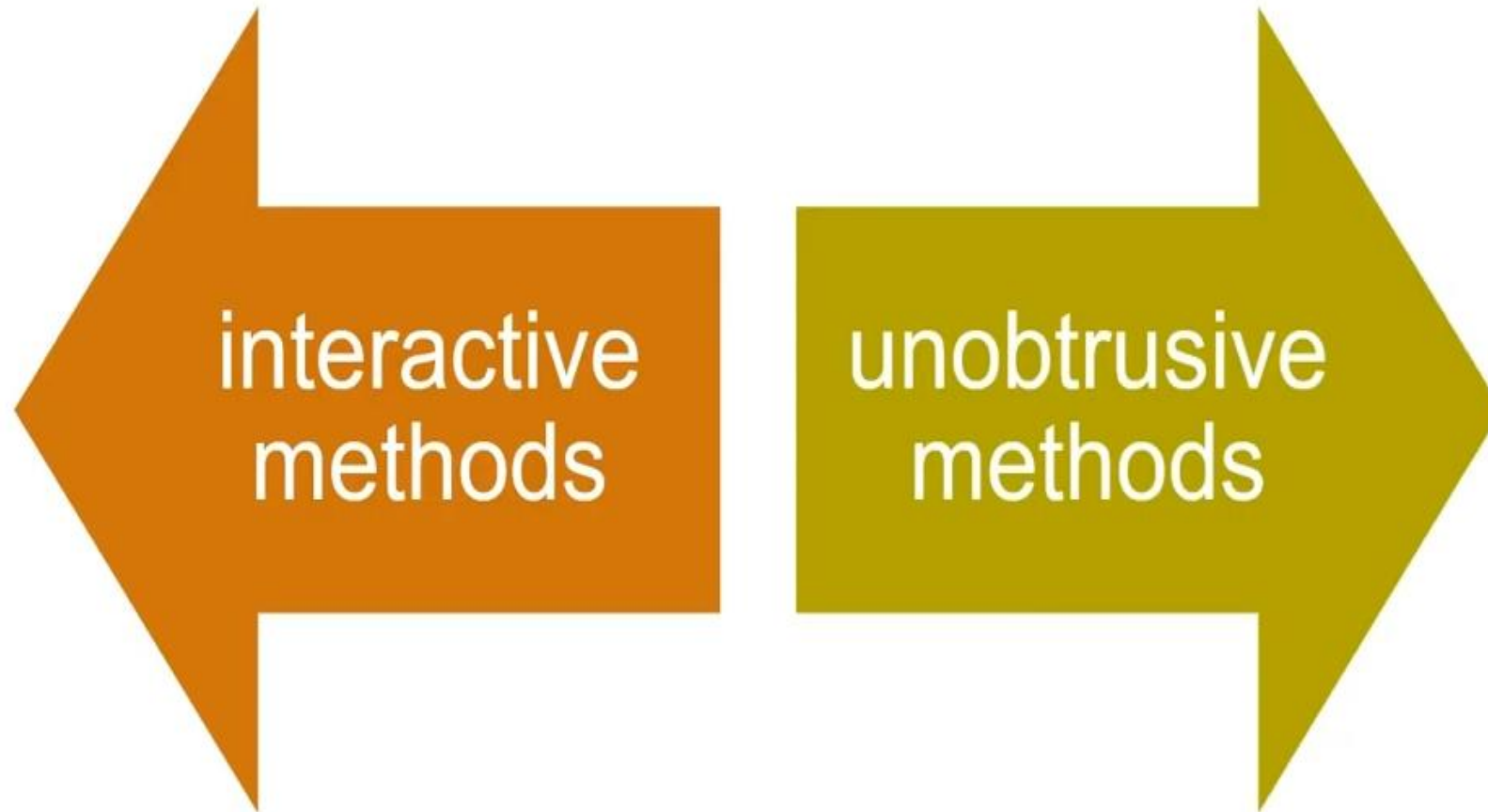




Information Gathering

INTERACTIVE METHODS

Interactive and Unobtrusive methods



Interactive Methods to Elicit Human Information Requirements

Interviewing



Joint Application Design (J A D)



Questionnaires



Major Topics (1 of 2)

Interviewing

User
Stories

Interview
preparation

Question
types

Arranging
questions

The
interview
report

Major Topics (2 of 2)

Joint
Application
Design
(JAD)

Questionnaires

Involvement

Location

Writing
questions

Using scales

Design

Administering

Interviewing

Interviewing is an important method for collecting data on human and system information requirements

Interviews
reveal
information
about:

- Interviewee opinions
- Interviewee feelings
- Goals
- Key **HCI** concerns

Interview Preparation

Reading
background
material

Establishing
interview
objectives

Deciding
whom to
interview

Preparing
the
interviewee

Deciding on
question
types and
structure



Question Types (1 of 2)

Open-ended

Closed



A survey interface titled "SURVEY" with a teal header. The question is "What factors are important for you when you buying a smartphone ?". Below the question are four options, each with a checkbox: "Brand" (checked), "Processor" (unchecked), "Camera" (unchecked), and "Price" (checked). The text "Closed Questions" is displayed in large teal font in the center. At the bottom, there is a teal bar with a back arrow, "11 OF 11", and a forward arrow.

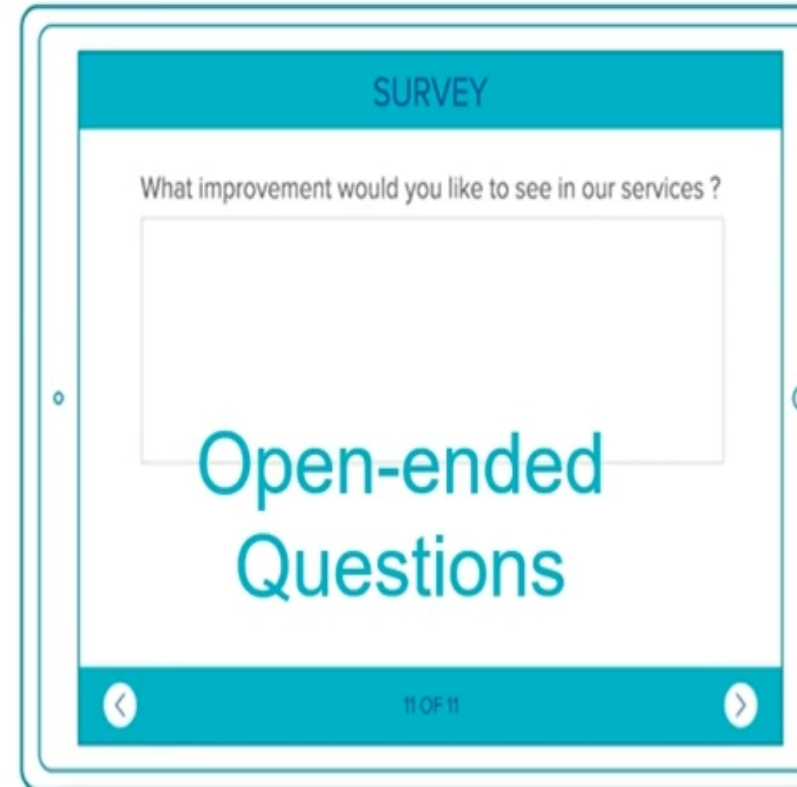
SURVEY

What factors are important for you when you buying a smartphone ?

- ☒ Brand
- ☐ Processor
- ☐ Camera
- ☒ Price

Closed Questions

11 OF 11



A survey interface titled "SURVEY" with a teal header. The question is "What improvement would you like to see in our services ?". Below the question is a large empty text input field. The text "Open-ended Questions" is displayed in large teal font in the center. At the bottom, there is a teal bar with a back arrow, "11 OF 11", and a forward arrow.

SURVEY

What improvement would you like to see in our services ?

Open-ended Questions

11 OF 11

Open-Ended Questions

Open-ended

interview questions allow interviewees to respond how they wish without length or structure limitations

Open-ended

interview questions are appropriate when the analyst is interested in breadth and depth of reply

Figure 4.2

Open-Ended Interview Questions

What's your opinion of the current state of business-to-business ecommerce in your firm?

What are the critical objectives of your department?

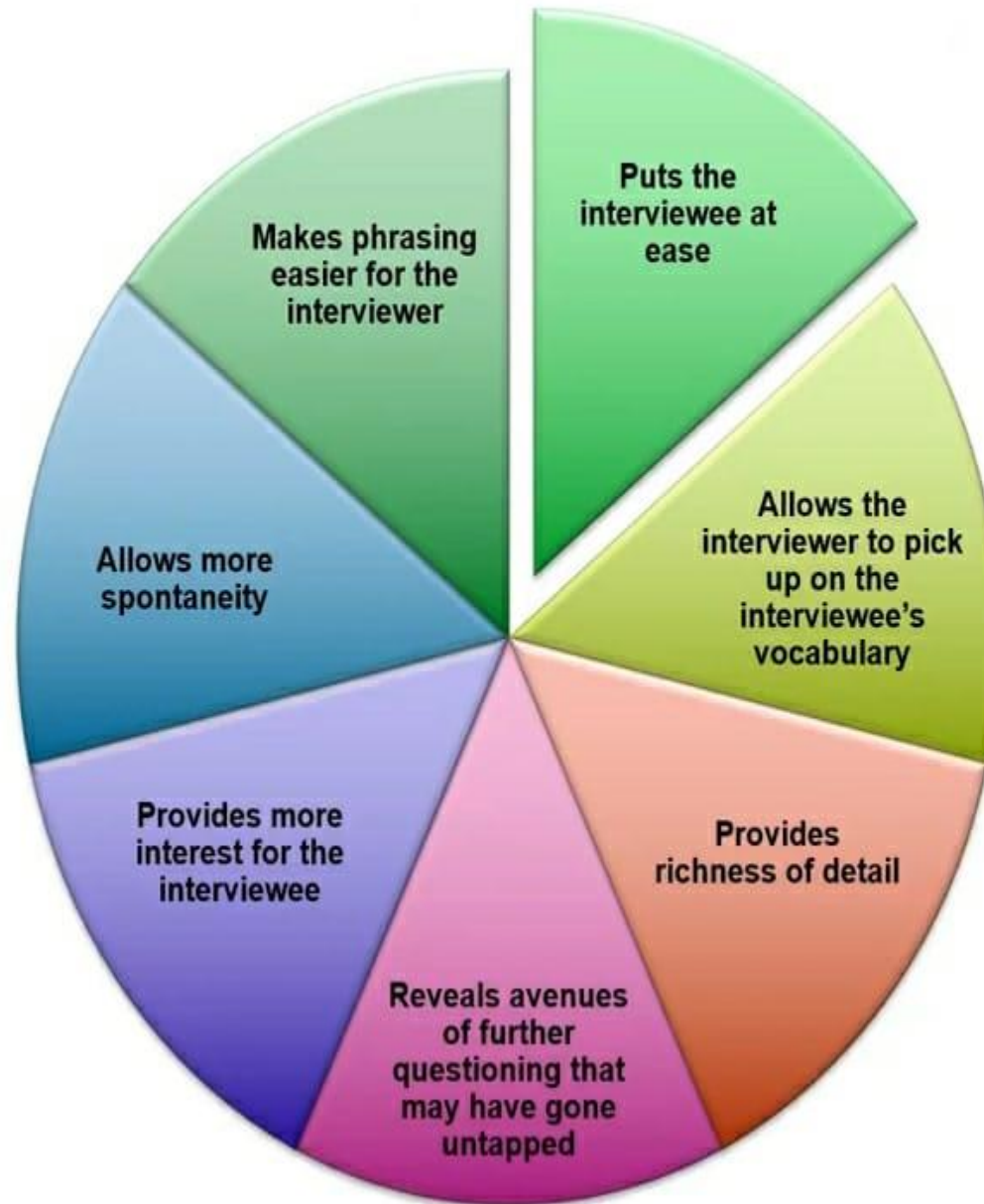
Once the data are submitted via the website, how are they processed?

Describe the monitoring process that is available online.

What are some of the common data entry errors made in this department?

What are the biggest frustrations you've experienced during the transition to ecommerce?

Advantages of Open-Ended Questions



Disadvantages of Open-Ended Questions



Closed Interview Questions



Closed interview questions limit the number of possible responses



Closed interview questions are appropriate for generating precise, reliable data that is easy to analyze



The methodology is efficient, and it requires little skill for interviewers to administer

Closed Interview Questions

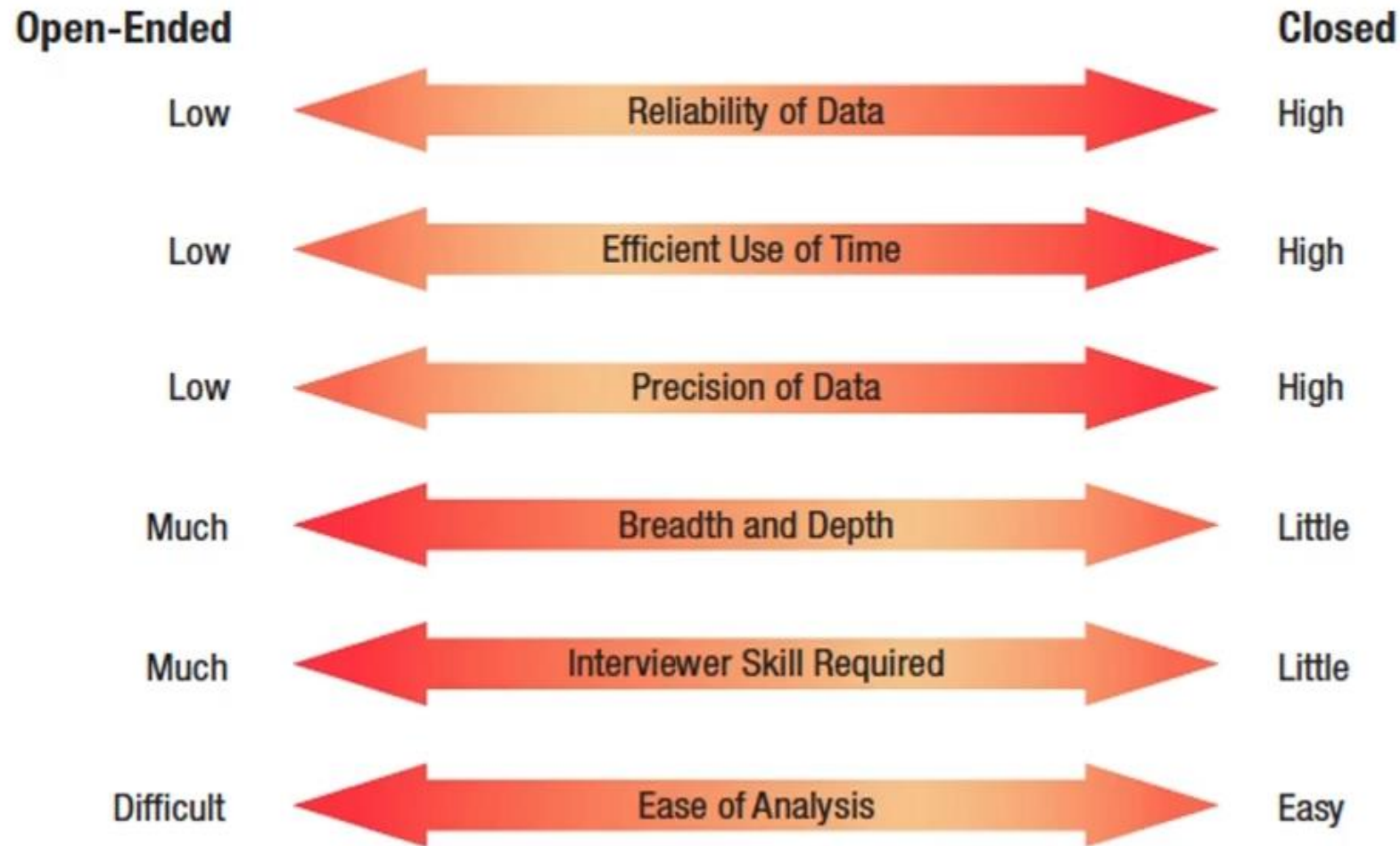
Benefits

- Save interview time
- Easily compare interviews
- Quickly get to the point
- Maintain control of the interview
- Cover a large area quickly
- Obtain relevant data

Disadvantages

- May be boring for the interviewee
- May fail to obtain rich details
- May miss some main ideas
- May fail to build rapport between interviewer and interviewee

Figure 4.5 Attributes of Open-Ended and Closed Questions



Bipolar Questions

Bipolar questions are those that may be answered with a “yes” or “no” or “agree” or “disagree”

Bipolar questions should be used sparingly

A special kind of closed question

What is your preference for the following?

I like
going
for walks

[]

[]

[]

[✓]

[]

I like
watching
a movie

Probes

Probing questions provoke more detail about previous questions

The purpose of probing questions is:

- To get more meaning
- To clarify
- To draw out and expand on the interviewee's point

May be either open-ended or closed

Arranging Questions

Pyramid

Starting with closed questions and working toward open-ended questions

Funnel

Starting with open-ended questions and working toward closed questions

Diamond

Starting with closed, moving toward open-ended, and ending with closed questions

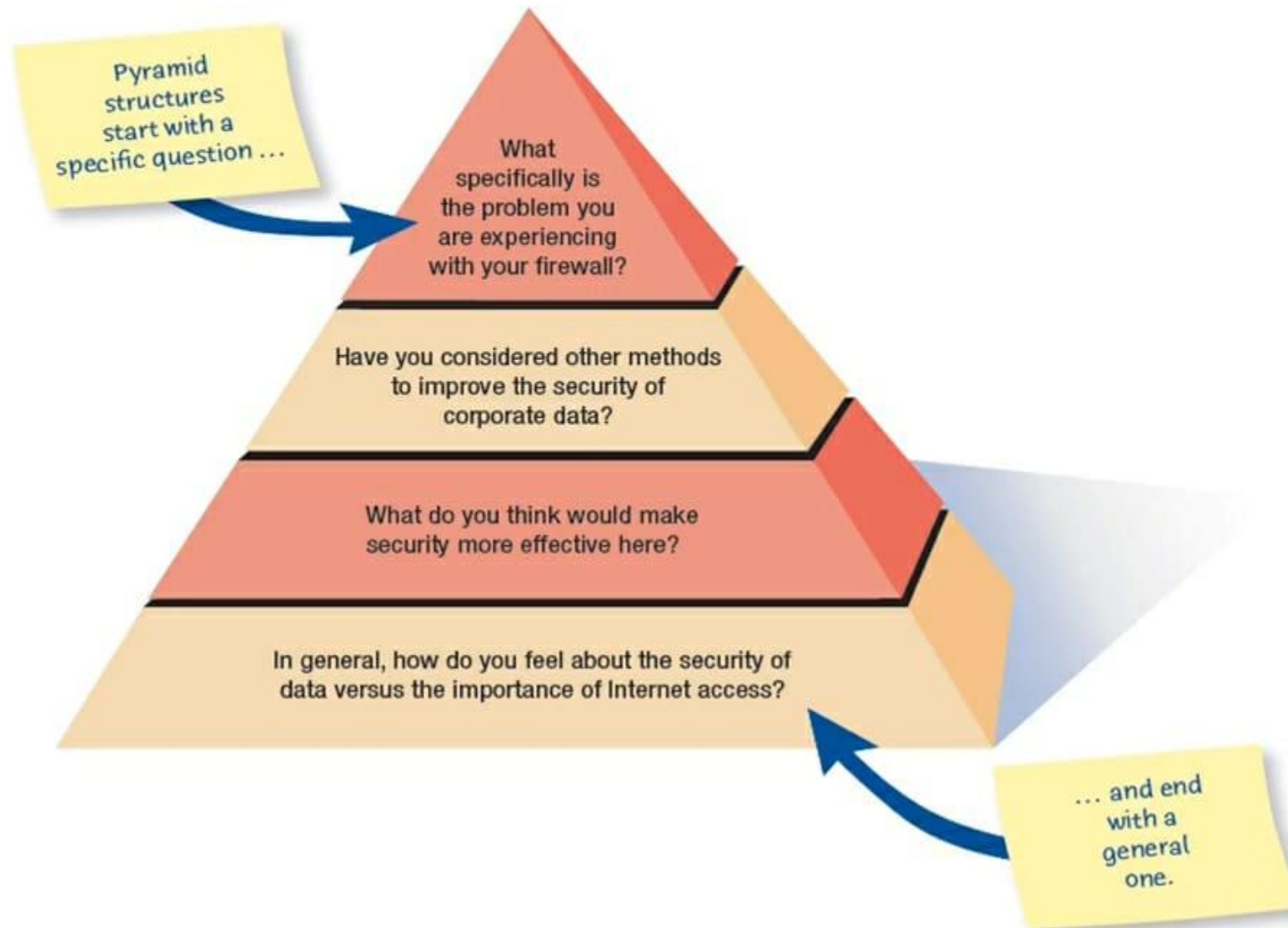
Pyramid Structure

Begins with very detailed, often closed questions

Expands by allowing open-ended questions and more generalized responses

Is useful if interviewees need to be warmed up to the topic or seem reluctant to address the topic

Figure 4.7 Pyramid Structure for Interviewing Goes from Specific to General Questions



Funnel Structure

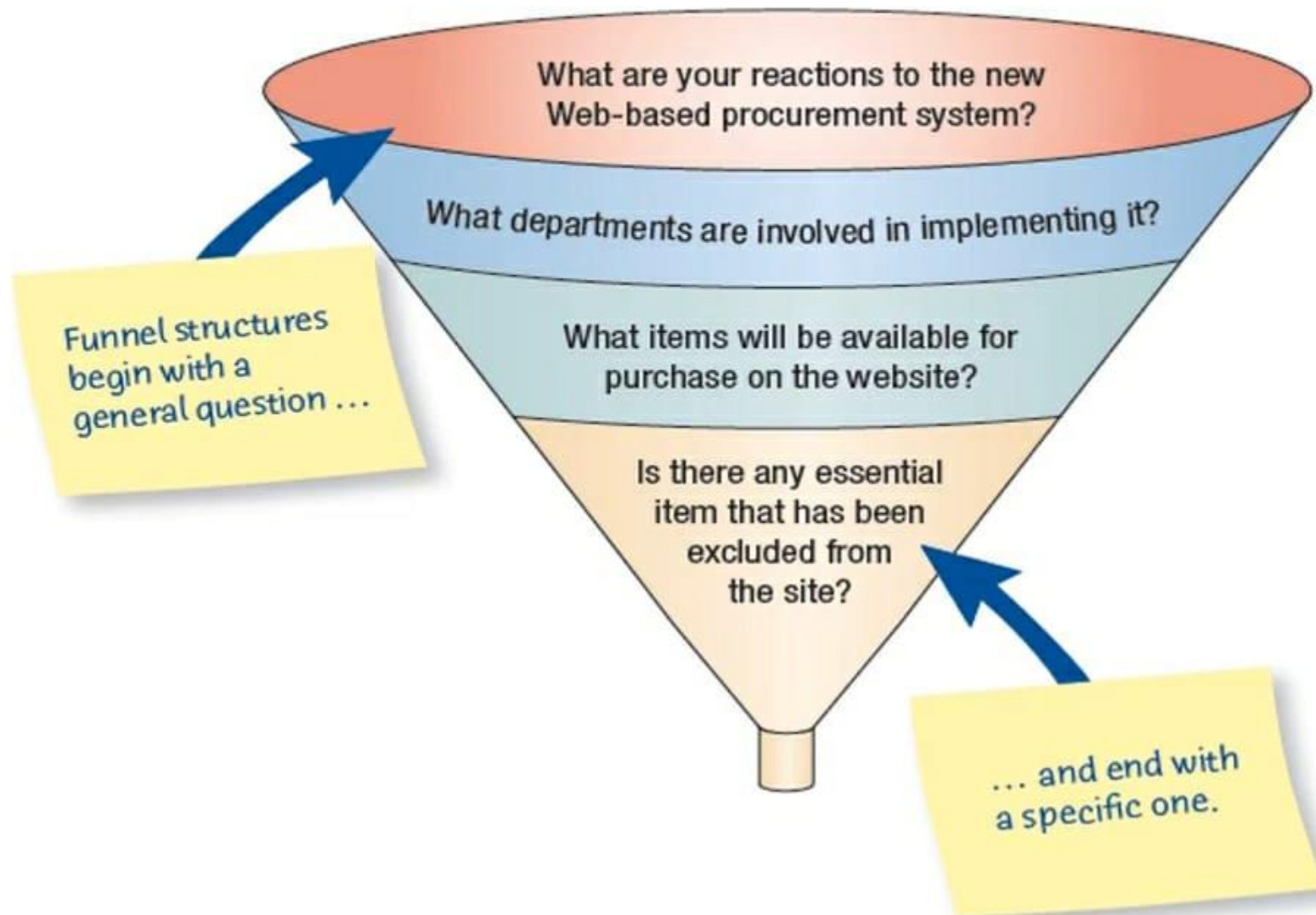
Begins with generalized, open-ended questions

Concludes by narrowing the possible responses using closed questions

Provides an easy, nonthreatening way to begin an interview

Is useful when the interviewee feels emotionally about the topic

Figure 4.8 Funnel Structure for Interviewing Begins with Broad Questions Then Funnels to Specific Questions



Diamond Structure

A diamond-shaped structure begins in a very specific way

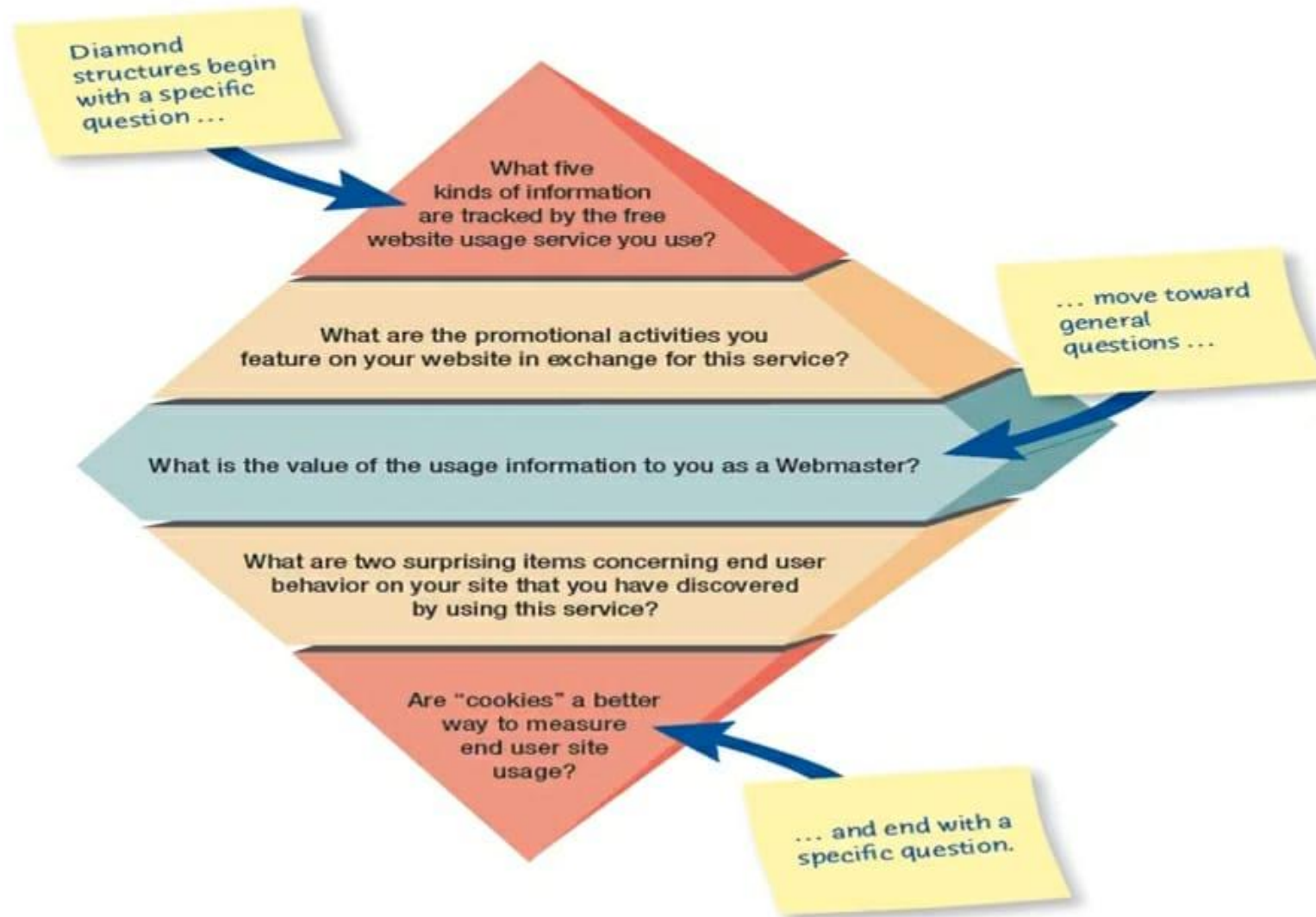
Then more general issues are examined

Concludes with specific questions

Combines the strength of both the pyramid and funnel structures

Takes longer than the other structures

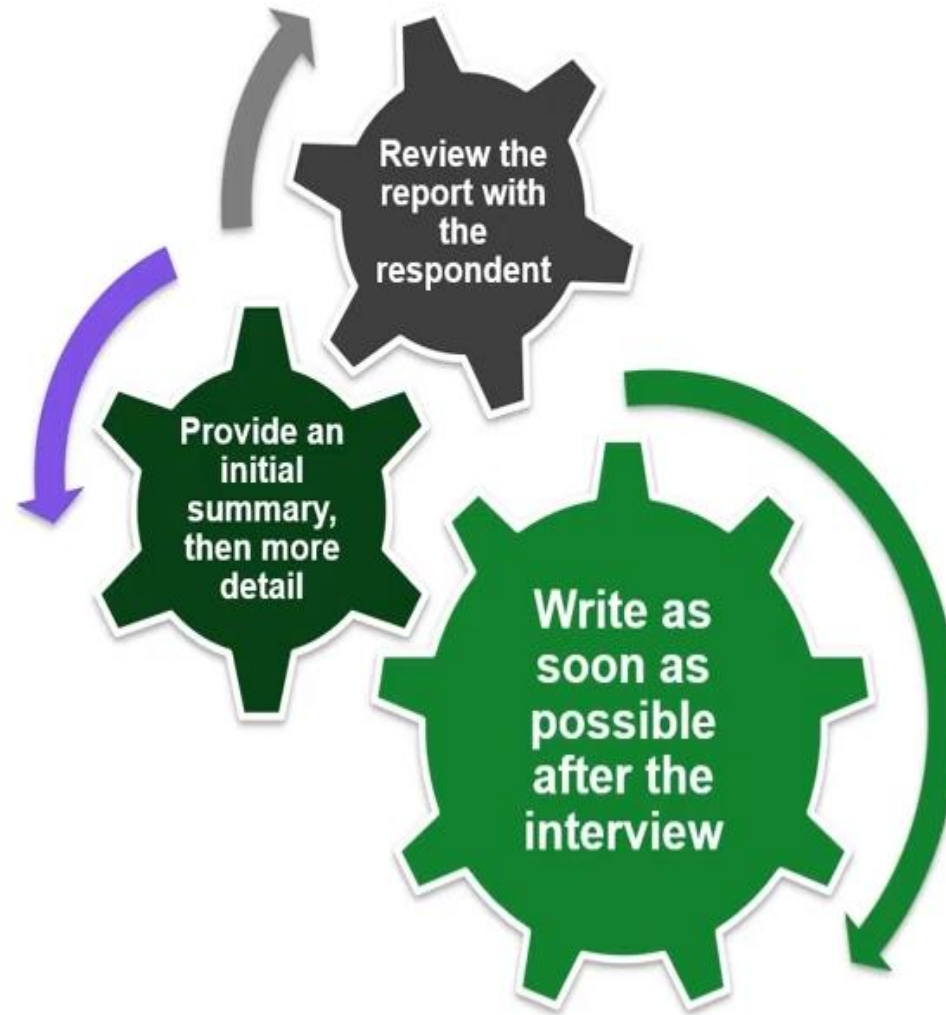
Figure 4.9 Diamond-Shaped Structure for Interviewing
Combines the Pyramid and Funnel Structures



Closing the Interview



Interview Report



Stories

Stories originate in the workplace

Organizational stories are used to relay some kind of information

When a story is told and retold over time it takes on a mythic quality

Isolated stories are good when you are looking for facts

Enduring stories capture all aspects of the organization and are the ones a systems analyst should look be seeking



Listening to Stories

Listening to stories is not efficient

It takes considerably more time than asking interview questions

Listening to stories may be more rewarding

Stories are more easily remembered than interview responses

Business Stories



Stories and the Organization

Engage organization participants by reacting to stories

Match one story to another by recounting it to other participants, and collaborating with the stories

It is a way to deeply understand some of the problems associated with information systems

Joint Application Design (JAD)

JAD is a technique that allows the analyst to accomplish requirements analysis and design the user interface with the users in a group setting

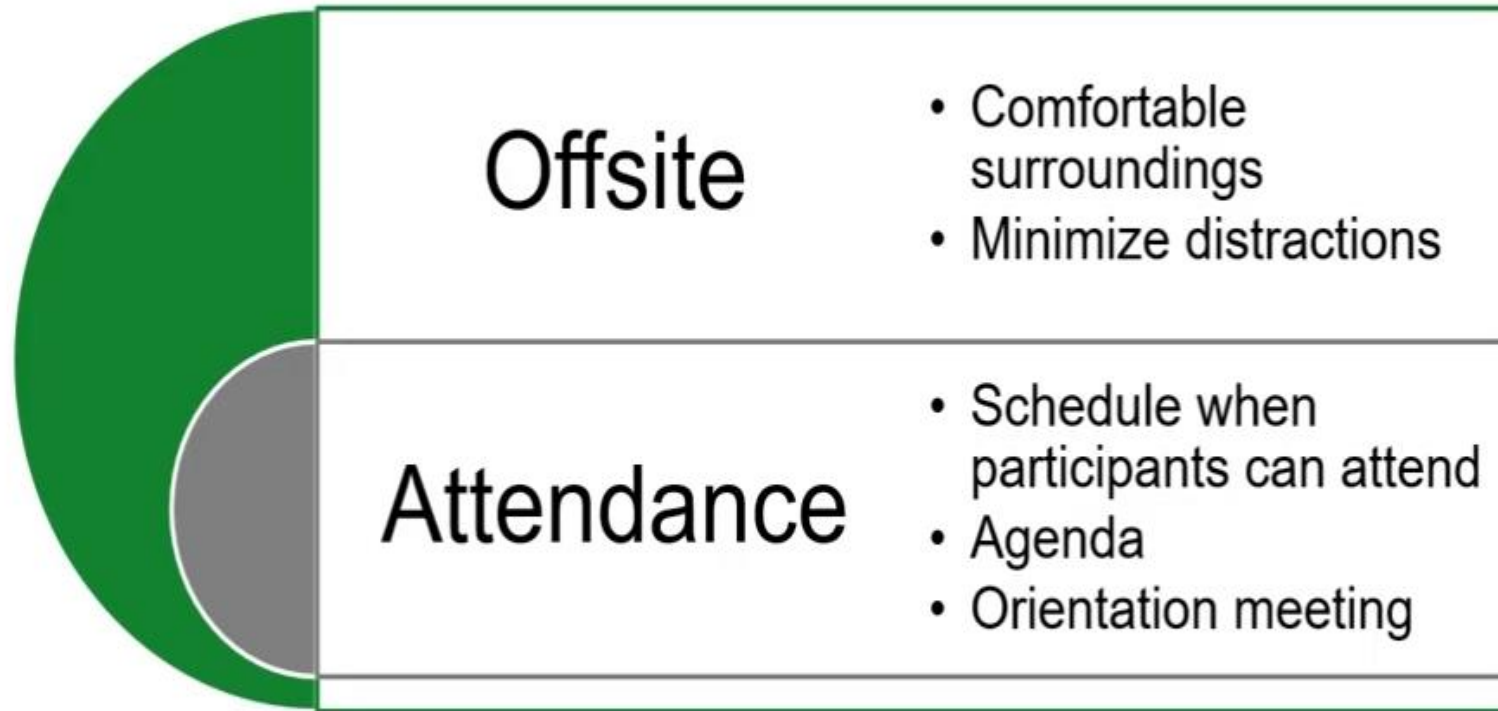
Joint Application Design (J A D) can replace a series of interviews with the user community

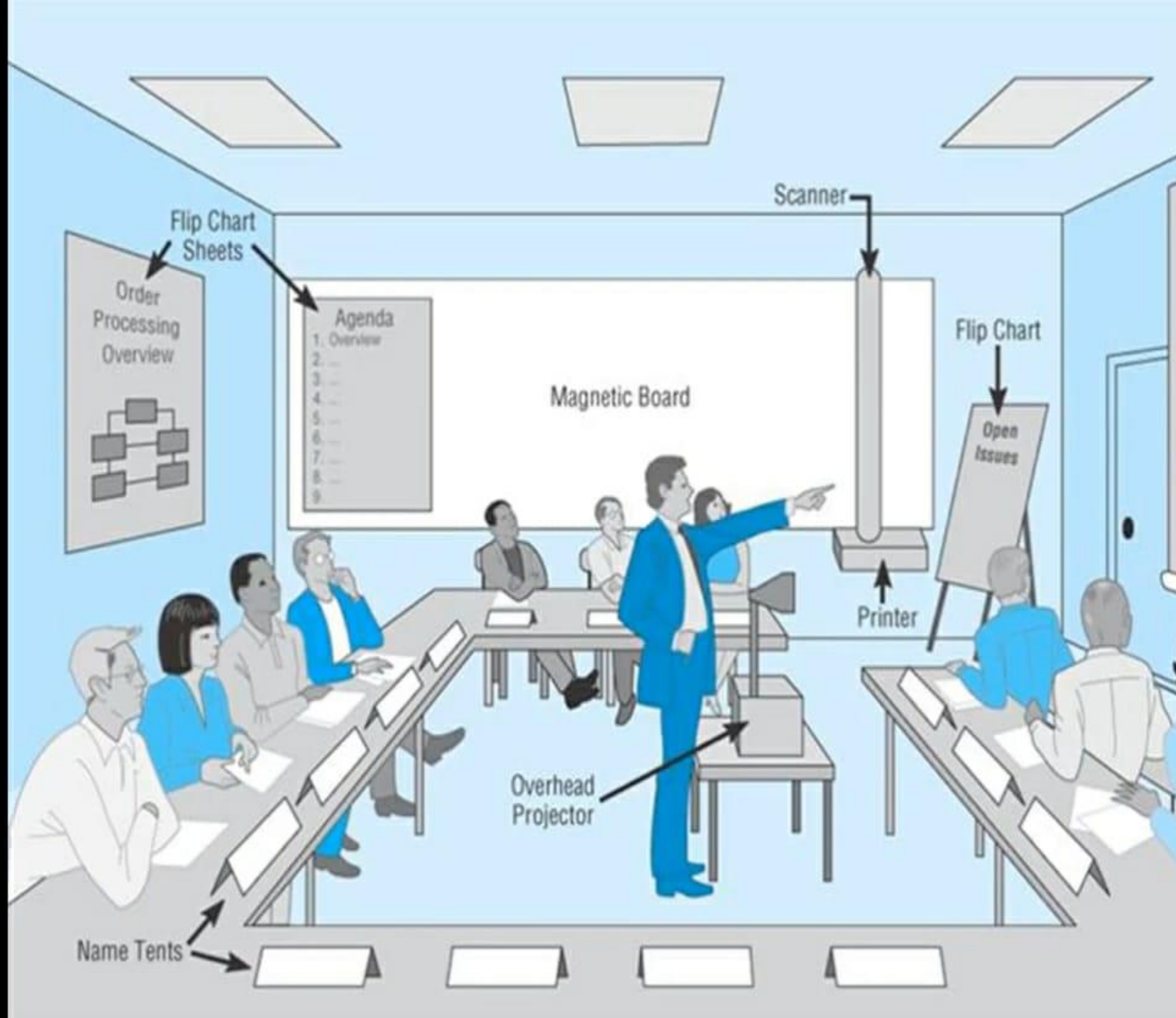


Who is Involved



Where to Hold JAD Meetings



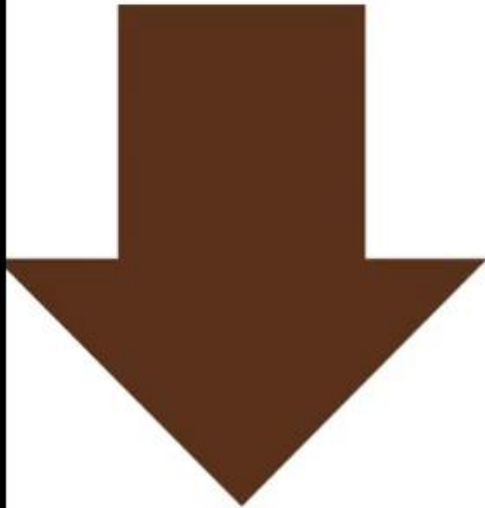


Benefits and Drawbacks of J A D



Benefits of JAD

- Time is saved, compared with traditional interviewing
- Rapid development of systems
- Improved user ownership of the system
- Creative idea production is improved



Drawbacks of Using JAD

- JAD requires a large block of time to be available for all session participants
- If preparation or the follow-up report is incomplete, the session may not be successful
- The organizational skills and culture may not be conducive to a JAD session

Questionnaires



Questionnaires are useful in gathering information from key organization members about:

- Attitudes
- Beliefs
- Behaviors
- Characteristics

Planning for the Use of Questionnaires

Organization members are widely dispersed

Many members are involved with the project

Exploratory work is needed

Problem solving prior to interviews is necessary

Question Types

Questions are designed as either:

Open-
ended

- Try to anticipate the response you will get
- Well suited for getting opinions

Closed

- Use when all the options may be listed
- When the options are mutually exclusive

Electronically Submitting Questionnaires

Reduced costs

Collecting and storing the results electronically



THANK

YOU