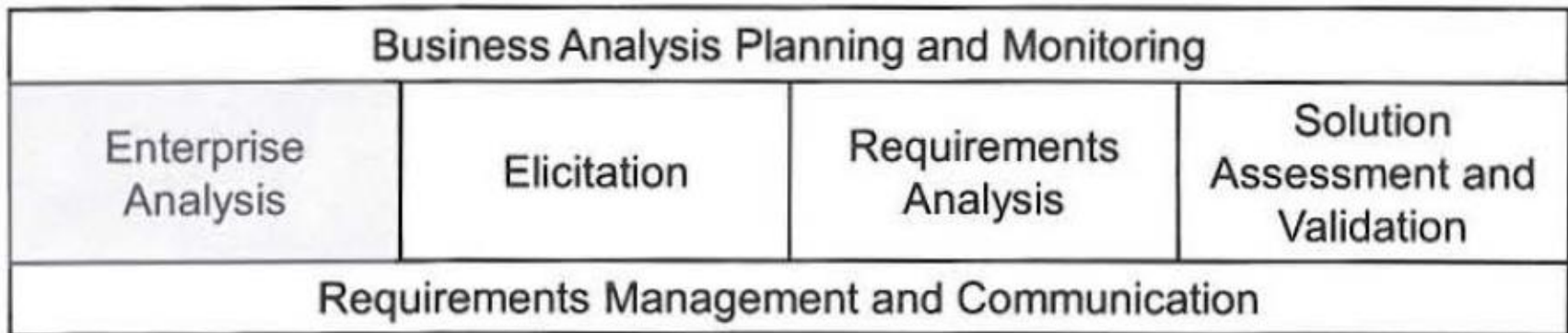# CO457 Business Modelling

Module Week 3

Mapping the Business Landscape

Enterprise and Business Architectures

Enterprise Analysis

- Enterprise analysis involves **describing the scope of potential projects**

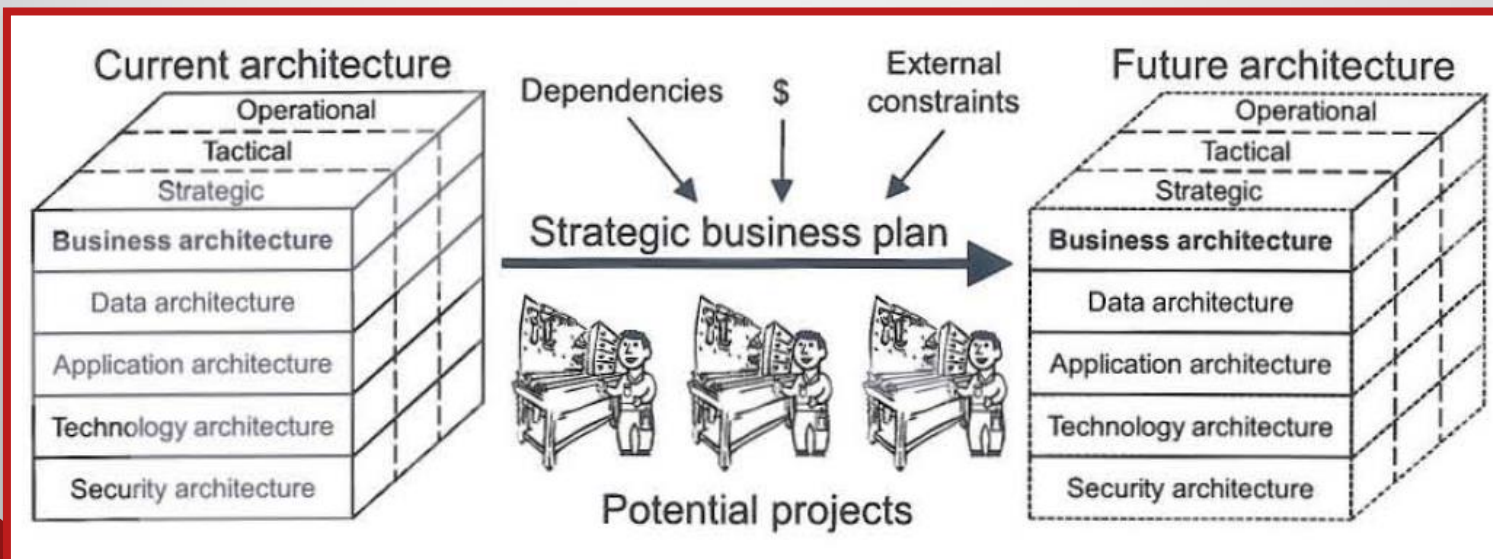- Project scope is **captured at the business-requirements level of detail**

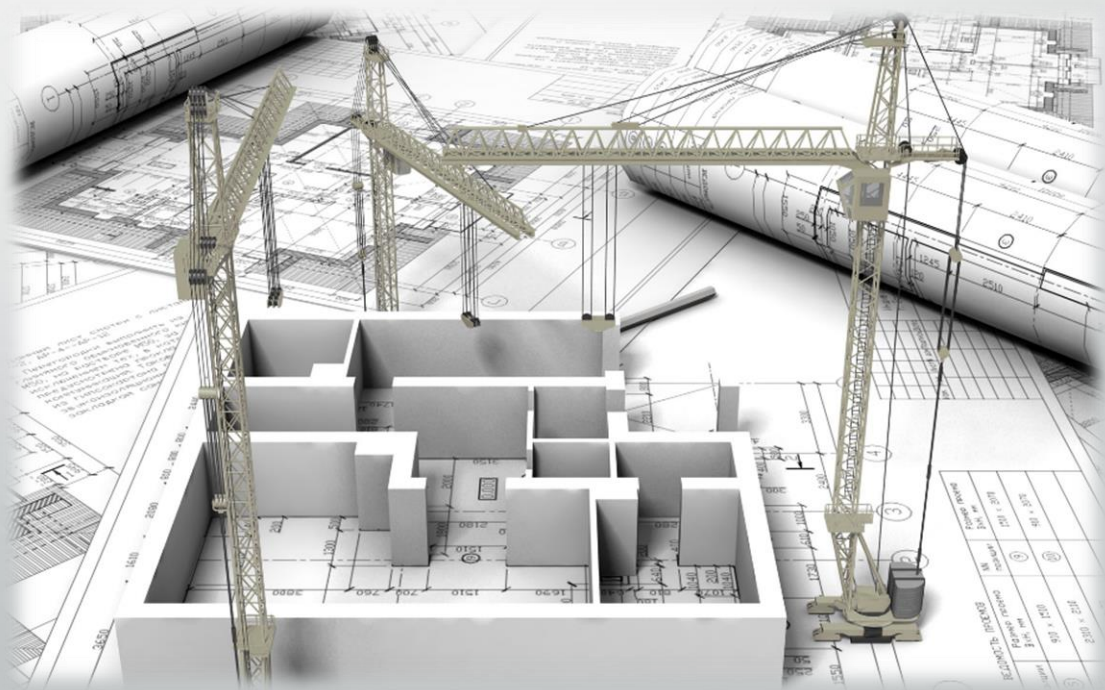| BABOK® Knowledge Areas			
Business Analysis Planning and Monitoring			
Enterprise Analysis	Elicitation	Requirements Analysis	Solution Assessment and Validation
Requirements Management and Communication			
Underlying Competencies			

Enterprise Architecture

- Enterprise analysis uses and modifies the Enterprise Architecture

- A strategic business plan

  - **Helps the organisation migrate**:

    - From the **current "as is" architecture**

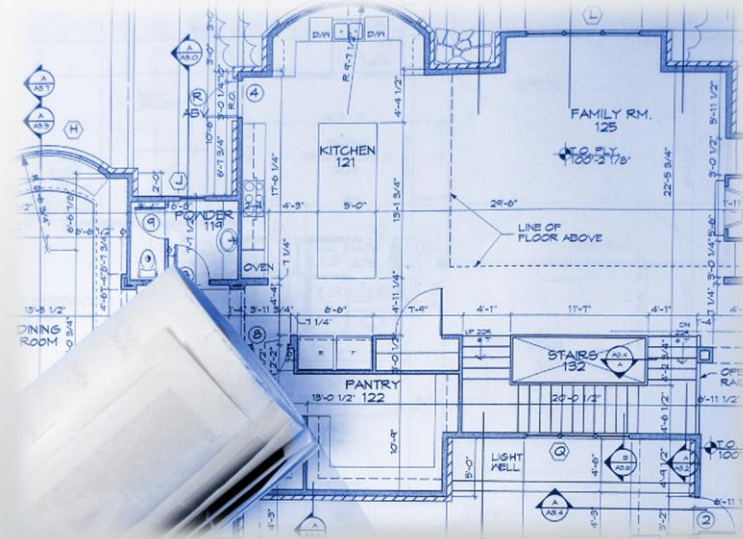   - To the **future "to be" architecture**

Enterprise Architecture

- An architectural view of a system (Business and IT)
  - '**The fundamental organisation of a system, embodied in its components, their relationships to each other and the environment**, and the principles governing its design and evolution'

Enterprise Architecture

- An Enterprise Architecture consists of
  - Business architecture
    - **Business goals, structure, and processes**
  - **Data architecture**
    - Used to support the business
  - Application architecture
    - Used to **process the data**
  - Technology architecture
    - Used to **deploy the applications**
  - Security architecture (optional)

Business Architecture: Definition

- The business architecture:

  - **An interrelated set of documents, models, and diagrams, describing the business in terms of its vision, mission, strategy, rules, policies, functions, procedures, processes, organisations, assets, competencies and locations**, that together comprise the business as a system for delivery of value

- The business architecture provides the **context for more detailed business models**
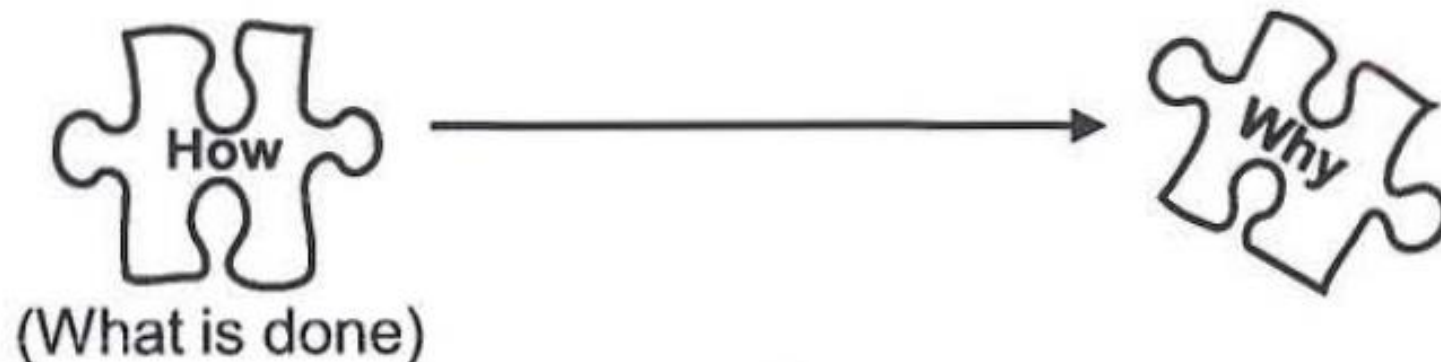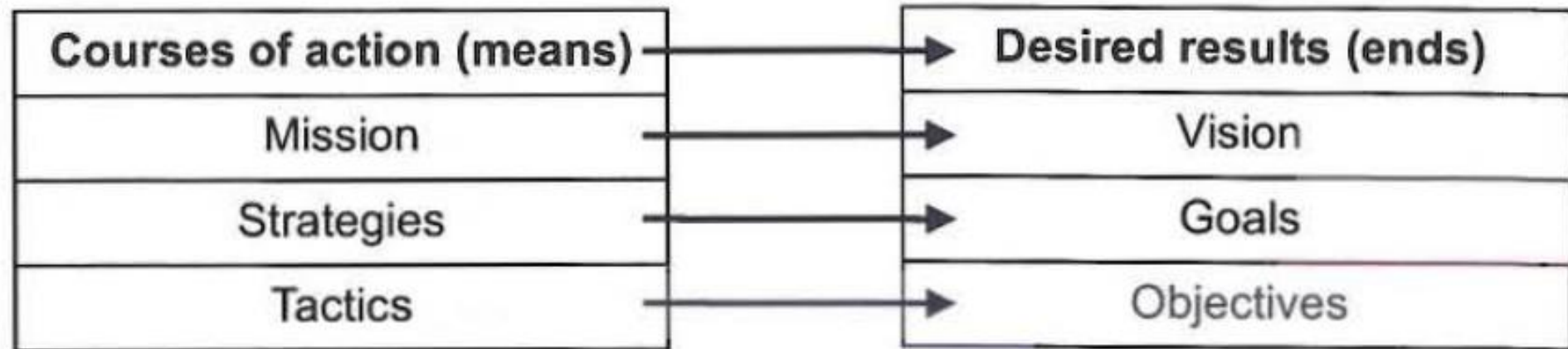
Business Architecture: Multiple Views

- A business architecture contains multiple views
    - **Motivational** view
        - Vision, goals, objectives
    - **Organisational** structure
    - **Functional/Process** views
    - Domain view
    - **Human Resources** view
        - Remuneration, incentives, hiring, promotion, culture, competencies
    - External view
        - Customers, marketplace, competition, regulations, suppliers
    - Geographical view
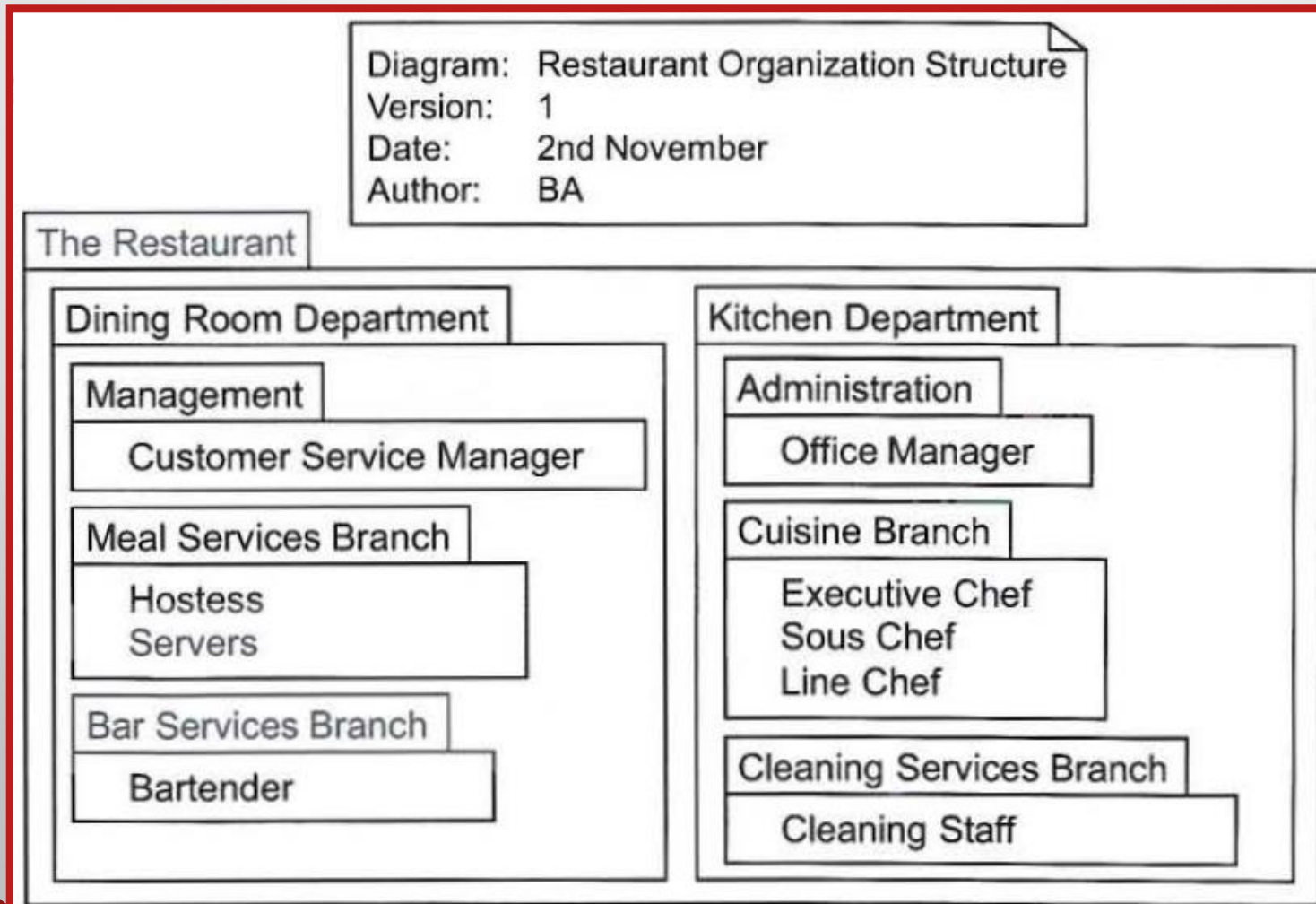   - Locations and facilities

Business Architecture: Motivational View

- **The business goals and means for achieving them**
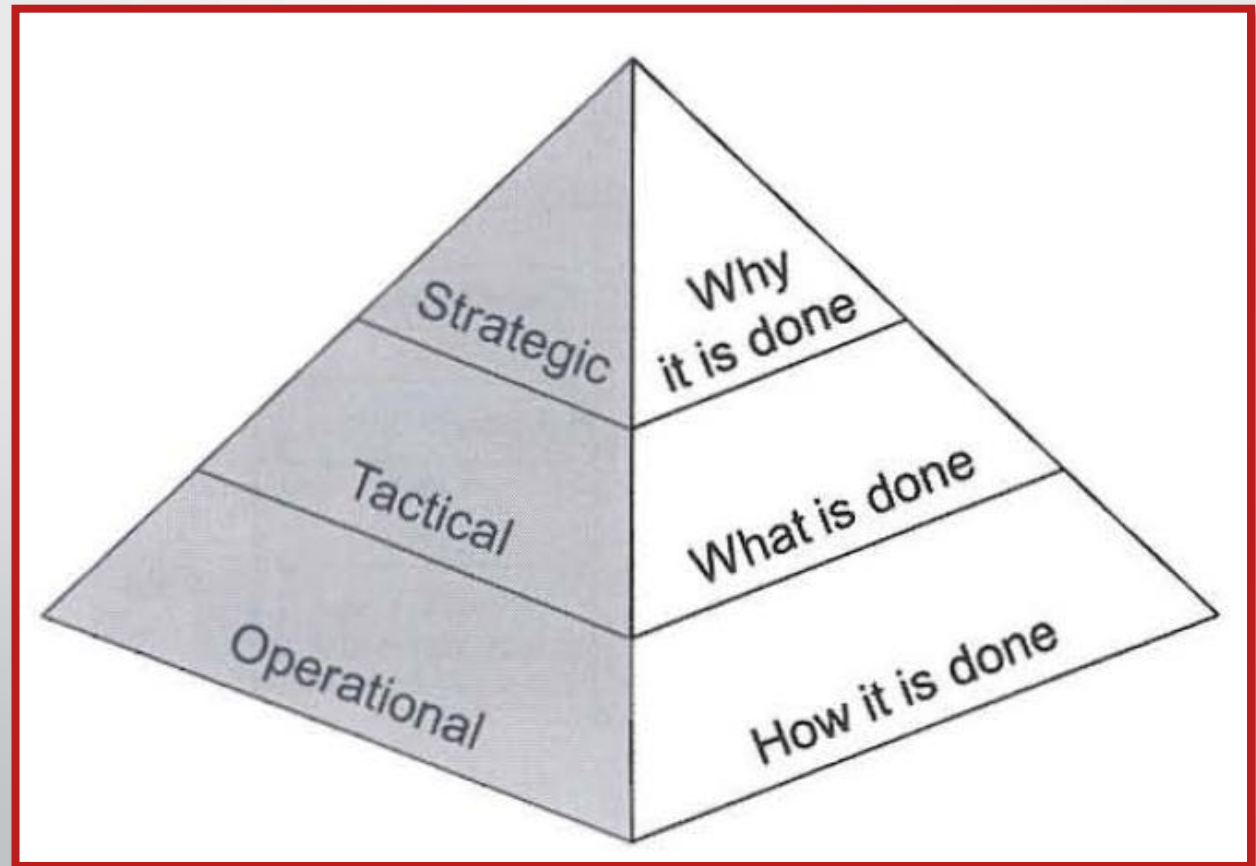 - Captured at the vision-and-goals level of detail in the architecture

Courses of action (means)	→	Desired results (ends)
Mission	→	Vision
Strategies	→	Goals
Tactics	→	Objectives

How (What is done) → Why

Business Architecture:
An Organisational Structure

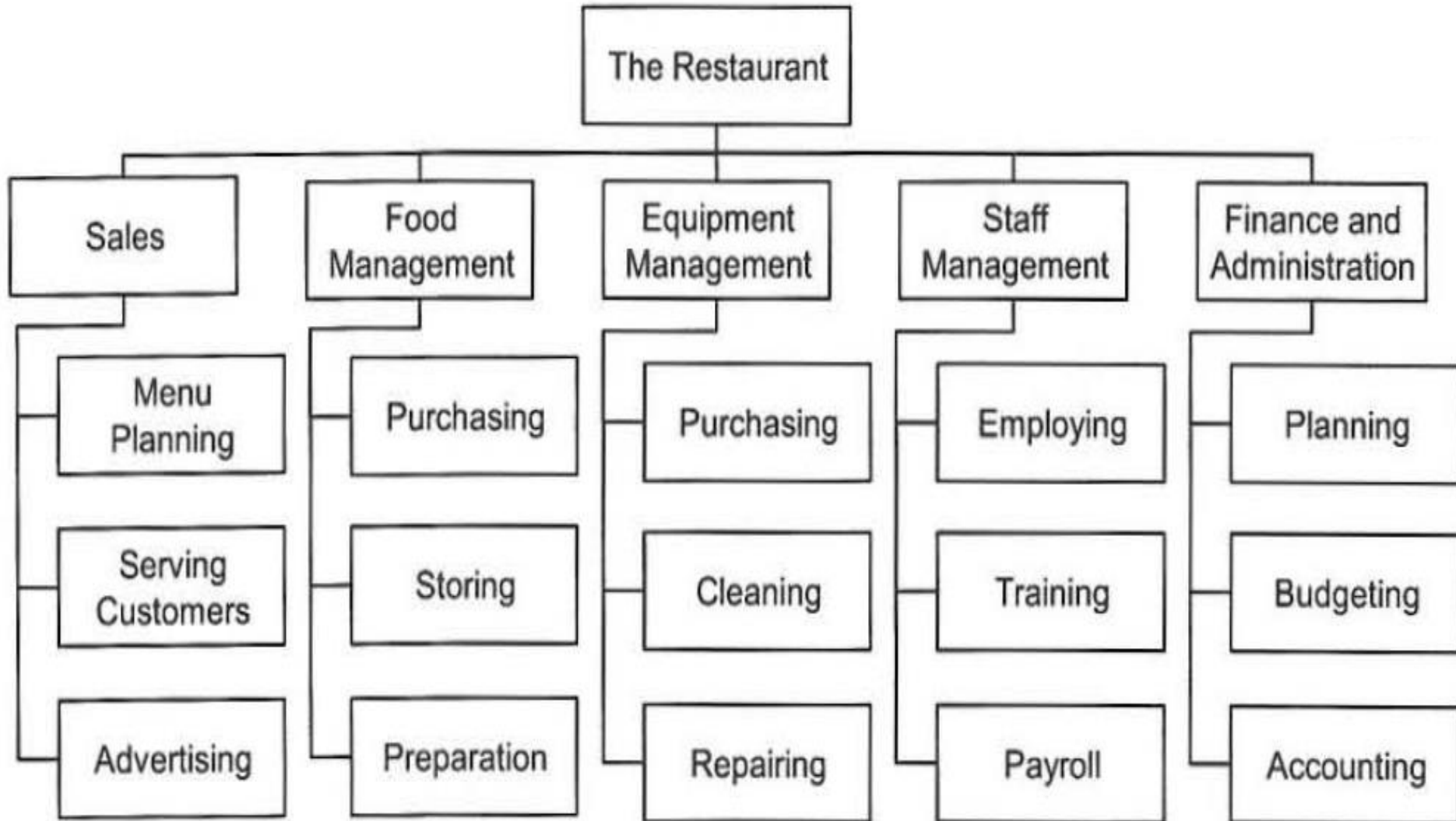- **An organisation is composed of organisational units**

Business Architecture: Functional/Process Views

- Functional/Process views are captured at the **strategic and tactical levels of detail** in the architecture
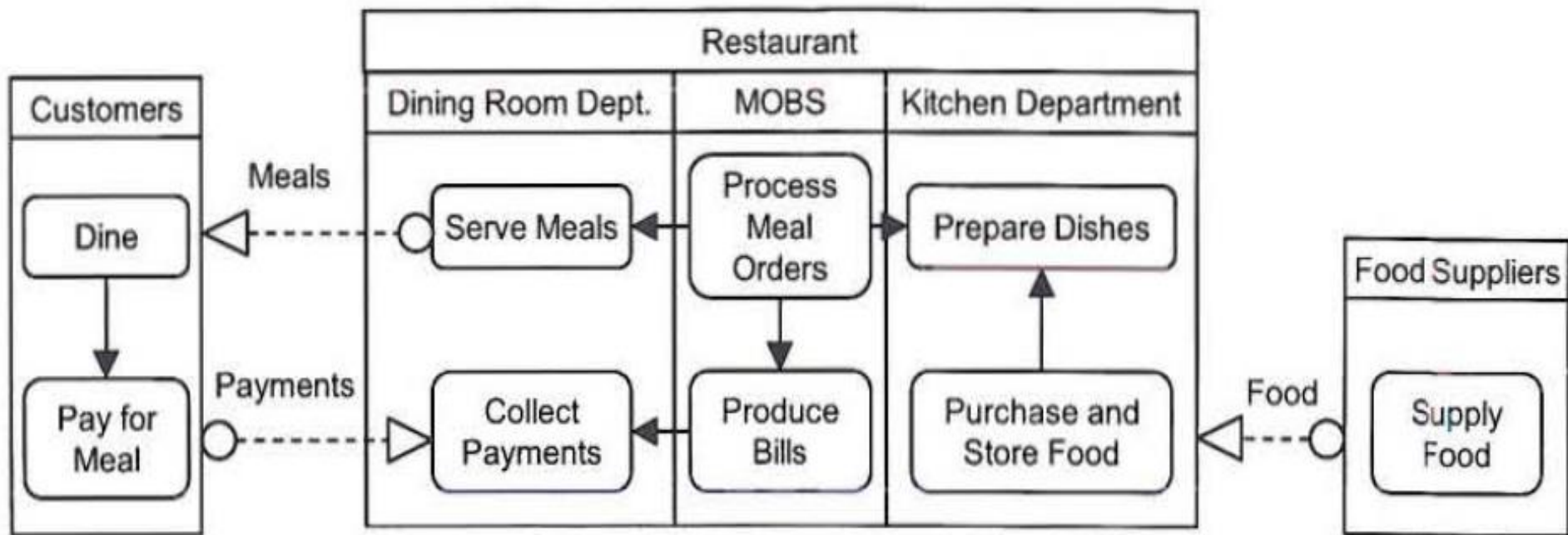
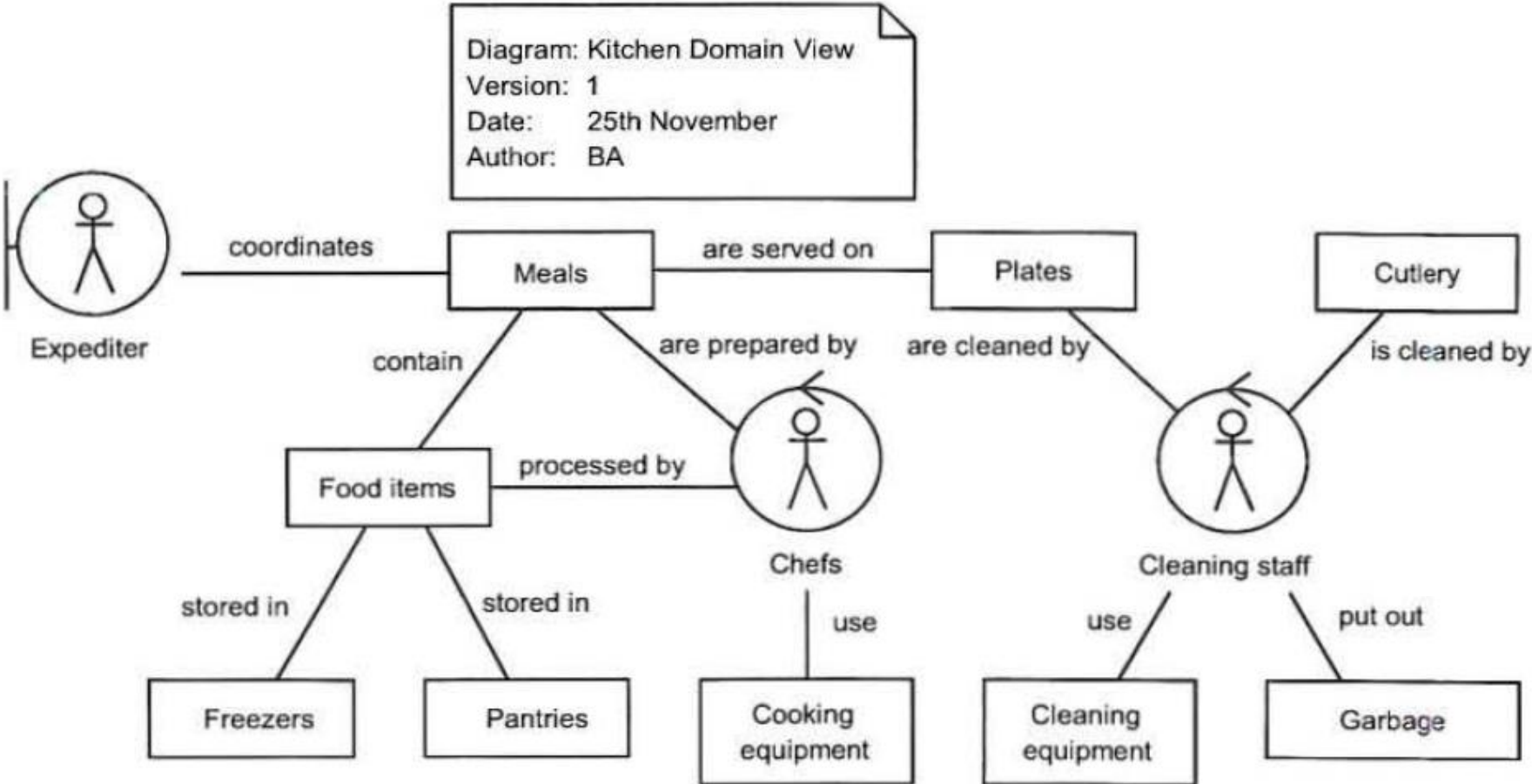# Business Architecture: A Pure Functional View

Business Architecture: A Process View

- A Process View captures

  - **Organisation's value chains**

  - How the business processes fit together, are managed and measured

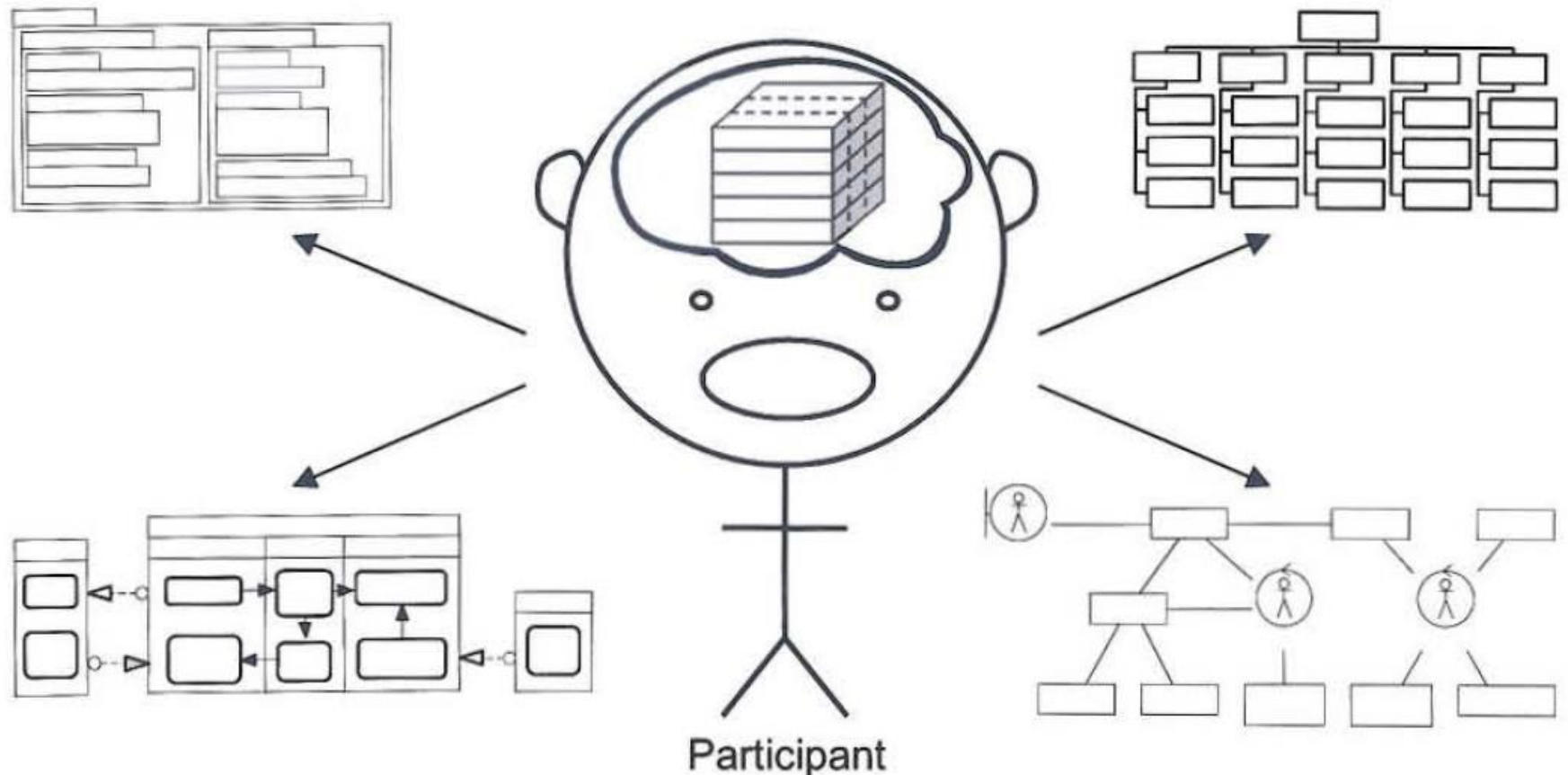 - Also known as a **cross-functional map**

Business Architecture: A Domain View

- **UML class diagram** of things in the kitchen and their associations

How Do We Model the Business Architecture?

- We start by **gathering business requirements** in a requirements workshop

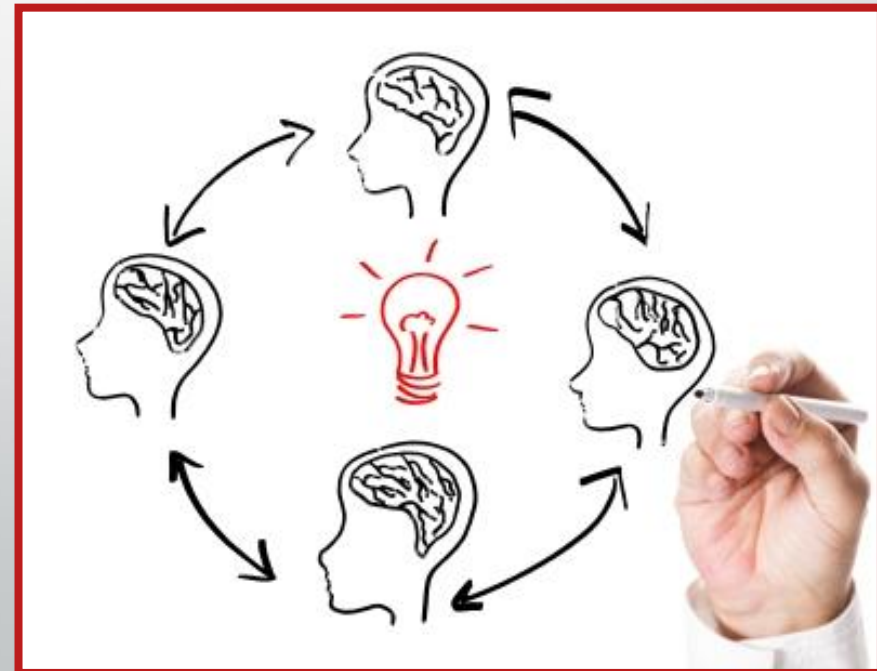Participant

Requirements Workshops

- Holding **a requirements workshop is a best practice in elicitation**

- Obtains a large quantity of **high-quality information, very rapidly**

- Also known as:

    - Joint Application Development (JAD)

    - Requirements Discovery Session (RDS)

    - Joint Requirements Planning Session (JRPS)

- **The goal is to reach an agreement on the requirements**

Requirements Workshops: Roles

- Moderated by a **facilitator**

- Documented by a **scribe**

- **Participants provide the knowledge**

- Observers come to **listen and learn**

Requirements Workshops: Preparation

- Select a facilitator and a scribe

- **Define the goal and scope of the workshop**

- Identify participants

  - **Cross-sectional group of stake holders**

  - Have a thorough knowledge of the business

  - **Able to make decisions**

Requirements Workshops: Preparation

- Decide on **observers**

- Review **existing documentation**

- Organise a time and place

- Develop the agenda

- Distribute an information package to participants and observers

Requirements Workshops: Agenda

- Introduction by project manager or sponsor
  - **Explain the workshop context, scope, and goal**
- Overview of the process by the facilitator
  - Describe the **rules of conduct**
  - Clarify the possible **problem-resolution strategies**
- Discussion among the participants
  - The majority of the workshop
    - Moderated by the facilitator
    - Captured by the scribe

Requirements Workshops: Agenda

- Conclusion by the facilitator
  - **Review the agreed-upon requirements**
  - **Itemise requirements deferred for later elicitation**
  - Inform participants of the next steps
    - The **production and review of the models**

Requirements Workshops: Rules of Conduct

- Follow the agenda
  - Facilitator maintains the **discussion in scope and on topic**
- Level playing field
  - Opinions are of equal value
  - No intimidation due to title
  - **Facilitator has no opinion**
- One speaker at a time
  - **No interruptions or side conversations**
  - **Silence is consensus**
  - If you don't speak up, you have agreed

Requirements Workshops: Rules of Conduct

- 100 percent participation
- Facilitator is the boss
  - **Makes sure everyone is heard**
- **Goal is to reach agreement**

Quick Quiz

- Requirements workshops are also known as:
  - Joint Application Development (JAD)
  - Requirements Discovery Session (RDS)
  - Joint Requirements Planning Session (JRPS)
  - All of the above
- A Strategic Business Plan is based on:
  - The current 'as is' architecture
  - The future 'to be' architecture
  - The current 'as is' and the future 'to be' architecture
  - None of the above

Quick Quiz

- Which is not contained in the Enterprise Architecture?
    - Business architecture
    - Environment architecture
    - Application architecture
    - Technology architecture
- A Business Architecture contains a:
    - Domain view
    - Motivation view
    - Organizational structure
    - All of the above

KEEP CALM ITS QUIZ TIME!

Modelling Resources

Business Modelling Standards

- Models from the Object Management Group (OMG)
  - **An international standards consortium**
  - Develops enterprise integration standards
- OMG standards:
  - **Unified Modelling Language (UML)**
    - **Use Case Diagram** for modelling Business Use Cases
    - **Class Diagram** for modelling Business Objects
    - UML business modelling profile

Business Modelling Standards

- OMG standards:
  - **Business Process Modelling Notation (BPMN)**
    - For process/workflow modelling
  - Semantics of Business Vocabulary and Business Rules (SBVR)
    - For business glossaries and business rules
  - Business Motivation Model
  - **UML Profile for Modelling Quality of Service (QoS) and Fault Tolerance**
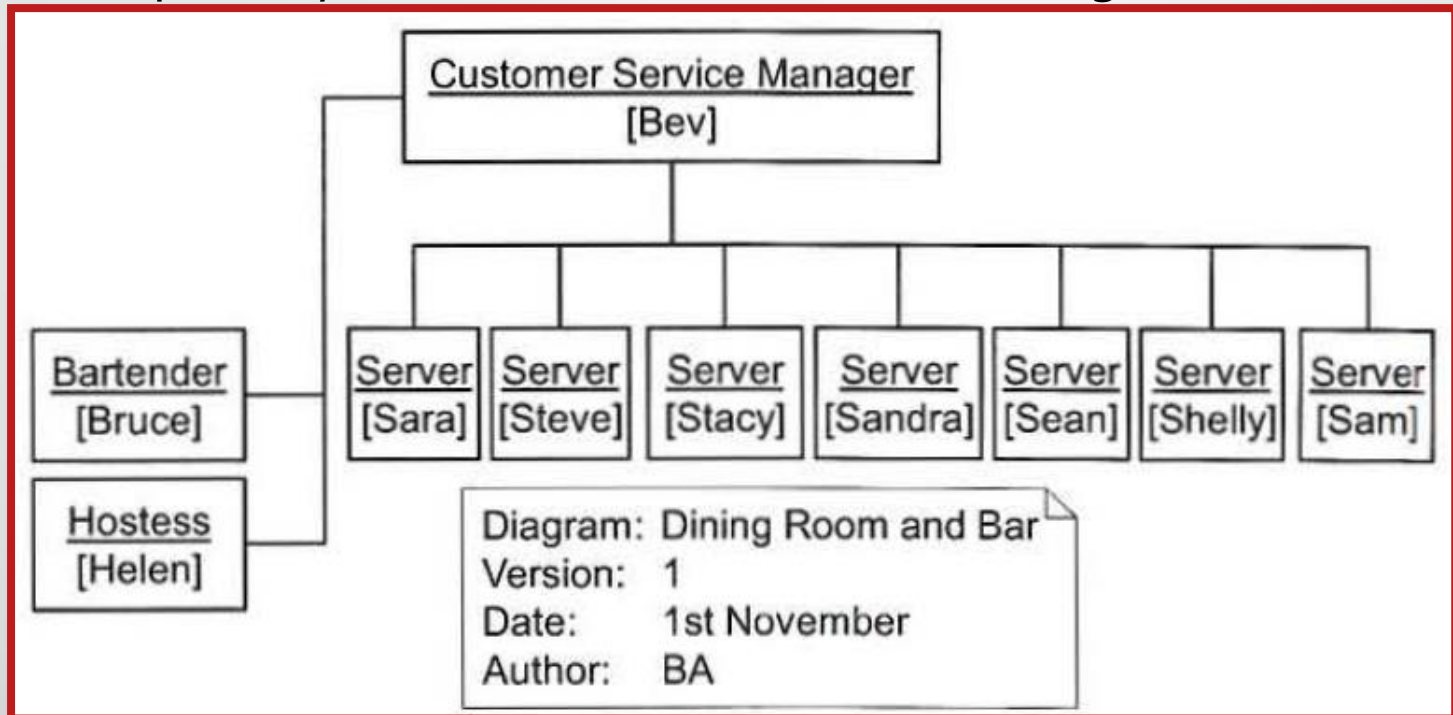 - Characteristics and Mechanisms Specification

Additional Modelling Techniques

- **Organisation chart**
- Floor plan/blueprint
- Enterprise Architecture diagrams
- Decision tables
- **Functional decomposition**
- Matrices
- Prioritisation
- Supplementary requirements
  - Also known as **non-functional requirements**
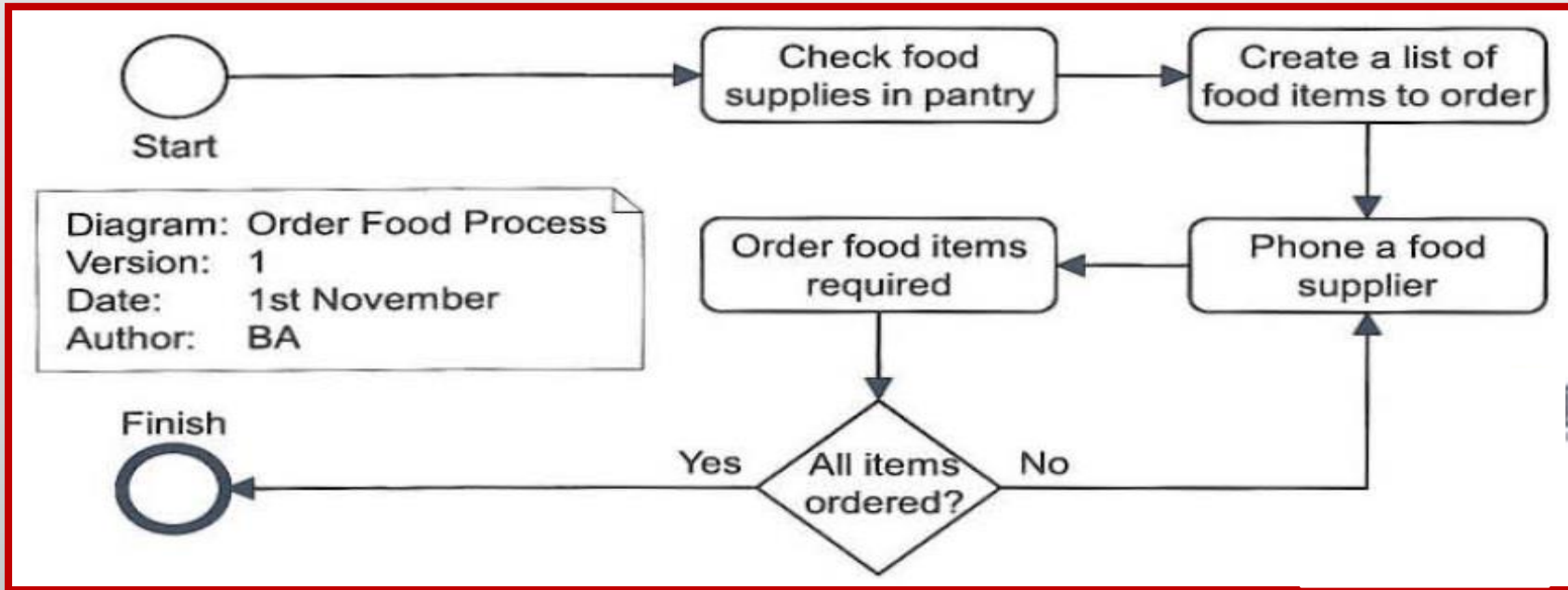 - Include **quality-of-service requirements**

Internet References

- Websites from which you can get more detailed modelling reference material:
  - International Institute of Business Analysis http://www.theiiba.org
  - The Object Management Group http://www.omg.org
  - **Unified Modelling Language** http://www.uml.org
  - Business Process Modelling and Notation http://www.bpmn.org
  - Business Process Trends http://www.bptrends.com
  - Business Rules Group http://www.businessrulesgroup.org

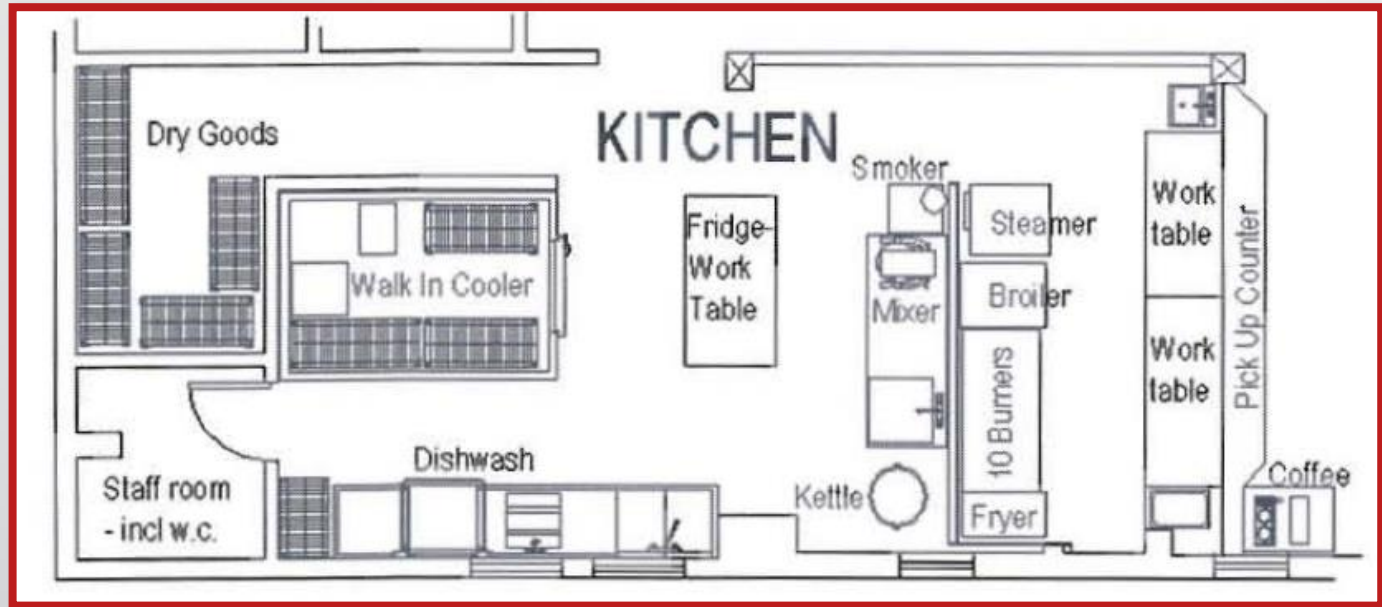- What is the primary dimension modelled in this diagram?

- Locations
- Motivation
- People
- Time

- What kind of relationship is shown in this diagram?

- Conceptual
- Sequence
- Reporting
- Aggregation

- What level of detail is shown in this diagram?

- Conceptual
- Logical
- Physical
- Aggregated