

# Data Science Joint Education Program

## INFO 200 Information Systems Analysis

### Chapter #4

# Information Gathering: Interactive Methods

# Keywords and Phrases

<b>bipolar closed questions</b>	<b>Joint Application Design (JAD)</b>
<b>central tendency</b>	<b>leniency</b>
<b>closed questions</b>	<b>nominal scale</b>
<b>diamond shaped questions</b>	<b>open-ended questions</b>
<b>funnel structure</b>	<b>probes</b>
<b>halo effect</b>	<b>pyramid structure</b>
<b>human-computer interaction (HCI)</b>	<b>questionnaire</b>
<b>information procedures</b>	<b>reliability</b>
<b>interval scale (Likert scale)</b>	<b>stories</b>
<b>interviewee feelings</b>	<b>survey respondents</b>
<b>interviewee goals</b>	<b>validity</b>
<b>interviewee opinions</b>	<b>interview types (structured / semi-structured / unstructured)</b>

# Interactive Methods to Elicit Human Information Requirements

- The acquisition of information from people working in an organisation can use two methods (research methods):
  - *Interactive* methods
  - *Unobtrusive* methods
- Chapter #3 introduces *interactive* methods
- Chapter #4 introduces *unobtrusive* methods
- Interactive methods are:
  - Interviewing
  - Joint Application Design (JAD)
  - Questionnaires

# Overview

- Chapter #4 provides an understanding of how to:
  - Recognize the value of using interactive methods for information gathering
  - Construct interview questions to elicit human information requirements and structure them in a way that is meaningful to users
  - Understand the purpose of listening to user stories and why they are useful in systems analysis
  - Understand the concept of JAD and when to use it
  - Write effective questions to survey users about their work
  - Design and administer effective questionnaires

# Major Topics Introduced

- Interviewing

- Interview preparation
  - Self preparation
  - Respondent preparation
- Question types
- Arranging questions
- The interview report

- User Stories

- Joint Application Design (JAD)

- Involvement
- Location

- Questionnaires

- Writing questions
- Using scales
- Design
- Administering

# Interviewing

# Interview Preparation



# Interviewing

- Interviewing is an important method for collecting data on human and system information requirements
- Interviews reveal information about:
  - Interviewee opinions and feelings
  - Interviewee goals
  - Key HCI concerns of the interviewee
- Interviewers:
  - Must be unbiased and avoid personal biases (preparation)
  - Will be setting up a relationship (probably with a stranger)

# Preparing for an Interview

- Interviewing will involve many interviewees (respondents) in (potentially) multiple sessions
- There are five steps in interview preparation which must include (see Figure 4.1):
  - Reading background material
  - Establishing interview objectives
  - Deciding whom to interview
  - Preparing the interviewee
  - Deciding on question types and structure

# Interview Planning

## Steps in Planning the Interview

1. Read background material.
2. Establish interviewing objectives.
3. Decide whom to interview.
4. Prepare the interviewee.
5. Decide on question types and structure.

### FIGURE 4.1

Steps a systems analyst follows in planning an interview.

# Question Types

# Interviews

- In traditional research methods there are three general types of interview and the related question types and preparation for the interview:
  - *Structured* interviews
  - *Semi-structured* interviews
  - *Unstructured* interviews
- In this chapter reference is made to:
  - Open-ended interview questions
  - Closed interview questions
  - Probing questions (omitted from the latest edition of the book)
- There is a broad correlation between the two question types and the three interview types:
  - The types of interview are generally used in different research fields

# Interview Question Types

- There are essentially four types of interview question:
  - Open-ended questions
  - Closed questions
  - Bi-polar questions
  - Probing questions
    - Including follow-up questions
    - Questions asked at a second interview

# Interview Question Types

- Open-ended questions:
  - Allow interviewees to respond how they wish, and to what length they wish
  - Are appropriate when the analyst is interested in breadth and depth of reply
- Closed questions:
  - Limit the number of possible responses
  - Are appropriate for generating precise, reliable data that is easy to analyze
  - The methodology is efficient as it requires little skill for interviewers to administer
- Probing questions elicit 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

# Open-Ended Interview Questions

## 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?

**FIGURE 4.2**

Open-ended interview questions allow the respondent open options for responding. These examples were selected from different interviews and are not shown in any particular order.



# Advantages of Open-Ended Questions

- Open-ended questions may be viewed in terms of a conversation between the interviewer and the interviewee:
- This approach has a number of advantages in eliciting information which include:
  - The interviewee will be more relaxed and can be put at ease
  - It allows the interviewer to pick up on the interviewee's vocabulary
  - It provides richness of detail
  - It reveals avenues of further questioning that may have gone untapped
  - It provides more interest for the interviewee
  - It allows more spontaneity
  - It makes phrasing easier for the interviewer
  - It is useful if the interviewer is unprepared

# Disadvantages of Open-Ended Questions (1)

- While open-ended interview questions have many advantages there are also disadvantages which include:
  - Too much irrelevant detail
  - Possibly losing control of the interview
  - May take too much time for the amount of useful information gained
  - Potentially seeming that the interviewer is unprepared
  - Possibly giving the impression that the interviewer is on a “fishing expedition”

# Disadvantages of Open-Ended Questions (2)

- Additionally disadvantages are:
  - The interview questions and responses must be recorded
  - Such recording may be use digital recording or documented using extraneous notes
- There are issues with both approaches:
  - The identification of important facts I potentially difficult
  - There are issues (and benefits) in transcribing (converting) the extraneous notes into a text document (e.g., the proposal report)
  - Analysis may be *quantitative* or *qualitative* – quantitative analysis is difficult
  - Analysis of the information collected is more difficult

# Closed Interview Questions

## Closed Interview Questions

- How many times a week is the project repository updated?
- On average, how many calls does the call center receive monthly?
- Which of the following sources of information is most valuable to you?
  - Completed customer complaint forms
  - Email complaints from consumers who visit the website
  - Face-to-face interaction with customers
  - Returned merchandise
- List your top two priorities for improving the technology infrastructure.
- Who receives this input?

## FIGURE 4.3

Closed interview questions limit the respondent's options. These examples were selected from different interviews and are not shown in any particular order.

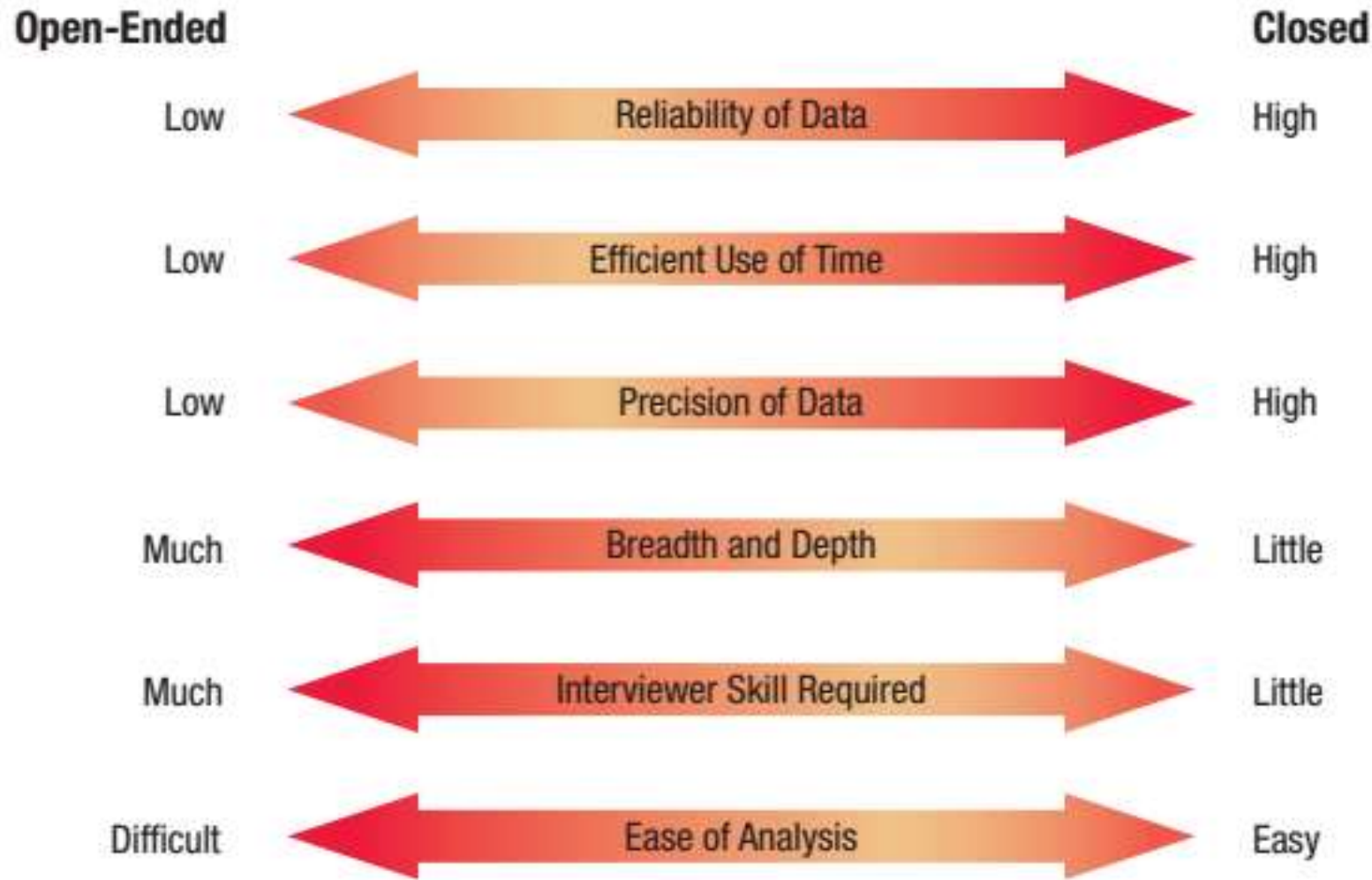
# Benefits of Closed Interview Questions

- The use of closed questions is a similar approach the structured interviews
- The benefits of closed questions include:
  - Saving the time taken for the interview
  - Interviews are more easily compared
  - There is more focus and getting to the point
  - The interviewer can keep better control of the interview
  - Can cover a large area quickly
  - Improves the relevance of the data gathered
- Additionally:
  - Data collection is easier
  - Analysis (*quantitative*) is simpler and potentially more accurate

# Disadvantages of Closed Interview Questions

- While there are benefits for closed interview questions there are also disadvantages including:
  - Closed questions are potentially boring for the interviewee
  - The level of richness in the information elicitation is potentially reduced
  - The main objectives (ideas) may be missed
  - There may be a reduced rapport between interviewer and interviewee

# Attributes of Open-Ended and Closed Questions



**FIGURE 4.5**

Attributes of open-ended and closed questions.

# Bipolar Questions

- Bipolar questions:
  - Are special kinds of closed question
  - Are questions which may be answered with:
    - Yes
    - No
    - Disagree
- The use of bipolar questions:
  - Should be restricted as:
    - Many factors are not “black or white
    - Most factors may be measured over a spectrum in terms of “shades of grey”



# Bi-Polar Interview Questions

## Bipolar Interview Questions

- Do you use the Web to provide information to vendors?
- Do you agree or disagree that ecommerce on the Web lacks security?
- Do you want to receive a printout of your account status every month?
- Does your website maintain a FAQ page for employees with payroll questions?
- Is this form complete?

### FIGURE 4.4

Bipolar interview questions are a special kind of closed question. These examples were selected from different interviews and are not shown in any particular order.

# Probe Questions

- Probe (probing) questions:
  - Are essentially used in follow-up interviews
  - Probes may be either *open-ended* or *closed* questions
- Probing questions may ask (see Figure 4.6 for examples):
  - Why? (the strongest for of the question)
  - Ask for examples?
  - Elaborate? (provide further details or examples)
- The purpose of probing questions is:
  - to go beyond the initial answer to get more meaning
  - To clarify answers (to draw out and expand on the interviewee's point)

# Probe Question Examples

## Probes

- Why?
- Give an example of how ecommerce has been integrated into your business processes.
- Please give an illustration of the security problems you are experiencing with your online bill payment system.
- You mentioned both an intranet and an extranet solution. Please give an example of how you think each differs.
- What makes you feel that way?
- Tell me step by step what happens after a customer clicks the “Submit” button on the Web registration form.

## FIGURE 4.6

Probes allow a systems analyst to follow up on questions to get more detailed responses. These examples were selected from different interviews and are not shown in any particular order.

# Question Type Considerations

- Questions are designed as either
- The selection of the type of question will consider a number of factors:
  - Open-ended questions
    - Try to anticipate the response
    - Well suited for getting opinions
  - Closed question
    - Use when all the options may be listed
    - When the options are mutually exclusive

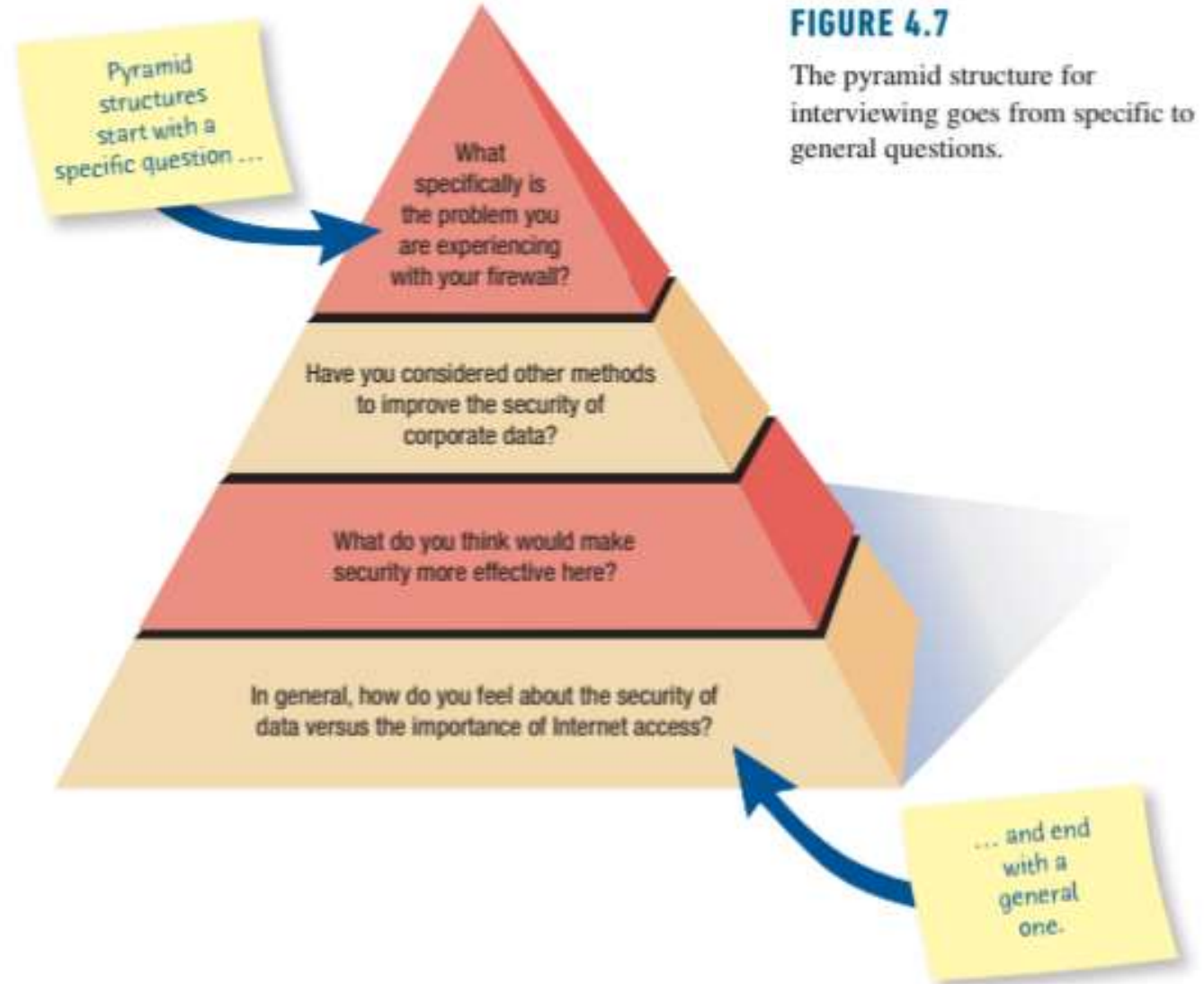
# Arranging Questions in a Logical Structure

# Arranging Questions

- Arranging questions in a Logical Structure may be achieved using the following methods:
  - A *pyramid* structure (see Figure 4.7)
    - Starting with closed questions and working toward open-ended questions
  - A *funnel* structure (see Figure 4.8)
    - Starting with open-ended questions and working toward closed questions
  - A *diamond* shaped structure (see Figure 4.9)
    - Starting with closed, moving toward open-ended, and ending with closed questions

# Pyramid Structure

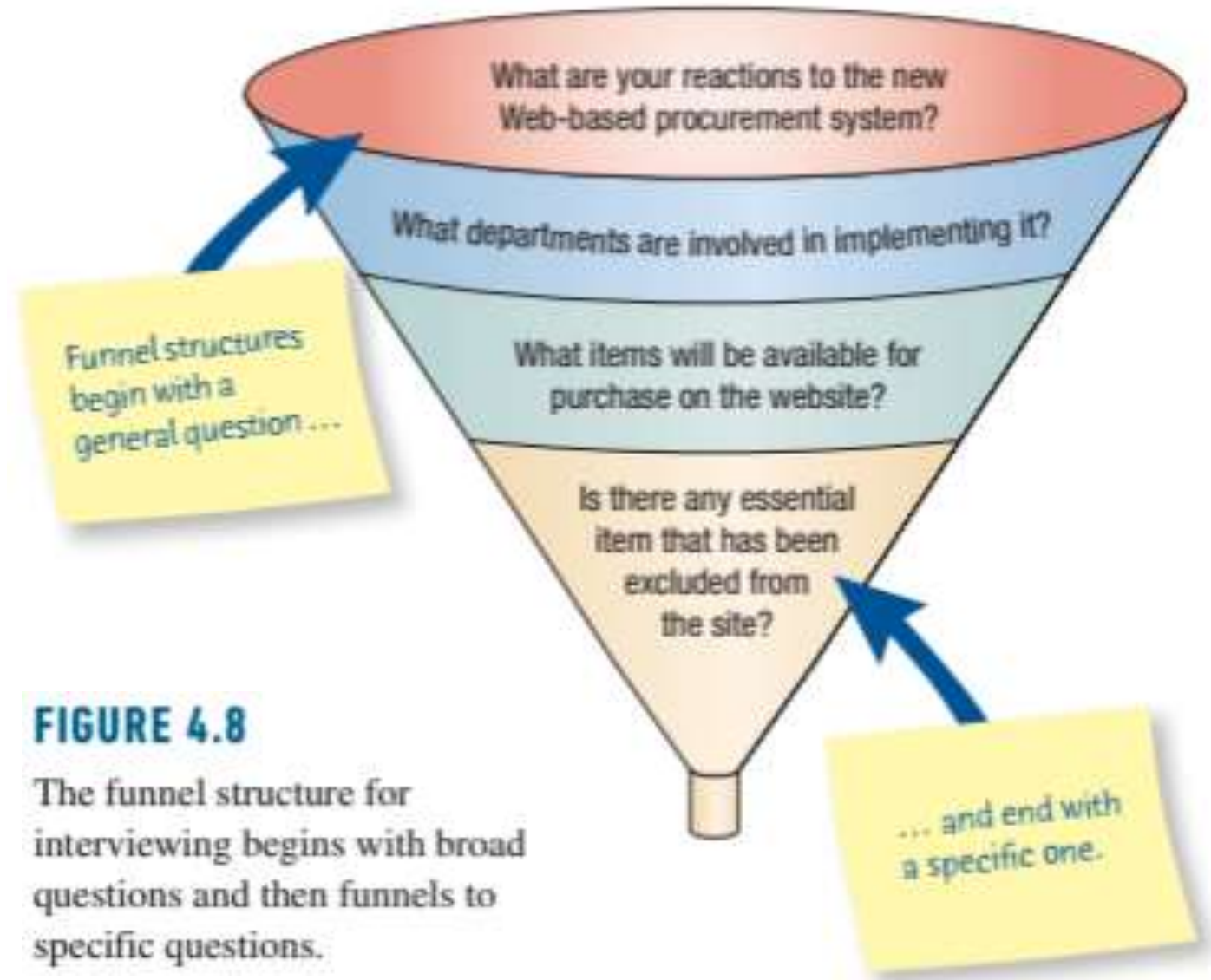
- The funnel structure (Figure 4.7):
  - Begins with very detailed often closed questions
  - Expands by allowing open-ended questions and more generalized responses
  - Is useful if interviewees need to be warmed up to the topic or seem reluctant to address the topic





# Funnel Structure

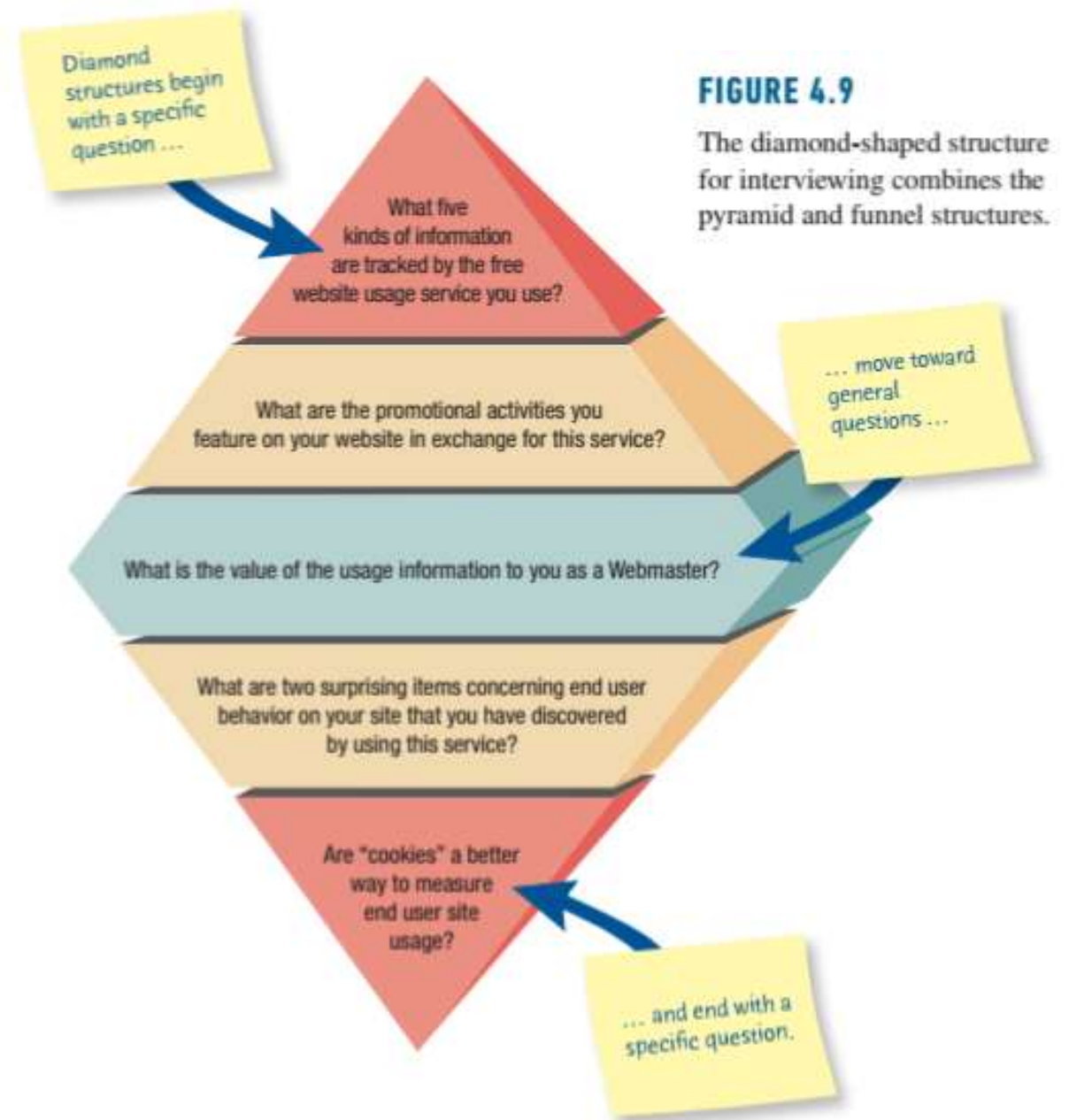
- The pyramid structure (Figure 4.8):
  - Begins with generalized, open-ended questions
  - Concludes by narrowing the possible responses using closed questions
  - Provides an easy, nonthreatening way to begin an interview
  - Is useful when the interviewee feels emotionally about the topic





# Diamond Structure

- The diamond structure (Figure 4.9):
  - 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



# Closing an Interview

- When an interview is complete it should be closed by asking an interviewee:
  - Always ask “Is there anything else that you would like to add?”
  - Summarize and provide feedback on your impressions
  - Ask if there is anyone you should talk with next
  - Set up any future appointments
  - Thank them for their time and shake hands

# Writing and Interview Report

# Writing a Report

- On completion of an interview:
  - The essence of the interview must be set out in a written report
  - Interview report(s) should be written as soon as possible after the interview
- This step can ensure the quality of interview data
  - Delaying the writing of the interview report may result in a reduction in the quality of the data
  - After this initial summary go into more detail and note the main points of the interview and your own opinions and conclusions
- Review the interview report with the respondent at a follow-up meeting:
  - This step helps to clarify the meaning the interviewee had in mind
  - The interviewee will know that you are interested enough to take the time to understand his or her point of view and perceptions

# Listening to Stories

# Stories

- The rich information gathered from listening stories is invaluable (see Figure 4.10)
  - Stories may originate in the workplace
  - Organizational stories are used to relay information
  - When a story is told and retold over time it takes on a mythic quality
  - Isolated stories are useful when you are looking for facts
  - Enduring stories can capture all aspects of the organization and are the ones a systems analyst should look for (including subliminal factors)

# Reasons for Telling a Story

- There are four essential reasons for telling a story:
  - Experiential stories:
    - Describe what the business or industry is like
  - Explanatory stories:
    - Tell why the organization acted a certain way
  - Validating stories:
    - Are used to convince people that the organization made the correct decision
  - Prescriptive stories:
    - Tell the listener how to act
- Systems analysts:
  - Use storytelling as a complement to other information gathering methods

# Story Elements and Examples (1)

**FIGURE 4.10**

Story elements and corresponding examples. Quotation from “Open source software opens door to Web design career” by Mark Thomas (2016).

Story element	Example from “Open source software opens door to Web design career” by Mark Thomas (2016)
The call to adventure	“I was fascinated and envious—I wanted to be able to create those exciting images with their grungy textures, characters lifted from games, dramatic lighting, and emphatic quotes. Other people didn’t seem to find it difficult to finish them, but I had no idea where to even start.”
The quest	“I was going to have to learn this discipline properly. Such things are not achieved overnight, of course, and so began a long quest to find, practice, and learn from every design resource I could find.”
The struggle	“Researching the topic, I realized that I had used the wrong tool for the job. Exasperated and in no small way desperate, I began looking for a package I could turn to rescue the situation. Time was pressing and, even if I could find an answer in time, as the now self-proclaimed designer in the team I would have to learn it double-quick.”
The transformation	“Taking stock for a moment, I began to wonder if it was possible to begin a business operation based on the open source software I was now developing in confidence and ability with. It became an ambition.”



# Story Elements and Examples (2)

## FIGURE 4.10

Story elements and corresponding examples. Quotation from “Open source software opens door to Web design career” by Mark Thomas (2016).

The resolution	“In 2009, I designed and built a website for the bakery that went on to supply our wedding cake, saving us money and introducing new customers to their business, too. In 2010, I created all the artwork for our wedding stationery. Later the same year, I registered my UK company and began providing Web design services to local companies who needed designs for their websites, which I then started to code.”
The moral	“To me, open source software means opportunity. It means education, freedom, commitment, collaboration and challenges. I went from knowing nothing whatsoever about design and coding to starting my own Web design business and capturing local clients who were happy with the things I’ve made for them and unconcerned by the tools I’d used to do it.”
The epilogue	“And even though my day job prevents me from publishing anywhere near the number of blog articles I want to (for which I apologize to my readers—you are not forgotten), it still manages nearly 3,000 visitors a month, and I regularly receive requests for tutorials from around the world, which I will get around to at some point.”

# Joint Application Design (JAD)

# Joint Application Design (JAD)

- Joint Application Design (JAD) can replace a series of interviews with the user community
  - The motivation for using JAD is to cut the time (and hence the cost) required for personal interviews
- JAD is a technique that:
  - Allows the analyst to accomplish requirements analysis with stakeholders (including users of a system) in a group setting
  - This approach has benefits for the interviewer (less time than is required for personal interviews)

# Conditions That Support the Use of JAD

- The use of the JAD technique can address a number of factors within an organisation:
  - Users may be restless and want something new
  - The organizational culture supports joint problem-solving behaviors
  - Analysts forecast an increase in the number of ideas using JAD
  - Personnel may be absent from their jobs for the length of time required
    - The JAD technique provides for improved time utilization and planning

# Who Is Involved in a JAD Meeting

- A broad range of stakeholders in a system will be involved in a JAD meeting to gather a wide range of views and opinions
- A JAD meeting will typically include:
  - The executive sponsor
  - The IS analyst
  - The users of the system
  - A session leader
  - Observers
  - The scribe

# Where to Hold JAD Meetings

- JAD meetings are generally held offsite (away from the organisation's premises)
- The meeting place should provide:
  - Comfortable surroundings
  - Minimal distractions
- Attendance:
  - A meeting must be held at a convenient time and location
  - A meeting must be scheduled to accommodate the work commitments so that participants can attend the meeting
  - An agenda should be distributed well before the meeting to all participants
  - The analyst may consider holding an orientation meeting

# Benefits and Downsides of JAD

The benefits of JAD are:

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

• The Drawbacks of JAD are:

- 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

# Using Questionnaires



# Questionnaires

- Questionnaires (surveys) are useful in gathering information from key organization members about:
  - Attitudes
  - Beliefs
  - Behaviors
  - Characteristics
- Responses
  - Recall that data uses both *quantitative* and *qualitative* analysis
  - Using closed questions can be *quantified*
  - Using open-ended questions are analyzed other ways
    - Generally such questions will require *qualitative* analysis techniques

# Planning for the Use of Questionnaires

# Planning for the Use of Questionnaires

- There are guidelines in the planning of questionnaires (surveys):
  1. Identify the objectives of the questionnaire
  2. Identify the research population (the members are involved with the project)
  3. Identify the method of distributing the questionnaire and the return of the responses (is the population local or widely dispersed)
  4. Prepare a pilot survey and distribute it to a test population to eliminate ambiguous questions and errors (exploratory work)
  5. Develop the approaches to the analysis and the methods to process and analyze the data collected
  6. Problem solving prior to conducting interviews is necessary
- 1. Remember:
  1. Comply with all data protection requirements

# Open-Ended Questions

- Writing and the for the use of open-ended questions
- Figure 4.11 shows typical open-ended questions

**FIGURE 4.11**

Open-ended questions used for questionnaires.

53. What are the most frequent problems you experience with computer output?

A. \_\_\_\_\_

\_\_\_\_\_

B. \_\_\_\_\_

\_\_\_\_\_

C. \_\_\_\_\_

\_\_\_\_\_

54. Of the problems you listed above, what is the single most troublesome?

\_\_\_\_\_

\_\_\_\_\_

55. Why?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Open-ended questions can ask the respondent for lists ...

... or detailed responses ...

Below are questions about yourself. Please fill in the blanks to the best of your ability.

67. How long have you worked for this company?

\_\_\_\_\_ Years and \_\_\_\_\_ Months

68. How long have you worked in the same industry?

\_\_\_\_\_ Years and \_\_\_\_\_ Months

69. In what other industries have you worked?

\_\_\_\_\_

... or short answers-

# Closed Questions

- Writing and the for the use of closed questions
- Figure 4.12 shows typical closed questions

**FIGURE 4.12**

Closed questions on questionnaires help ensure responses.

Answer questions 23 and 24 by checking the appropriate box.

23. Below are the six software packages currently available. Please check the software package(s) you personally use most frequently.

<input type="checkbox"/> Microsoft Excel	<input type="checkbox"/> Microsoft Access
<input type="checkbox"/> Microsoft PowerPoint	<input type="checkbox"/> Microsoft Project
<input type="checkbox"/> Oracle SCM	<input checked="" type="checkbox"/> Visble Analyst

24. "The sales figures are usually late."

<input type="checkbox"/> Agree	<input checked="" type="checkbox"/> Disagree
--------------------------------	--

Answer questions 25 and 26 by circling the appropriate number.

25. "When the sales figures are prepared by computer data services they are late."

Never 1	Rarely 2	Sometimes 3	Often 4	Always 5
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Answer questions 45–48 by circling the appropriate response.

45. The division I am currently in is called

Investments  
Operations  
Marketing

46. My educational background can best be described as

High School  
Some College  
Bachelor's Degree  
Master's Degree or Higher

My gender is

Male  
Female

Annotations:

- "Closed questions may require the respondent to check a box ..."
- "... or circle a number ..."
- "... or circle the answer itself."

# Open-Ended vs Closed Questions



**FIGURE 4.13**

Trade-offs between the use of open-ended and closed questions on questionnaires.

# Problem Questions

- These questions produced little or no information
- Why?

Circle the appropriate number for each source of information described.

1. Industry Reports	Less 1	2	About the Same 3	4	More 5
2. Trend Analysis	Less 1	2	About the Same 3	4	More 5
3. Computer-Generated Graphs	Less 1	2	About the Same 3	4	More 5
4. Investment Advisory Services	Less 1	2	About the Same 3	4	More 5
5. Point and Figure Charts	Less 1	2	About the Same 3	4	More 5
6. Computerized Portfolio Analysis	Less 1	2	About the Same 3	4	More 5
7. Hot Tips	Less 1	2	About the Same 3	4	More 5

We need to change this questionnaire.  
-Penny

**FIGURE 4.C1**

A questionnaire developed for the brokerage firm Carbon, Carbon, & Rippy by Rich Kleintz.

# Writing Questions



# Writing the Questions

- There is a difference between interview questions and questionnaire questions:
  - Interviews are conducted face-to-face
  - Surveys are conducted remotely
- Recall *open-ended* question and *closed* questions:
  - Both may be used in a questionnaire (see Figures 4.11 and 4.12 for examples)
- There is a 'trade-off when choosing the type of question:
  - Figure 4.13 shows a summary of the 'trade-off'

# Language and Word Selection

- The language used in a questionnaire is extremely important
  - It must be appropriate for the intended respondents (e.g., English)
  - The word selection is very important (keep it simple and avoid jargon)
- Some important guidelines:
  - Keep questions specific, short, and simple
  - Do not patronize respondents
  - Avoid bias in wording
  - Target questions to the correct population (the respondents)
  - Ensure technical accuracy
  - Appropriate for the reading level of the respondents

# Using Scales and Measurement

# Scales

- Scaling is:
  - The process of assigning numerical values to attributes or characteristics for the purpose of measurement
- The two different forms of measurement scales are:
  - Nominal
  - Interval (*Likert* scales)
- Nominal scales are used to classify things (It is the weakest form of measurement)
- In interval scales the intervals are equal
  - This enables data may be processes numerically or statistically

# A Typical Question

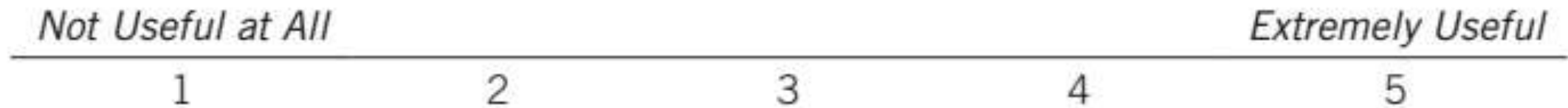
- What type of software do you use the most?
- Potential responses:
  - 1: A word processor
  - 2: A spreadsheet
  - 3: A database
  - 4: An email program
  - 5: An Internet application (e.g., Google)
- The following slide shows a practical example

# The Likert Scale

- This example shows an interval scale (generally termed a *Likert* scale
- This approach provides a simple method of quantitative analysis as the inputs are numerical and not text-based

By anchoring the scale on either end, the analyst may want to assume that the respondent perceives the intervals to be equal when they respond to this question:

***How useful is the support given by the Technical Support Group?***



If the systems analyst makes this assumption, more quantitative analysis is possible.

# Validity and Reliability

# Validity and Reliability

- Reliability of scales refers to consistency in response
  - i.e., obtaining repeatability
  - If the same questionnaire was administered again under the same conditions the same results would be reached
- Validity:
  - Is the degree to which the question(s) measures what the factors an analyst intends to measure



# Constructing Scales

# Problems with Scales

- Leniency
- Caused by easy raters
  - Solution is to move the “average” category to the left or right of center
- Central tendency
  - A Central tendency occurs when respondents rate everything as average
    - Improve the scales by making the differences smaller at the two ends
    - Adjust the strength of the descriptors
    - Create a scale with more points (not always recommended)
- Halo effect is:
  - When the impression formed in one question carries into the next question
  - Solution is to place one trait and several items on each page

# Questionnaire Design




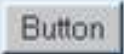
# Designing the Questionnaire (1)

- A well-designed questionnaire can overcome respondent resistance
- There are a number of basic design rules including:
  - Allow ample white space
  - Provide ample space for respondents to write responses
    - People write in small to large handwriting
  - Make it easy for respondents to clearly mark their answers
  - Be consistent in the style for the questionnaire
- Question order:
  - Order the questions logically
  - Place most important questions first
  - Cluster items of similar content together
  - Introduce less controversial questions first

## Designing the Questionnaire (2)

- In considering questionnaire design there are useful additional features we may consider including:
  - It is often useful if respondents' suggestions are requested
    - This can elicit unexpected but useful rich information
    - Such information may lead to another (unexpected) strand in the analysis
  - Additionally: to make the transcription of the data easier the format should make the data points easily accessible make the for the data analysis
- Figure 4.14 shows a software package with common data entry formats

# Designing a Web Survey

Name	Appearance	Purpose
One-line text box		Used to obtain a small amount of text and limit the answer to a few words
Scrolling text box		Used to obtain one or more paragraphs of text
Check box	<input type="checkbox"/>	Used to obtain a yes-no answer (e.g., Do you wish to be included on the mailing list?)
Radio button	<input type="radio"/>	Used to obtain a yes-no or true-false answer
Drop-down menu		Used to obtain more consistent results (Respondent is able to choose the appropriate answer from a predetermined list [e.g., a list of state abbreviations])
Push button		Most often used for an action (e.g., a respondent pushes a button marked "Submit" or "Clear")

**FIGURE 4.14**

When designing a Web survey, keep in mind that there are different ways to capture responses.

Methods to  
Capture  
Responses  
When  
Designing a  
Web Survey

## An Example?

- Is this form a good example?
- How can you improve the form for:
  - Respondents
  - The analysis?

<p>QUESTIONNAIRE FOR ALL MANAGERS OF HEALTH SPAS</p> <p>***URGENT***FILL OUT IMMEDIATELY AND RETURN PERSONALLY TO YOUR DIVISION MANAGER. YOUR NEXT PAYCHECK WILL BE WITHHELD UNTIL IT IS CONFIRMED THAT YOU HAVE TURNED THIS IN.</p> <p>In 10 words or fewer, what complaints have you lodged about the current computer system in the last six months to a year?</p> <p>Are there others who feel the same way in your outlet as you do? Who? List their names and positions.</p> <table border="0"> <tr> <td>1.</td> <td>2.</td> </tr> <tr> <td>3.</td> <td>4.</td> </tr> <tr> <td>5.</td> <td></td> </tr> <tr> <td>7.</td> <td></td> </tr> </table>	1.	2.	3.	4.	5.		7.		<p>What is the biggest problem you have when communicating your information requirements to headquarters? Describe it briefly.</p> <p>How much computer downtime did you experience last year?</p> <p>1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 -</p> <p>Is there any computer equipment you never use?</p> <table border="0"> <tr> <td><u>Description</u></td> <td><u>Serial Number</u></td> </tr> </table> <p>Do you want it removed?   Agree      Neutral      Disagree</p> <p>In your opinion, what's next as far as computers and Global Health Spas are concerned?</p> <p>Thanks for filling this out. • • • • •</p>	<u>Description</u>	<u>Serial Number</u>
1.	2.										
3.	4.										
5.											
7.											
<u>Description</u>	<u>Serial Number</u>										

Terri  
Please help  
me improve this  
form.  
Tennys

# Administration of Questionnaires



# Administering Questionnaires (1)

- Administering questionnaires has two main questions:
  - Who in the organization should receive the questionnaire
  - How should the questionnaire be administered
- Methods of Administering the Questionnaire
  - Convening all concerned respondents together at one time
  - Personally administering the questionnaire
  - Allowing respondents to self-administer the questionnaire
  - Mailing questionnaires
  - Administering over the Web or via email
    - Electronically Submitting Questionnaires
    - Reduced costs
    - Collecting and storing the results electronically

# Summary

# Chapter #4 Summary

- We have introduced:
- Interviewing including:
  - Interview preparation
  - Question types
  - Arranging questions
  - The interview report
- Stories and story telling
- Joint Application Design (JAD)
  - Involvement and location
- Joint Application Design (JAD)
  - Involvement and location
- Questionnaires including:
  - Writing questions
  - Using scales and overcoming problems
  - Design and order
  - Measurement scales
  - Administering and submitting
- Chapter #5 introduces unobtrusive methods

# Case Studies