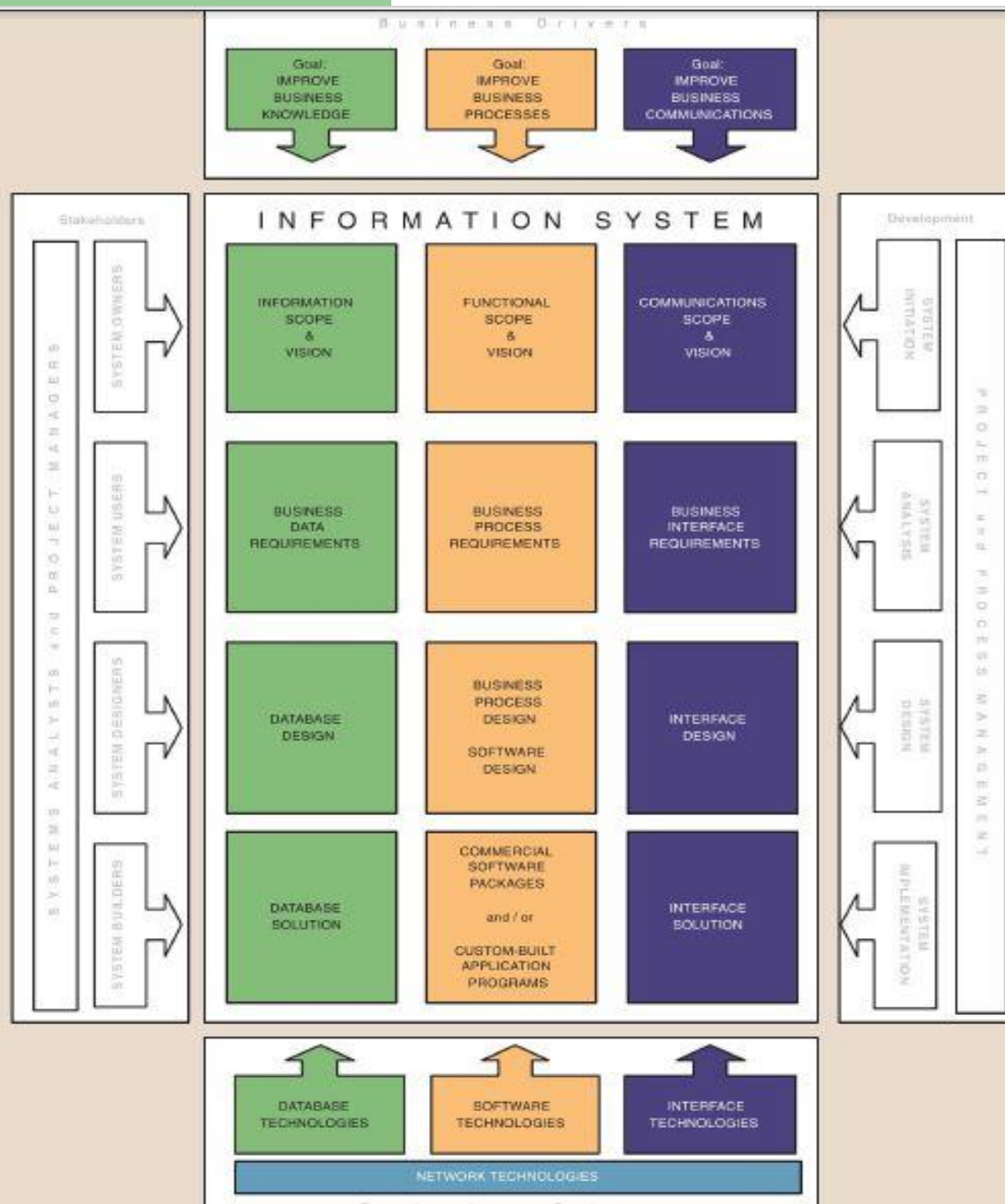# Unit 2:Information System Building Block:

Topics to be Covered

- Information System
- Framework of the Information System
- Knowledge Building Block
- Process Building Block
- Communication Building Block
- View of stakeholders in Different Building Block

Business Drivers

| Goal: IMPROVE BUSINESS KNOWLEDGE | Goal: IMPROVE BUSINESS PROCESSES | Goal: IMPROVE BUSINESS COMMUNICATIONS |

INFORMATION SYSTEM

Stakeholders

SYSTEMS ANALYSTS and PROJECT MANAGERS

SYSTEM OWNERS · SYSTEM USERS · SYSTEM DESIGNERS · SYSTEM BUILDERS

INFORMATION SCOPE & VISION	FUNCTIONAL SCOPE & VISION	COMMUNICATIONS SCOPE & VISION
BUSINESS DATA REQUIREMENTS	BUSINESS PROCESS REQUIREMENTS	BUSINESS INTERFACE REQUIREMENTS
DATABASE DESIGN	BUSINESS PROCESS DESIGN / SOFTWARE DESIGN	INTERFACE DESIGN
DATABASE SOLUTION	COMMERCIAL SOFTWARE PACKAGES and / or CUSTOM-BUILT APPLICATION PROGRAMS	INTERFACE SOLUTION

Development

PROJECT and PROCESS MANAGEMENT

SYSTEM INITIATION · SYSTEM ANALYSIS · SYSTEM DESIGN · SYSTEM IMPLEMENTATION

| DATABASE TECHNOLOGIES | SOFTWARE TECHNOLOGIES | INTERFACE TECHNOLOGIES |

NETWORK TECHNOLOGIES

The Product- Information System

- **Front office Information system :** It is an information system that supports business function that extends out to the organization's customer.

- **Back office Information system:** It is an information system that supports internal business operation of an organization.

Information System Architecture

- It is a unifying framework into which various stakeholders with different perspective can organize and view the fundamental building blocks of information system.

- It provides a foundation for organizing the various component of any information system you care to develop.

Knowledge Building Block

- Improving Business knowledge is the goal of an information system.

- It is derived from data and information.

- Knowledge is what enables a company to achieve its mission and vision.

System owners view of Knowledge

- System owner interested in information that adds new business knowledge.
- It helps managers to make intelligent decision.
- They are concerned with the big picture.
- They are not interested in entity and the field of information system.
- They define the scope and vision of the project.
- They relate business entities with problems and opportunities.

System users view of Knowledge

- They capture, store, process, edit and use the data everyday.

- The data can be obtained by using various fact finding technique.

- They are responsible for data requirements.

- Data requirements is a representation of user's data in terms of entity, attributes and rules.

System Designer view of Knowledge

- They translate the data requirements into database design.

- They make data structure, database schema, fields and indexes.

- The system designers' view of data is constrained by the limitations of whatever database management system (DBMS) is chosen.

System Builder view of Knowledge

- They are closet to the actual database management system.

- They represent the data in very precise and unforgiving language.

- The most commonly used database language is SQL(Structure Query Language).

Process Building Block

- It deals with software technology that will be used to automate selected process.

- Processes are used to solve business function.

- Business function is a group of related processes that support the business. Functions can be decomposed into other subfunctions.

System owners view of Process

- They do not focus on work flow and procedures.
- They focus on services that is provided to customers suppliers and other persons.
- They see the IS as a big picture.

System users view of Process

- They are responsible for user's expectations and the processing requirements for a business process and its information system.

- The process requirement is collected in the form of activities, data flow and workflow.

- Processes are defined in terms of policies and procedures

System Designer view of Processes

- Software specification is developed by the designers.

- It is the technical design of business processes to be automated or supported by computer programs to be written by system builders.

- To fulfill the business process requirements of system users.

- To provide sufficient detail and consistency for communicating the software design.

System Builder view of Process

- They build the system by using precise programming language.

- Different types of technique can be used for programming like: prototyping.

- Some of the programming languages are C++, Visual Basics and C#.

Communication Building Block

- The main target of communication building block is to improve communication and collaboration between employee and constituents.

- It deals with the interface that is given by development team to the information system.

System owners view of Communication

- Owner deals with
  - Employees and customers to whom the system is going to interact.
  - Different location of the departments

System users view of Communication

- System users are responsible for input and output design of any system.
- They define the forms according to fields.
- They try to make the system same as a software like word and excel.

System Designer view of Communication

- They are responsible for interface specification.
- It is a technical design that document how system users are interact with a system and how a system interact with other system.
- They find or built interfaces between technology of new system and system users.

System Builder view of Communication

- They use ADE to make the interface between software and database.

- They make the Middle for communication

- MIDDLEWARE is a utility software that allows application software and system software that utilize differing technologies.

Questions and Discussion