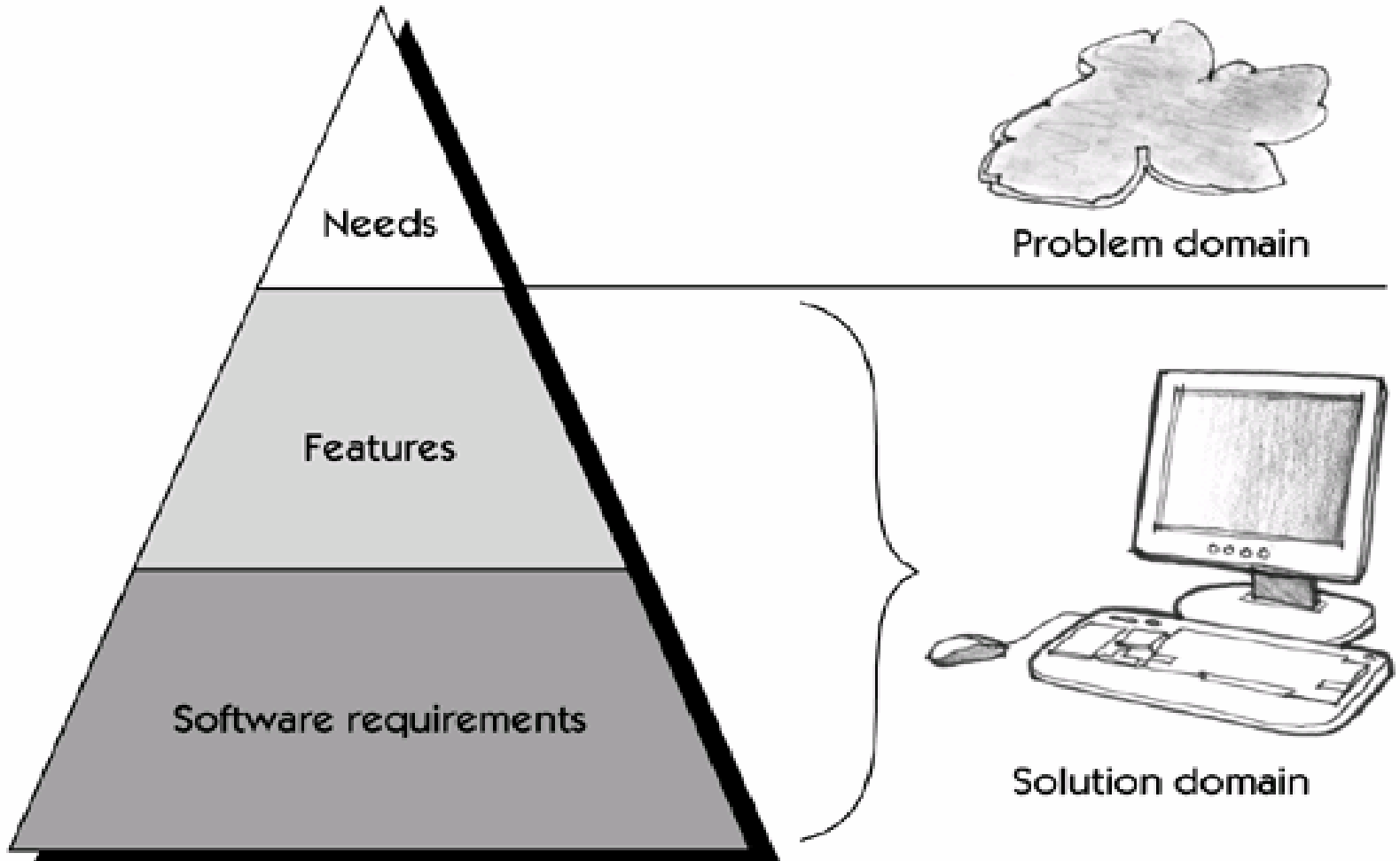


Recall The Team Skills

1. Analyzing the Problem (with 5 steps)
 1. Gain agreement on the problem definition.
 2. Understand the root causes
 3. Identify the stakeholders and the users.
 4. Define the solution system boundary.
 5. Identify the constraints
2. Understanding User and Stakeholder Needs
3. Defining the System
4. Managing Scope
5. Refining the System Definition
6. Building the Right System

Recall: The Requirements Pyramid



Fact Finding Techniques

1. **Background Reading**: about users, stakeholders, environment, company, ..etc
2. **Interviewing**: users, customers and stakeholders (Ch 10)
3. **Observation**: of the existing system and users
4. **Document Sampling**: about the old system
5. **Questionnaires**: to the users and stakeholders

And many others ..

Fact Finding Techniques

And many others .. Like

- Workshops: Ch 11
- Brainstorming: Ch 12
- Storyboarding: Ch 13

Chapter 10

Interviewing

A Requirements Gathering Technique

- The interviewing process
- Template for conducting user interviews

Interviewing

- One of the most important and most straightforward requirements gathering techniques is the user interview
- It is simple and direct technique that can be used in virtually every situation.
- However, the interviewing process is not easy, and it forces us to get "up close and personal" to the "User and the Developer" syndrome.

Interviewing

■ Advantages:

- Produce high quality information because of personal contact.
- Deeper information about the work can be obtained
- The interview can be terminated at any time specially when the interviewee doesn't have any more thing to say.

Interviewing

■ Disadvantages:

- Time-consuming
- Requires after-interview work and analysis
- Subject to bias & interviewee may be close minded
- May provide conflicts information specially when different interviews are done.

Interviewing

- **Appropriate Situation:**
 - Good for most projects
 - Specially when depth information about the existing or the new system is need

Start with Context-Free Questions

- Asking questions about the nature of the user's problem without context for a potential solution. Examples:
 - Who is the user?
 - Who is the customer?
 - Are their needs different?
 - Where else can a solution to this problem be found?
- A context-free question helps us gain an understanding of the real problem without biasing the user's input.
- These questions force us to listen before attempting to invent or describe a potential solution.
- Listening gives us a better understanding of the customer's problem and any problems behind the problem.

Then, Solutions-Context Questions

- After we ask the context-free questions, we can explore the suggested solutions.
- It's time for **solution-context questions**

Generic Interview Template

Part I: Establishing the Customer or User Profile

Name:

Company:

Industry:

Job title:

(The above information can typically be entered in advance.)

What are your key responsibilities?

What outputs do you produce?

For whom?

How is success measured?

Which problems interfere with your success?

What, if any, trends make your job easier or more difficult?

Generic Interview Template

Part II: Assessing the Problem

For which [application type] problems do you lack good solutions?

What are they? (Hint: Keep asking, "Anything else?")

For each problem, ask the following questions.

- Why does this problem exist?
- How do you solve it now?
- How would you like to solve it?

Generic Interview Template

Part III: Understanding the User Environment

Who are the users?

What is their educational background?

What is their computer background?

Are users experienced with this type of application?

Which platforms are in use?

What are your plans for future platforms?

Are additional applications in use that are relevant to this application? If so, let's talk about them a bit.

What are your expectations for usability of the product?

What are your expectations for training time?

What kinds of user help (for example, hard copy and online documentation) do you need?

Generic Interview Template

Part IV: Recap for Understanding

You have told me:

(List customer-described problems in your own words.)

-
-
-

Does this adequately represent the problems you are having with your existing solution?

What, if any, other problems are you experiencing?

Generic Interview Template *(Cont'd)*

Part V: The Analyst's Inputs on the Customer's Problem

(Validate or invalidate assumptions.)

(If not yet addressed) Which, if any, problems are associated with: (List any needs or additional problems you think should concern the customer or user.)

-
-
-

For each suggested problem, ask the following questions.

- Is this a real problem?
- What are the reasons for this problem?
- How do you currently solve the problem?
- How would you like to solve the problem?
- How would you rank solving these problems in comparison to others you've mentioned?

Generic Interview Template *(Cont'd)*

Part VI: Assessing Your Solution (if applicable)

(Summarize the key capabilities of your proposed solution.)

What if you could:

-
-

How would you rank the importance of these?

Generic Interview Template *(Cont'd)*

Part VII: Assessing the Opportunity

Who in your organization needs this application?

How many of these types of users would use the application?

How would you value a successful solution?

Generic Interview Template *(Cont'd)*

Part VIII: Assessing the Reliability, Performance, and Support Needs

What are your expectations for reliability?

What are your expectations for performance?

Will you support the product, or will others support it?

Do you have special needs for support?

What about maintenance and service access?

What are the security requirements?

What are the installation and configuration requirements?

Are there special licensing requirements?

How will the software be distributed?

Are there labeling and packaging requirements?

Generic Interview Template *(Cont'd)*

Part IX: Other Requirements

Are there any legal, regulatory, or environmental requirements or other standards that must be supported?

Can you think of any other requirements we should know about?

Part X: Wrap-up

Are there any other questions I should be asking you?

If I need to ask follow-up questions, may I give you a call? Would you be willing to participate in a requirements review?

Generic Interview Template (*Cont'd*)

Part XI: The Analyst's Summary

After the interview, and while the data is still fresh in your mind, summarize the three highest-priority needs or problems identified by this user/customer.

- 1.
- 2.
- 3.

Tips for a Successful Interview

1. Prepare an appropriate context-free interview, and write it down briefly in a notebook for reference during the interview.
2. Review the questions just prior to the interview.
3. Before the interview, research the background of the stakeholder and the company to be interviewed.
4. Don't bore the interviewee with questions you could have answered in advance. On the other hand, it wouldn't hurt to briefly verify the answers with the interviewee.

Tips for a Successful Interview

5. Write down brief answers (short notes) in your notebook during the interview. (Don't attempt to capture the data electronically at this time!)
6. Refer to the template during the interview to make certain that you're asking the right questions.

Compiling the Needs Data: Analyst's Summary

- Your problem analysis will have identified the key stakeholders and users you will need to interview to gain an understanding of their needs.
- Typically, it does not take many interviews to get a solid understanding of the larger issues.

Compiling the Needs Data: Analyst's Summary

- In many cases, after just a few interviews, user and stakeholders needs will start to be repeated.
- This means that you may be starting to get **convergence on some common needs**.
- 10 interviews may get 10-15 needs
- This is to be expected, especially among those users or stakeholders who share a common perspective.

A Note on Questionnaires

- There is no substitute for an interview.
 - Do it first!
 - Do it for every new class of problem!
 - Do it for every new project!
- Questionnaires can be used to validate assumptions and gather statistical preference data.

A Note on Questionnaires

- The questionnaires technique is **not a substitute for interviewing**. Reasons:
 - Relevant questions **cannot be decided in advance**.
 - The assumptions behind **the questions bias the answers**.
 - It is **difficult to explore new domains** ("What you really should be asking about is . . ."), and there is no interaction to explore domains that need to be explored.
 - It is **difficult to follow up** on unclear user responses.

Key Points

- **Interviewing** is a simple and direct technique that can be used in most circumstances.
- **Context-free questions** can help achieve bias-free interviews.
- It may be appropriate to search for **undiscovered requirements** by exploring solutions.
- Convergence on some common needs will initiate a "requirements repository" for use during the project.
- A **questionnaire** is no substitute for an interview.

Assignment

Read HOLIS needs obtained by interviews in
pages 106-107