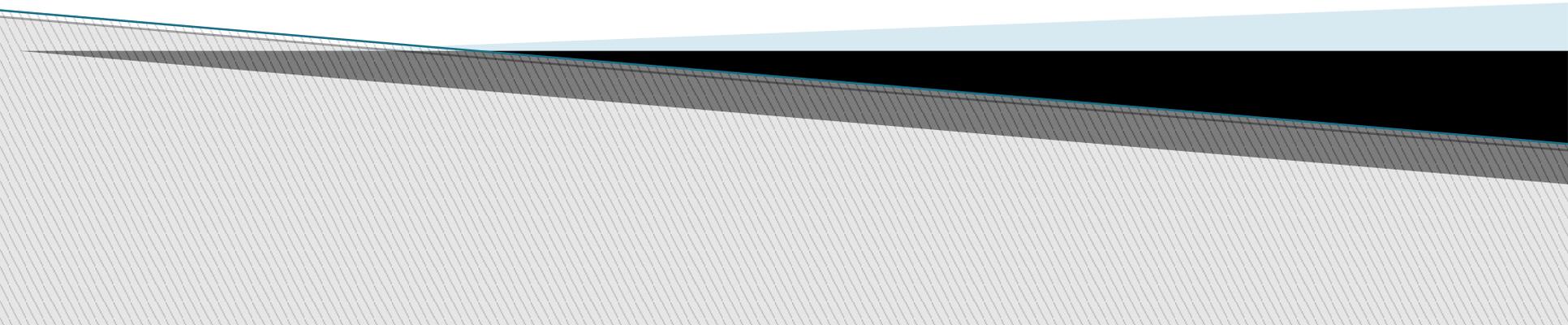
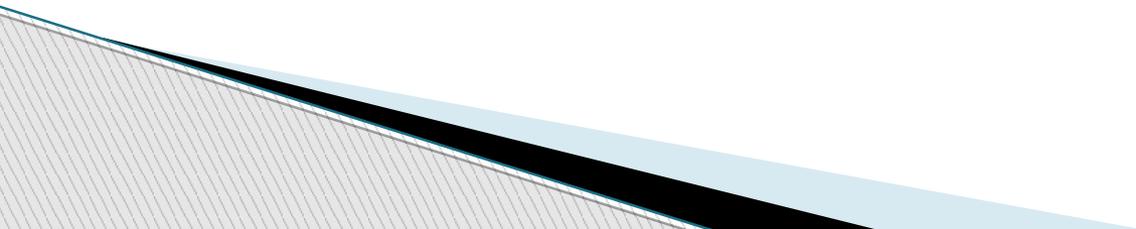


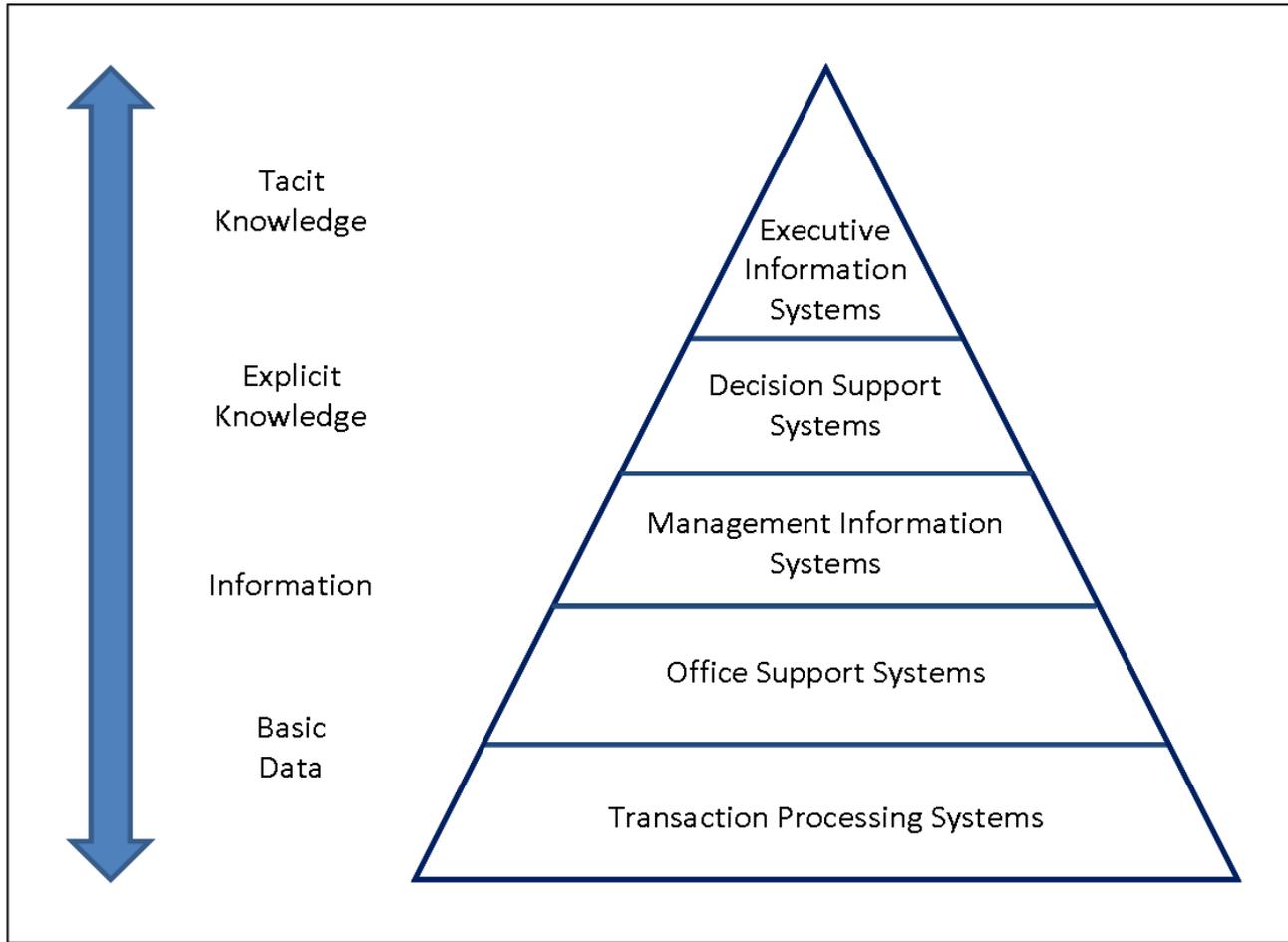
**MIS**



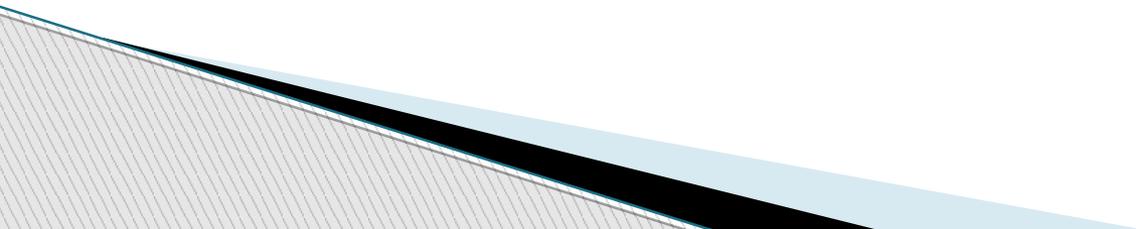
# UNIT I



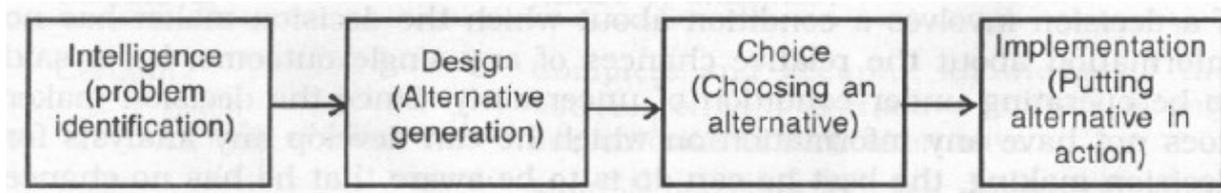
# TYPES OF IS



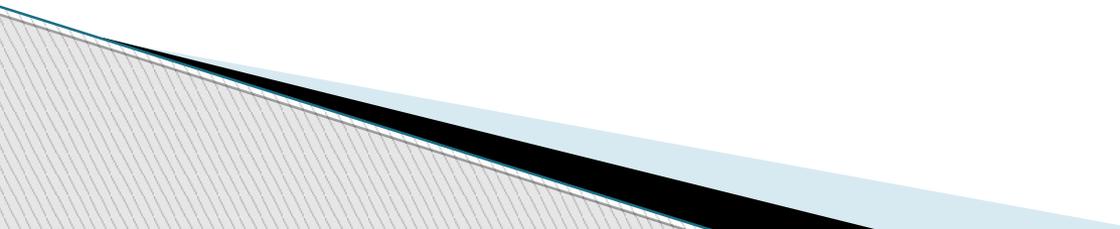
# DECISION MAKING PROCESS



# INDIVIDUAL DECISION MAKING



# ORGANIZATIONAL DECISION MAKING

- ▶ **Identify the decision to be made.**
  - ▶ **Analyze the issue under discussion**
  - ▶ **Establish criteria.**
  - ▶ **Brainstorm potential solutions.**
  - ▶ **Evaluate options and select the best one.**
  - ▶ **Implement the solution.**
  - ▶ **Monitor and evaluate the outcome.**
- 

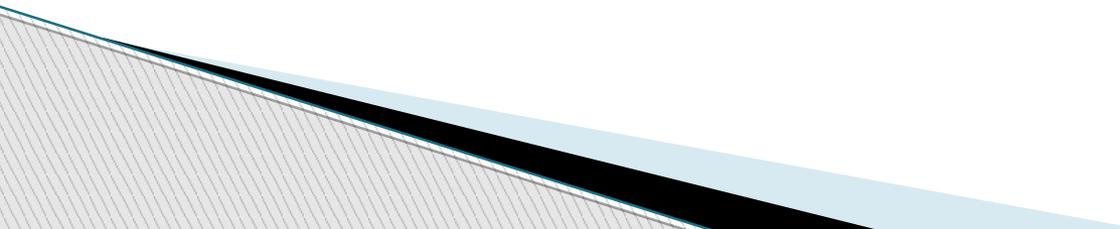
# IT INFRASTRUCTURE FOR ORGANIZATIONS

An IT infrastructure consists of a set of physical devices and software applications that are required to operate the entire enterprise.

- ▶ • Computing platforms
- ▶ • Telecommunications services
- ▶ • Data management services
- ▶ **Business Solutions**
- ▶ • Physical facilities management services
- ▶ • IT management services
- ▶ • IT standards services
- ▶ • IT education services
- ▶ • IT research and development services

# UNIT II

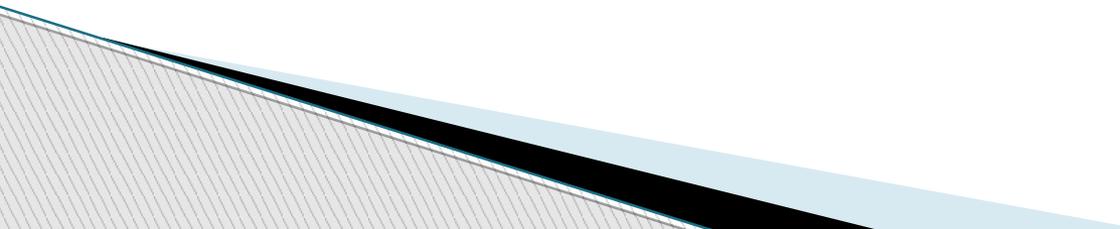
## IMPORTANCE OF SYSTEM DESIGN

- ▶ User Requirements :
  - ▶ Computerization :
  - ▶ Costly process eventual users of information systems to support them in working with technologies in an organizational setting.
  - ▶ User Interface :
  - ▶ New technology : \_
- 

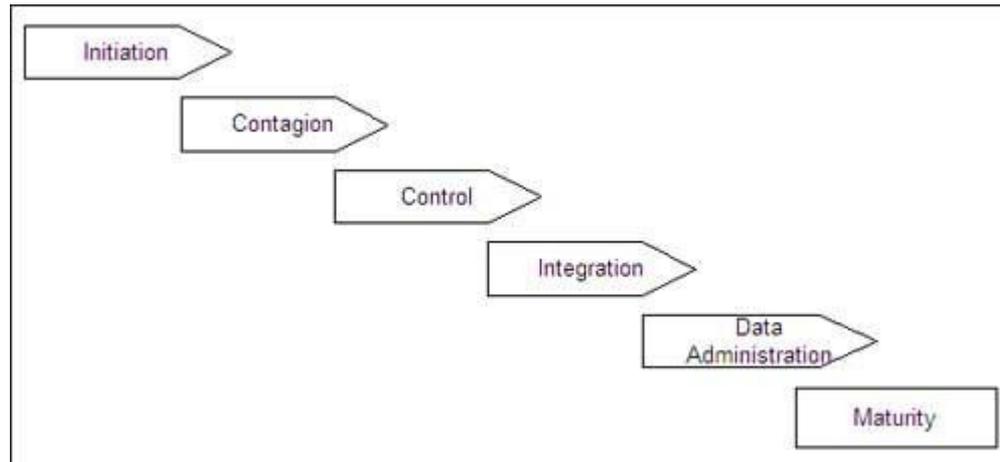
# TRADITIONAL APPROACH

- ▶ SDLC
- ▶ WATERFALL

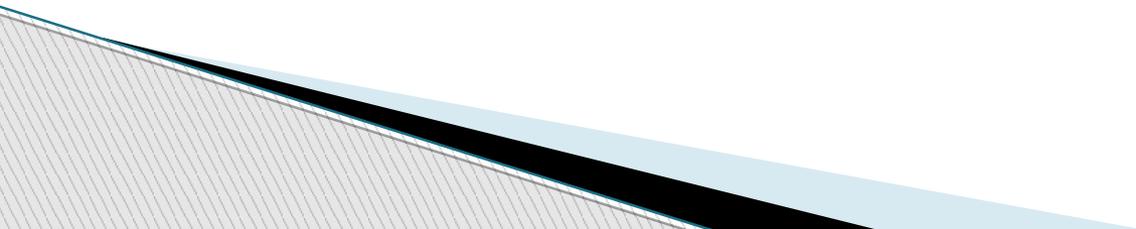
# MODERN APPROACH

- ▶ SSADM
  - ▶ RAD
  - ▶ SOFTWARE PROTOTYPE
  - ▶ OOAD
- 

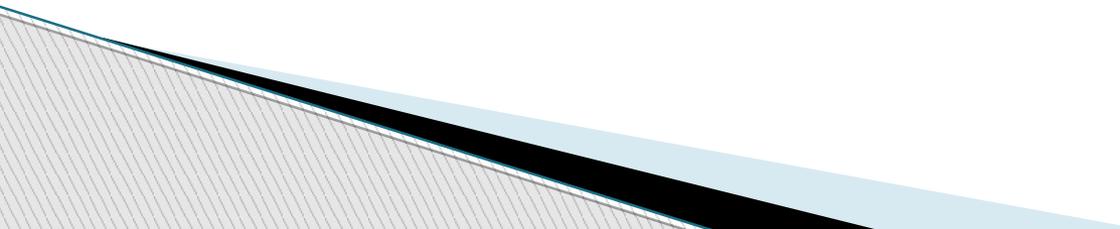
# MIS GROWTH MODEL



# UNIT III

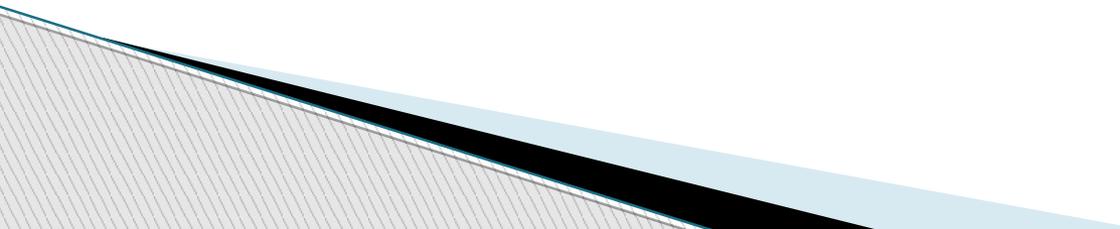


# OLAP – ONLINE ANALYTICAL PROCESSING

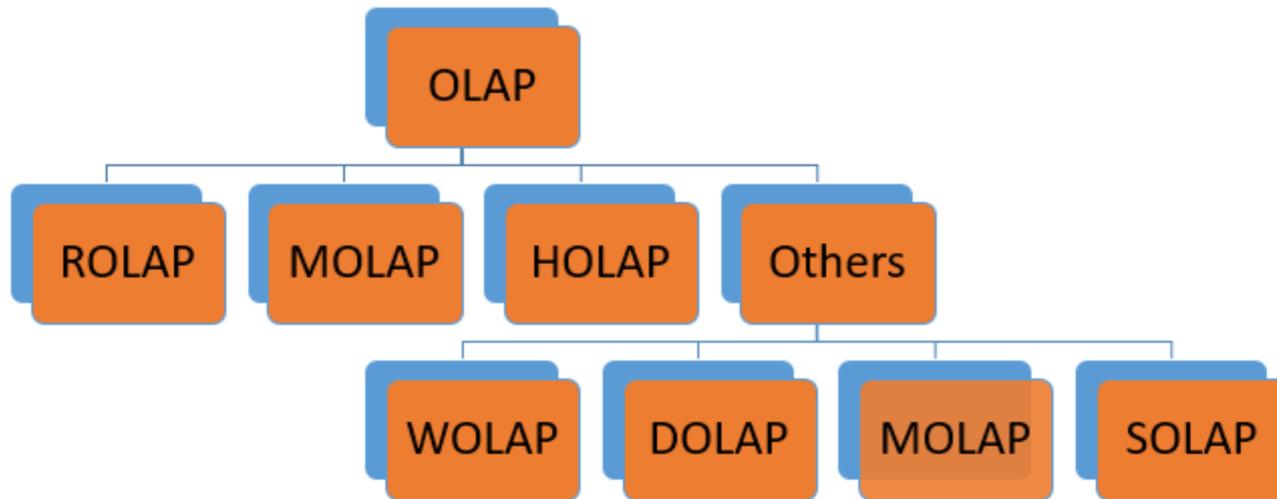
- ▶ **Online Analytical Processing**
  - ▶ OLAP is a category of software that allows users to analyze information from multiple database systems at the same time. It is a technology that enables analysts to extract and view business data from different points of view. OLAP stands for Online Analytical Processing.
- 

# Basic analytical operations of OLAP

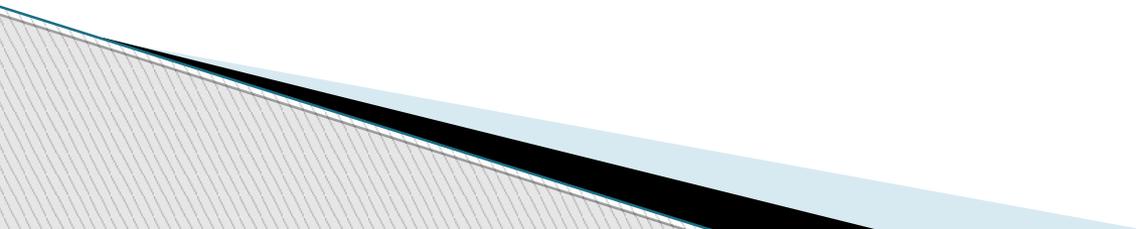
Four types of analytical operations in OLAP are:

- ▶ Roll-up
  - ▶ Drill-down
  - ▶ Slice and dice
  - ▶ Pivot (rotate)
- 

# TYPES OF OLAP

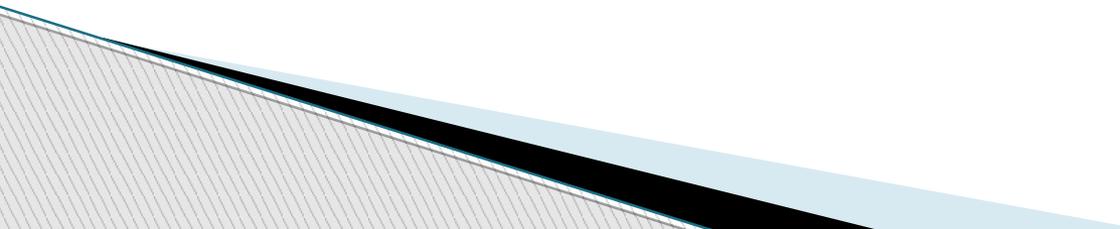


# DATA WAREHOUSE AND DATA MINING

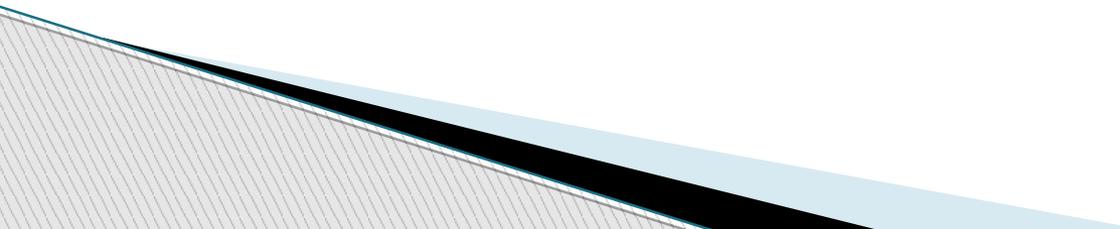


# DATA MINING AND DATA WAREHOUSE

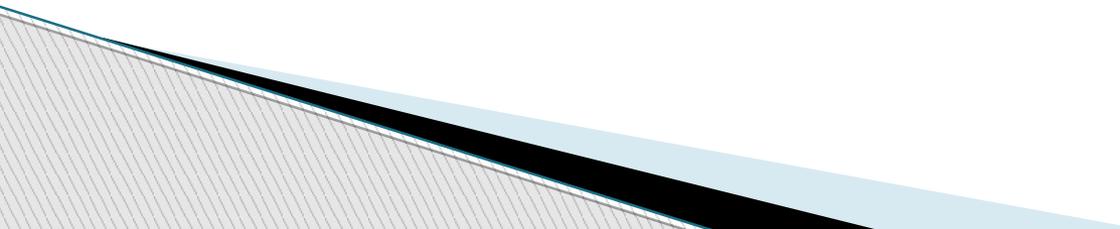
The term "Data Warehouse" was first coined by Bill Inmon in 1990. According to Inmon, a data warehouse is a subject oriented, integrated, time-variant, and non-volatile collection of data.



# Data Warehouse Applications

- ▶ Financial services
  - ▶ Banking services
  - ▶ Consumer goods
  - ▶ Retail sectors
  - ▶ Controlled manufacturing
- 

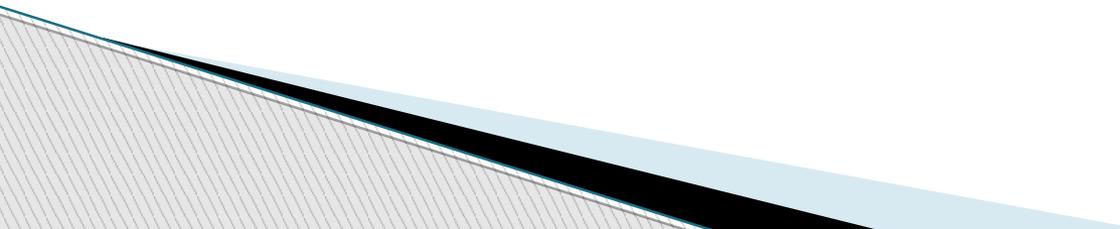
# Types of Data Warehouse

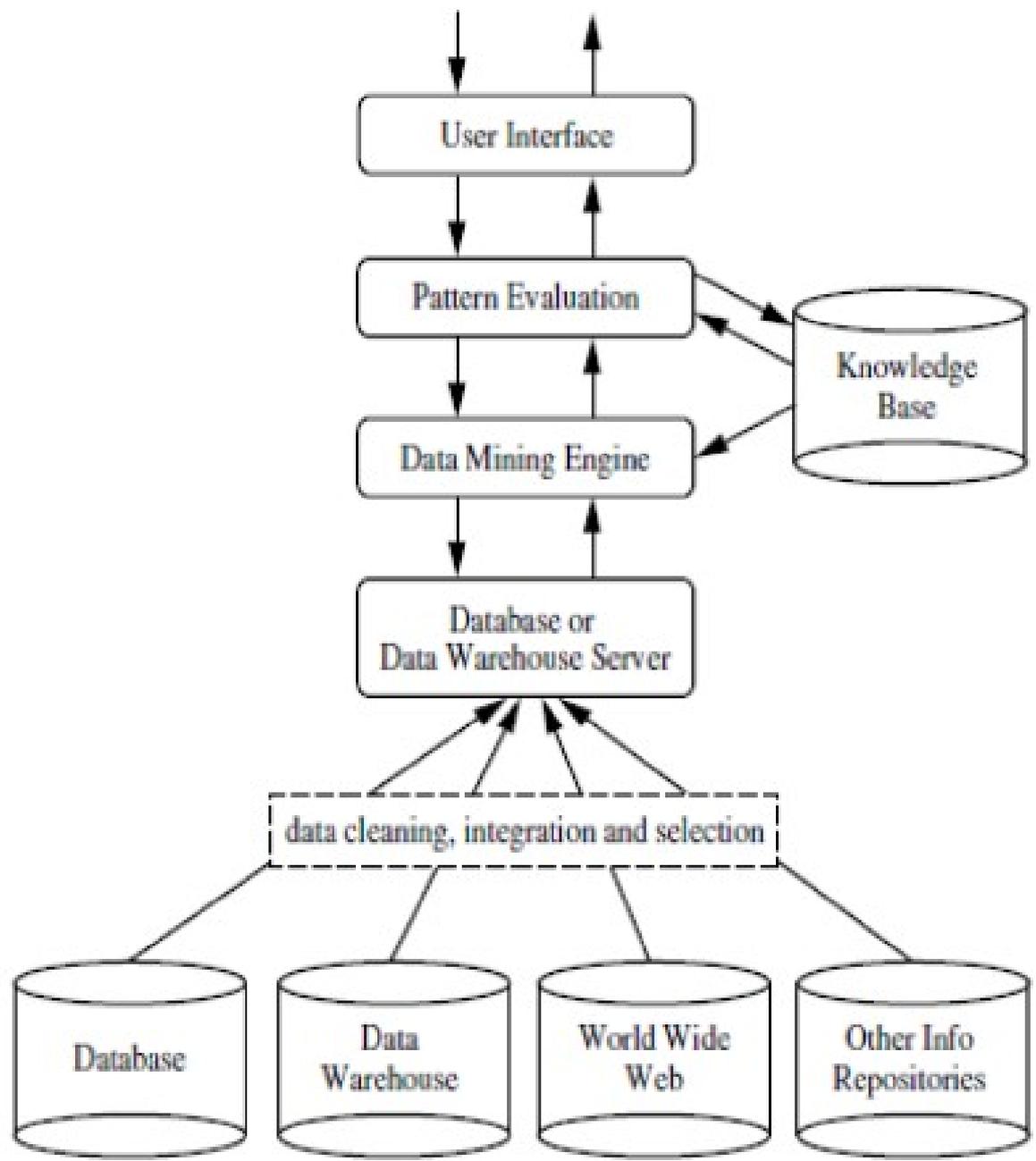
- ▶ Information processing,
  - ▶ analytical processing,
  - ▶ data mining
- 

# DATA MINING

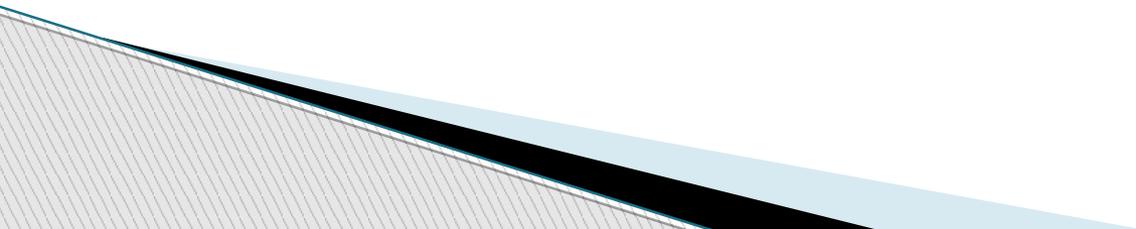
- ▶ Data mining refers to extracting or mining knowledge from large amounts of data. The term is actually a misnomer.

The key properties of data mining are

- ▶ Automatic discovery of patterns
  - ▶ Prediction of likely outcomes
  - ▶ Creation of actionable information
  - ▶ Focus on large datasets and databases
- 



# UNIT IV



# OPERATIONAL

General Ledger  
Fixed assets  
Sales order processing  
Accounts Receivable  
Accounts Payable  
Inventory control  
Purchase order processing  
Payroll

# PRODUCTION INFORMATION SYSTEM

## OPERATIONAL

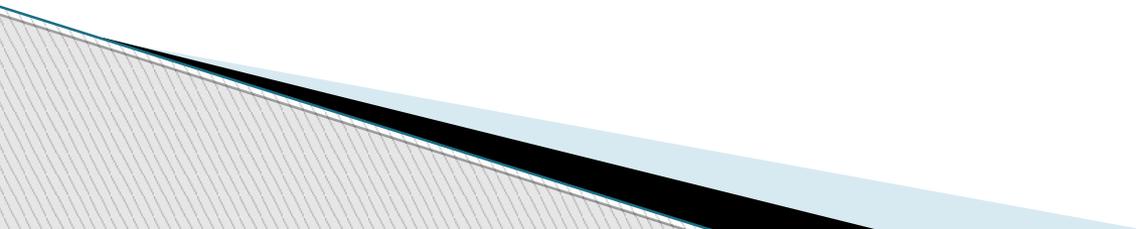
Purchasing  
Receiving  
Quality Control  
Cost Accounting  
Materials management  
Inventory control  
Materials handling  
CAD  
CAM  
Image Management  
Material selection  
Shop floor scheduling

# MARKETING INFORMATION SYSTEM

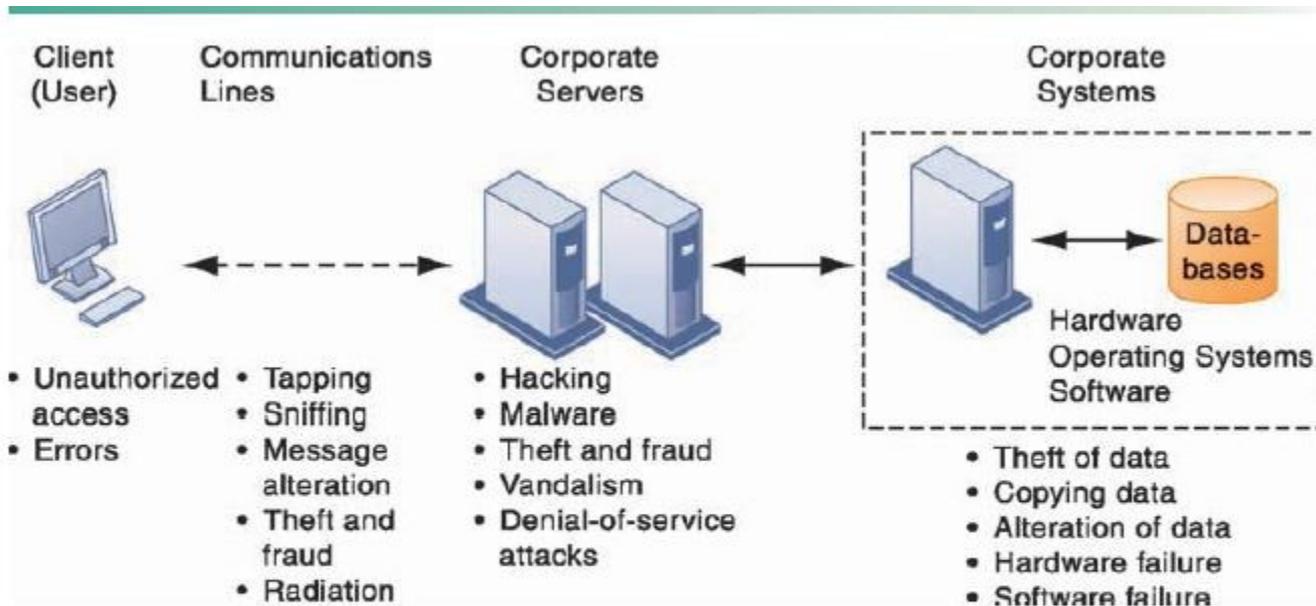
## OPERATIONAL

sales force automation  
Prospect information  
Contact Management  
Micro marketing  
Tele Marketing  
Direct Mail  
POS(Point of Sales)  
Delivery tracking  
Virtual shopping  
Electronic shopping

# UNIT V



# CONTEMPORARY SECURITY CHALLENGES AND VULNERABILITIES



The architecture of a Web-based application typically includes a Web client, a server, and corporate information systems linked to databases. Each of these components presents security challenges and vulnerabilities. Floods, fires, power failures, and other electrical problems can cause disruptions at any point in the network.

## MALICIOUS SOFTWARES

VIRUS

WORMS

TROJAN  
HORSE

SPYWAR  
E

SQL  
INJECTION  
ATTACKS



# EXTERNAL

\*HACKING

\*SPOOFING AND SNIFFING

\*DOS

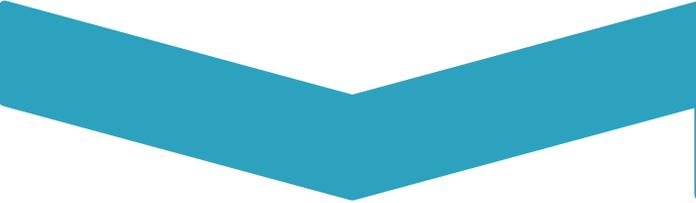
\*IDENTITY THEFT

\*PHISHING

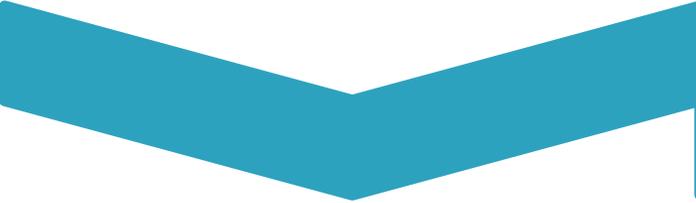
\*PHARMING

\*CLICK FRAUD

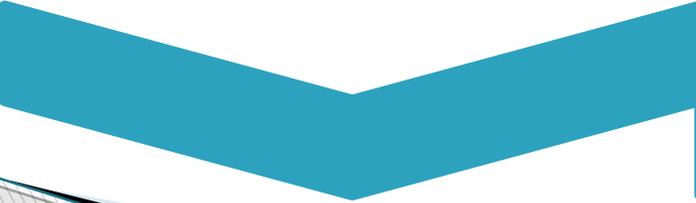
# INTERNAL



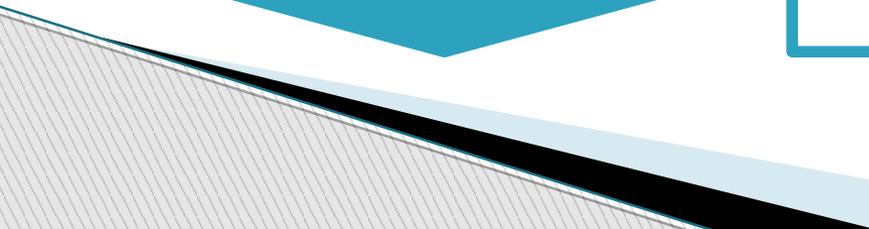
•EMPLOYEES



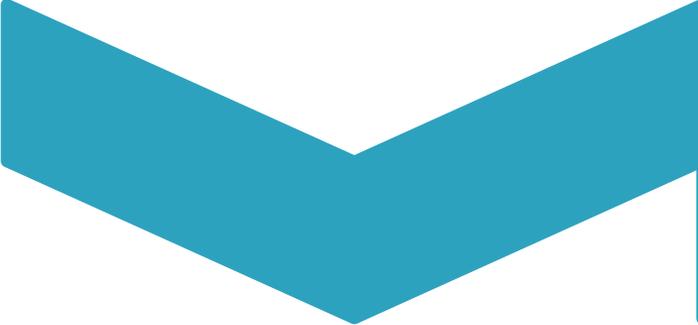
•SOCIAL ENGINEERING



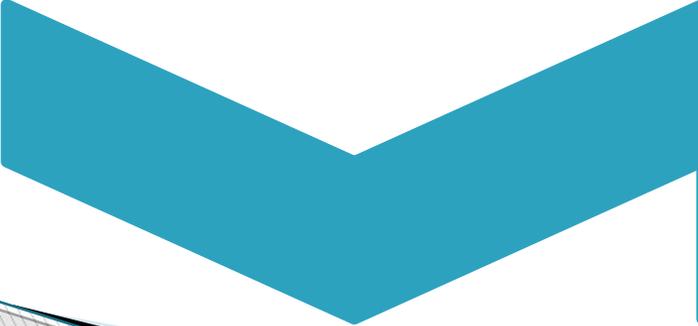
•SOFTWARE VULNERABILITY



# GLOBAL



•CYBERWARFARE



•CYBERTERRPRISM



# INFORMATION SYSTEM SECURITY CONTROL

SECURITY CONTROL

GENERAL CONTROL

APPLICATION CONTROL

# GLOBAL INFORMATION SYSTEM



# IS AUDIT

- ▶ An information system (IS) audit or information technology(IT) audit is an examination of the controls within an entity's Information technology infrastructure.
- ▶ . Regarding the protection of information assets, one purpose of an IS audit is to review and evaluate an organization's information system's availability, confidentiality, and integrity by answering the following questions:
- ▶ Will the organization's computerized systems be available for the business at all times when required? (Availability)
- ▶ Will the information in the systems be disclosed only to authorized users? (Confidentiality)
- ▶ Will the information provided by the system always be accurate, reliable, and timely? (Integrity).

STEPS:

AUDIT PLANNING

RISK ASSESSMENT

PERFORMANCE OF AUDIT

REPORTING