Fact Finding Techniques…

Interviews…

How to conduct an *Interview*?

Select Interviewees

- Interview the end users of the information system you are studying.

- A formal organizational chart will help you identify these individuals and their responsibilities.

- Always make an appointment with the interviewee.

- Higher the management level of the interviewees, less time should be spent.

Fact Finding Techniques…

Interviews…

How to conduct an *Interview*?

Prepare for the Interview

Prepare an *interview guide* - checklist of specific questions interviewer will ask the interviewee

Avoid the type of questions such as:

- *Loaded* questions e.g Do you need to include both of these columns for this report?
- *Leading* questions e.g. You are not going to use this operator code, are you?
- *Biased* questions e.g. How many codes do we need for food classification in the inventory file? I think 20 should cover it ?
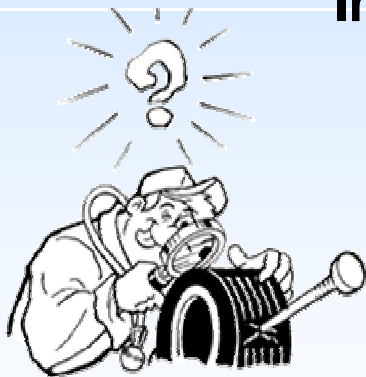
Fact Finding Techniques…

Interviews…

How to conduct an *Interview*?

Prepare for the Interview

Interview question guidelines :

- Use clear and concise language
- Don't include your opinion as part of a question
- Avoid long or complex questions
- Avoid threatening questions
- verify before you leave

The purpose of the interview is to investigate, not to evaluate or criticize

Fact Finding Techniques…

Interviews…

How to conduct an *Interview*?

Conduct the Interview
The actual interview consist of three phases:

Interview Opening : Intended to influence or motivate the interviewee to participate

Interview body : Obtain interviewee's response to your list of questions

Interview conclusion : Express your appreciation. Important for maintaining good relationship and trust.

Fact Finding Techniques…

Prototyping

- Building a small working model of the users' requirements or a proposed design for an information system

- Usually a design technique

- Can also be used to perform fact-finding requirement analysis (discovery prototyping)

- Allows analyst to quickly create mock forms and tables to simulate the implemented system.

Fact Finding Techniques…

Prototyping…

Analyst will develop a model following an initial analysis

A repeat visit may then validate the model with the user

Agreement is reached on the model

Further detailed data may be gathered to elaborate the model

Fact Finding Techniques…

Prototyping…

This iterative approach serves a number of purposes:

- there is always a record of information gathered to date
- ensures correctness of the information as you continually verify the results with the user
- Analyst does not get too far ahead using wrong assumptions

Fact Finding Techniques…

Prototyping…

Advantages

- Allow users and developers to experiment with the software and develop with an understanding

- Helps to determine feasibility and usefulness of the system

- Minimize the time spent for fact-finding and help define more stable requirements.

Fact Finding Techniques…

Prototyping…

Disadvantages

- ✤ Developer may need to be trained in the prototyping approach

- ✤ Prototype can only simulate system functionality and are incomplete in nature.

- ✤ May extend the development schedule

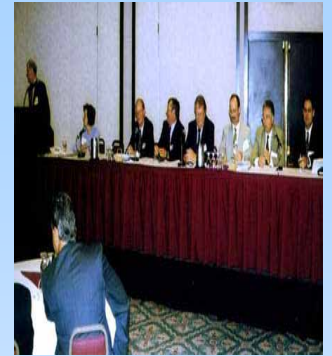- ✤ Increase the development costs

Fact Finding Techniques…

Joint Requirement Planning (JRP)

❑ Highly structured group meeting are conducted to analyze problems and define requirements.

❑ JRP is a subset of a more comprehensive joint application development or JAD technique

Fact Finding Techniques…

Joint Requirement Planning (JRP)

JRP Participants

- **Sponsor**

  Serve as JRP champion. Single person in top management who makes the final decision

- **Facilitator**

  Single individual who plays the role of the leader or facilitator. Someone who has excellent communication skills

Fact Finding Techniques…

Joint Requirement Planning (JRP)…

JRP Participants…

Users and Managers

> Number of participants from the user and management. Both users and managers are relied on to ensure that their critical success factors are being addressed

Scribes

> Those who are keeping responsible for keeping records pertaining to everything discussed in the meeting. System analysts frequently play this role

Fact Finding Techniques…

Joint Requirement Planning (JRP)…
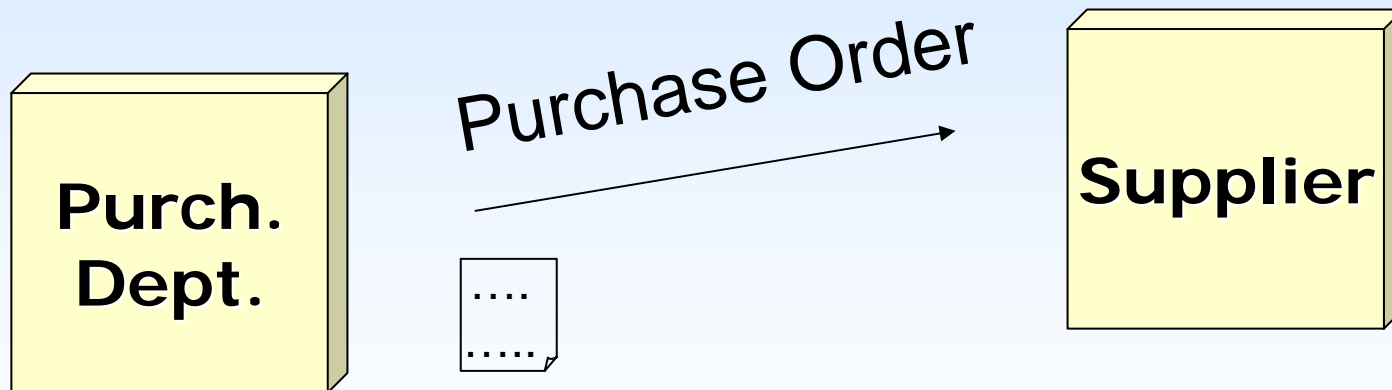
JRP Participants…

IT Staff

   IT personnel who primarily listen and take notes regarding issues and requirements. Usually consists of members of the project team.

Refer page 229-234 Ref1

Fact Finding Techniques…

Document Flow Diagrams

– Used to identify physical movement of documents.

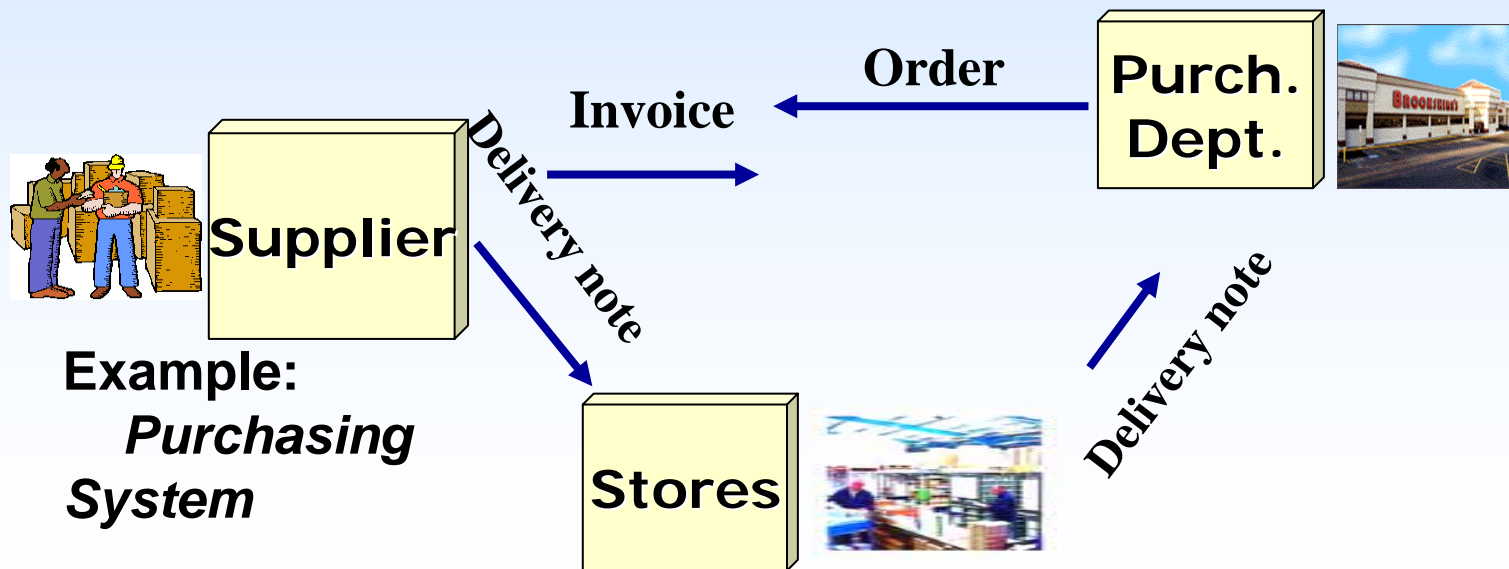# Fact Finding Techniques…

Document Flow Diagrams…

- shows
  - where the document comes from,
  - where it goes to , and
  - what it is called.

Fact Finding Techniques…

Document Flow Diagrams…

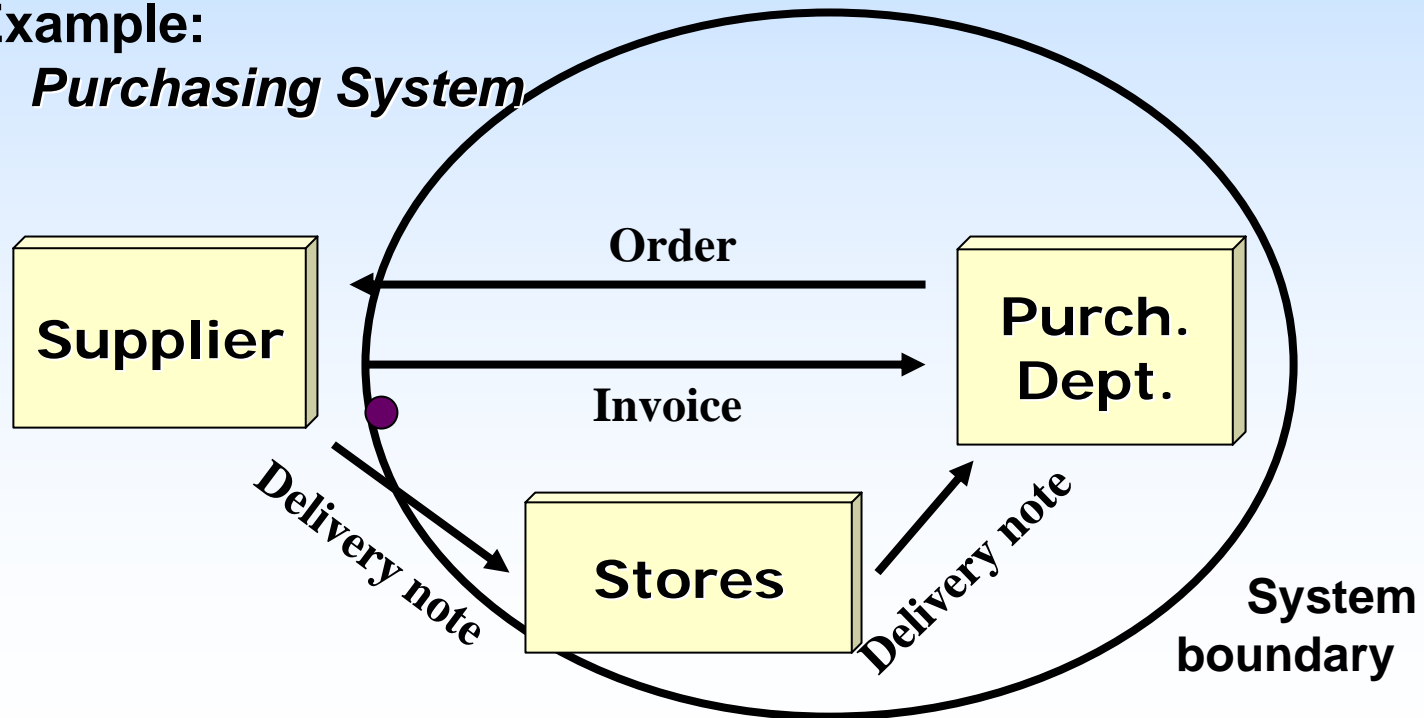Used to examine the flow of documents within the existing system.

Example:
Purchasing System

Fact Finding Techniques…
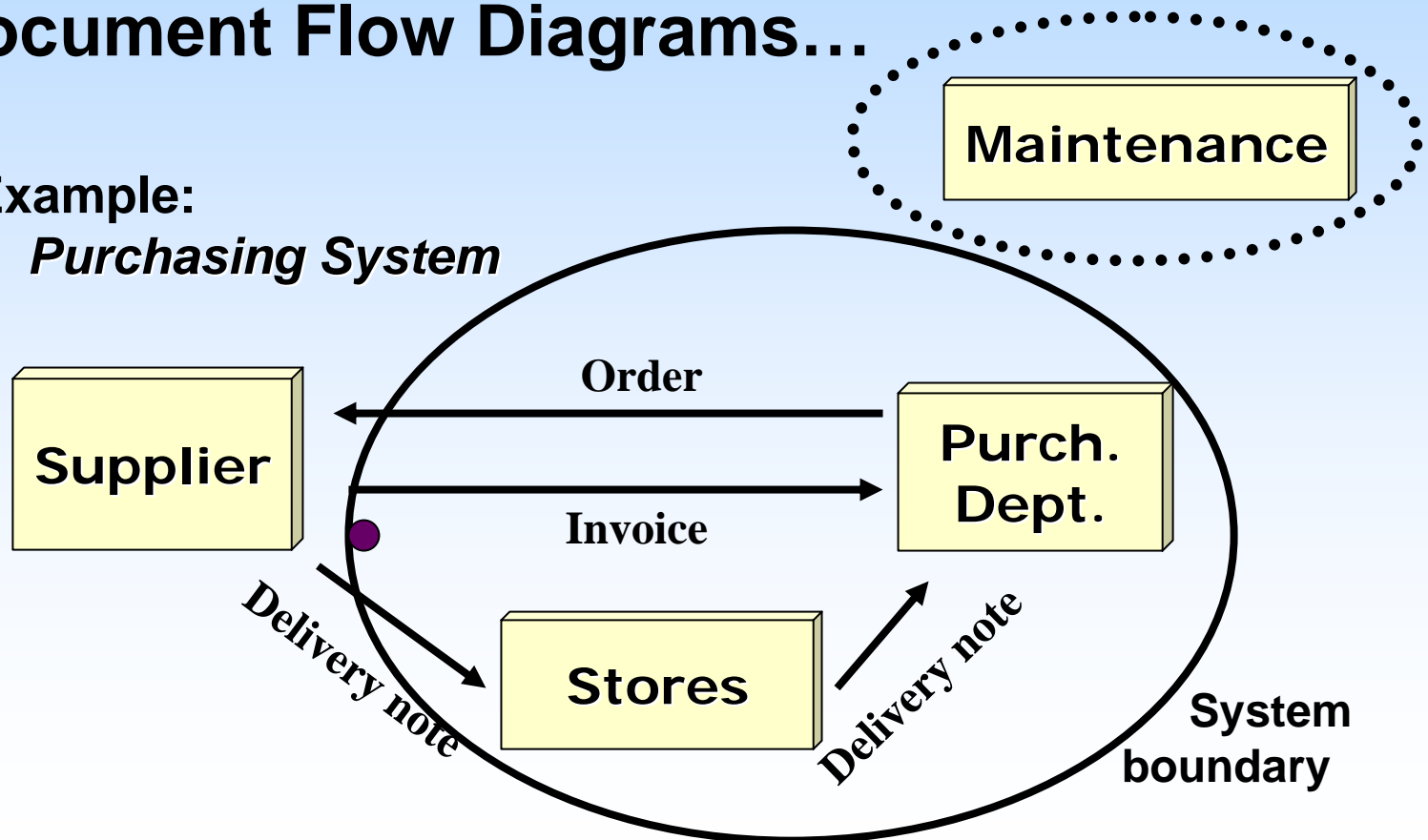
Document Flow Diagrams…

Example:
Purchasing System

Fact Finding Techniques…

Document Flow Diagrams…
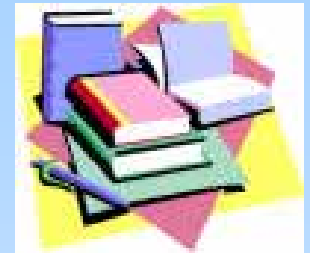
Example:
Purchasing System

Fact Finding Techniques…

Document Flow Diagrams…

Advantages / Usefulness

- **Used to identify the documents in the system**
- **Identify the flow of documents**
- **To understand the workflow of the existing system**
- **Used to define the system boundary**
- **Used to draw Data Flow Diagrams after further analyzing**

Documentation

Documentation is both a communication tool and a management tool.

It is a communication tool :

– because it contains a repository of all work done to date and makes it available to all persons working on related parts of a large project.

– Such a repository can prevent unnecessary repetitions when someone leaves the project team.

– Proper documentation ensures that all the information developed about the system is always available to new people joining the project.

Documentation…

Documentation is also a management tool:

It supports management in two ways:

- **gives access to the latest work to all project personnel and thus reduces the chance of work having to be repeated.**

- **is the only project deliverable, specially in the early project phases, and thus serves to determine project status and progress. Is also a part of the phase output.**

Documentation…

- Requirement Definition Document

    - **A formal document that communicates the requirements of a proposed system to key stakeholders**

    - **Serves as a contract for the systems project**

    - **Final deliverable of the requirements analysis phase**

    - **Also known as requirements statement, requirements specification, and functional specification.**

Documentation…

- Requirement Definition Document

  - **Consists of**
    - **Functions and services the system should provide**
    - **Nonfunctional requirements (system's features, characteristics, and attributes)**
    - **Constraints**
    - **Information about other systems with which the system must interface**

  - **No standard format for the document**

  Refer page 214 Ref1 Figure 6-2 (Sample Requirements Definition Outline)

Documentation…

- Requirement Definition Document

  - Readers of the document

    - **System Owners and Users (to specify their requirements and any changes that may arise)**

    - **Managers (to prepare project plans and estimates)**

    - **Developers (to understand what is required and to develop tests to validate the system)**