



Management Information Systems



Introduction

- ◆ **Information age**
 - Computers and telecommunications
- ◆ **Information is a fundamental resource**
- ◆ **Development of expertise**
 - Application of modern technology to business



Systems

- ◆ **Data processing systems**
 - Process day-to-day transactions
- ◆ **Informational systems**
 - Use the data from DP systems to create useful information
- ◆ **Example:**
 - Data processing system collects data on items sold via barcode scanner
 - Operational information system examines data to produce order information
 - Management information system analyses sales data to plan marketing campaigns, or adjust prices, etc.



Internal and external information

- ◆ **Internal information**
 - Company operations
- ◆ **External information**
 - Intelligence gathering about competitors' activities
 - Information about population shifts
 - Economic and social factors
 - Government legislation



Information flow

◆ Informal

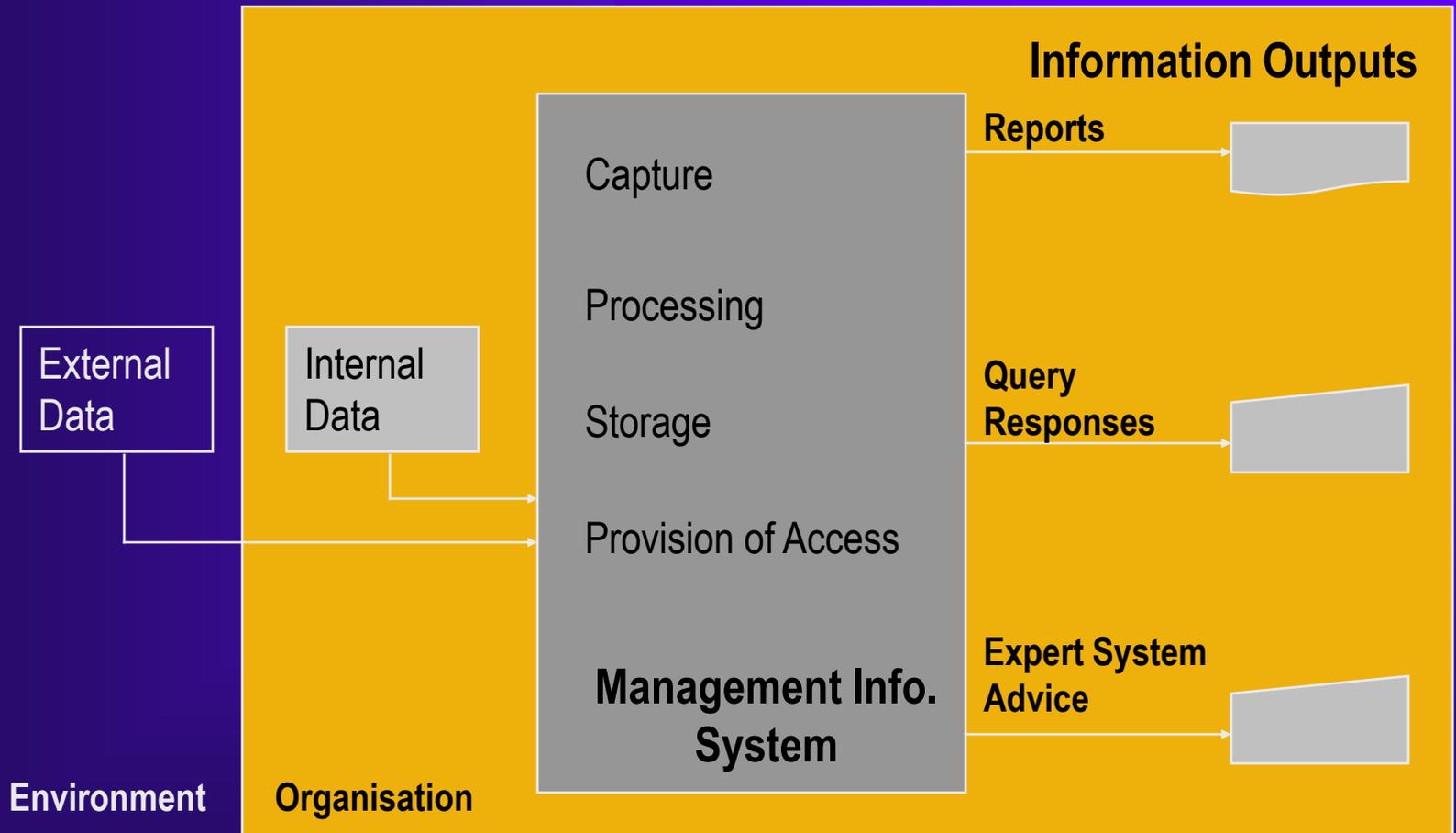
- Conversations - face-to-face and telephone
- Magazines, tv and radio
- Internet

◆ Formal

- Computerised information systems
- Software packages allow cooperative working
- Internal and external e-mail facilities
- Intranets

◆ Information overload

The Management Information System





What managers do

◆ Planning

- the direction a company is to take, whether to diversify, which areas of the world to operate in, how to maximise profit

◆ Organising

- resources such as people, space, equipment and services

◆ Coordinating

- the activities of various departments

◆ Decision-making

- about the organisation, products or services made or sold, the employees, use of I.T.

◆ Controlling

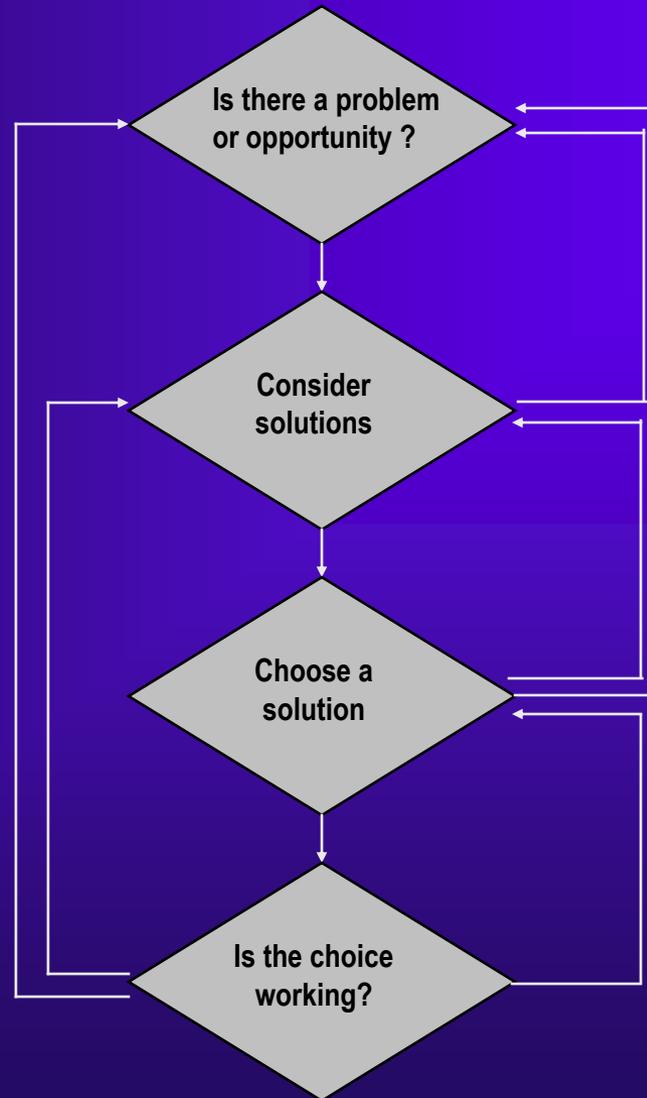
- monitoring and supervising the activities of others



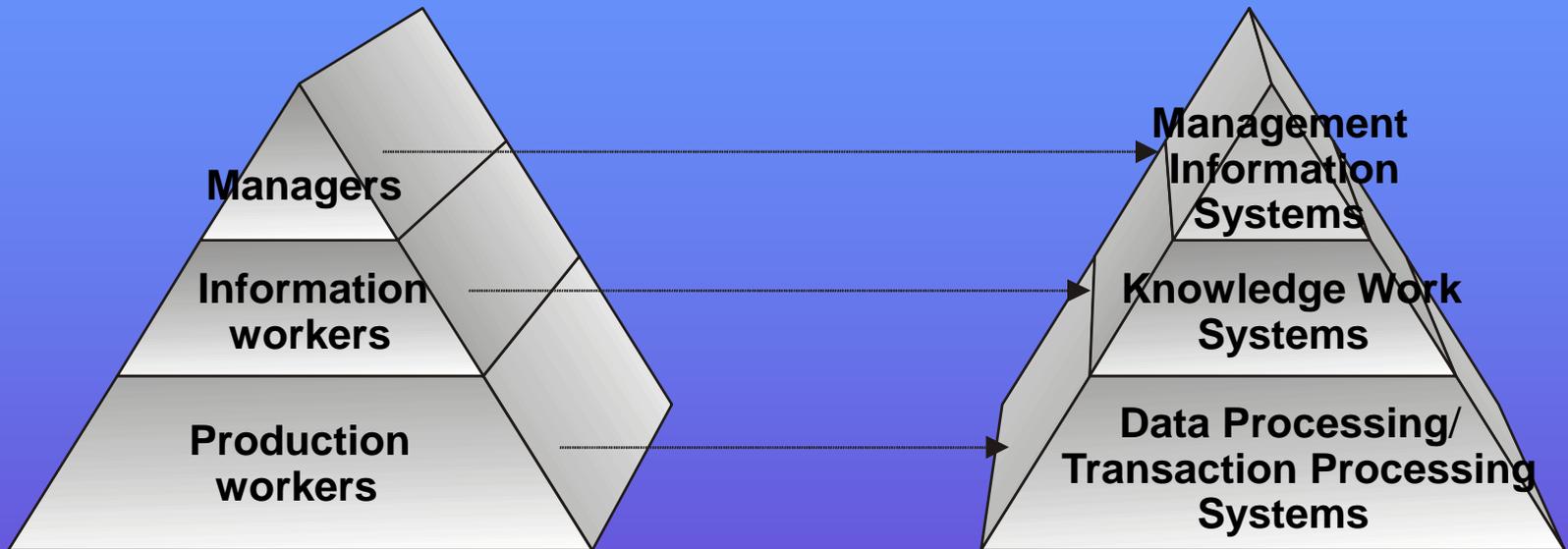
Types of decision

- ◆ Management decisions can be classified into two types – *structured* and *unstructured*.
- ◆ **Structured decisions**
 - are repetitive, routine and involve a definite procedure for handling them.
- ◆ **Unstructured decisions**
 - require judgement, insight and evaluation. They are often important decisions and there is no set procedure for making them.

Stages of decision-making



Information systems



- ◆ Organisations will have many information systems.



Desirable characteristics of a MIS

- ◆ **They are flexible**
 - allowing for many different ways of analysing data and evaluating information
- ◆ **They are capable of supporting a range of skills and knowledge**
- ◆ **They help managers get things done**
 - through interpersonal communication with other members of the organisation
- ◆ **They should not require extensive periods of concentration**
 - because managers are busy people who switch rapidly between different tasks
- ◆ **They should make it easy to interrupt the work and return to it at a later time**
- ◆ **They should protect a manager, as far as possible, from information overload.**



Factors affecting success/failure

- ◆ Inadequate analysis
- ◆ Lack of management involvement in design
- ◆ Emphasis on the computer system
- ◆ Concentration on low-level data processing
- ◆ Lack of knowledge of capability of ICT systems
- ◆ Lack of teamwork
- ◆ Lack of professional standards