a valuable role in support of the process of business continuity planning
- can be applied by organization as a means of focusing attention on continuity & recovery requirement

*Information security management

- Ensure that the information security policy satisfies the organizations overall security policy and the requirements originating from corporate governance
- The information security management system (ISMS) serves as the basis for a cost effective development of an information security program that supports the business objectives.

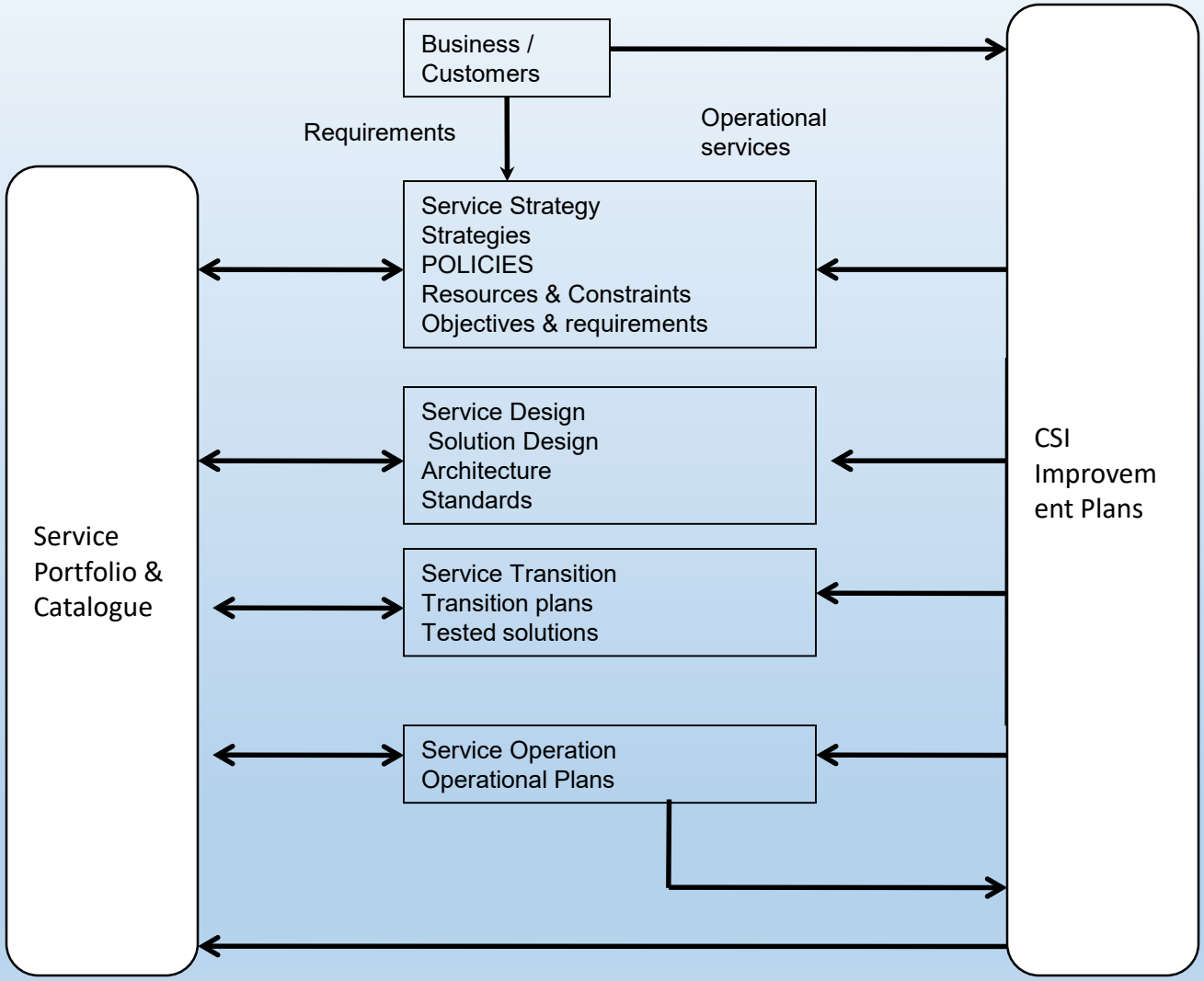
*Supplier management

- Important to all of suppliers and contract in order to support the delivery of services to the customer
- Goal is to guarantee a constant level of quality for the right price.
- Depends on suppliers and contracts database.
- Must be “in sync” with the demands of the organization as well as the requirements of information security management

Business Impact Analysis (BIA)

- What are the critical services ?
- What are the acceptable limits of the unavailable time ?
- What are the levels of unavailability of services ?
- What are the costs of loss of services ?
- What are the critical business & service periods ?

*Interfaces with other phase in the lifecycle



The most important relationships, inputs and outputs of Service Design

Service Design (Review Question)

Q1 List 5 supporting processes for service design.

Q2 What is in-sourcing ? List the pros and cons of in-sourcing.

Q3 List 5 areas one should consider when carrying out service solution design.

Q4 Name any 5 Objectives of Service Design.

Q5 State 5 ways of conducting BIA.

Revision MCQ

1 In which core publication can you find detailed descriptions of Service level management, Availability management, Supplier management and IT service continuity management?

A. Service transition
B. Service design
C. Service strategy
D. Service operation

2 The best description of the purpose of Service Design is:

A. To decide how it will engage with suppliers during the Service management lifecycle
B. To design and build processes that will meet business needs
C. To proactively prevent all outage to IT services
D. To deliver and support IT services at agreed levels to business user and customers

3 IT service continuity strategy should be based on:

1. Design of the service technology
2. Business continuity strategy
3. Business impact analysis
4. Risk assessment

A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. All of the above.

Revision MCQ

4 Which is NOT a Key aspect within the service design?

A. service solution design
B. service portfolio design
C. architecture design
D. software design

5 The goal of IT service continuity management is to _____

A. To decide how it will engage with suppliers during the Service management lifecycle
B. To design and build processes that will meet business needs
C. To proactively prevent all outage to IT services
D. to support business continuity by ensuring that the required IT facilities can be restored within the agreed time

6 SLA aims to _____

1.keep goals and responsibility of parties involved
2.ensure levels of IT service delivery are achieved
3.include planning, coordinating, reporting and revision of attained service delivery
4.identify customer demand for service

A. 1 and 2 only
B. 1 and 3 only
C. 1, 2 and 3 only
D. All of the above.