

MIS 3506 Digital Design and Innovation Studio

4: RESEARCHING YOUR PROJECT + INTERVIEWING SKILLS

Amy Lavin

Photo: Installation by Jenny Holzer, US Pavillion, Venice Biennale 1990

Schedule:

Scope draft (individual): Thurs 9/29

Interview #2: Tues 9/27 2:00-3:20 / A603 / Rachel Carr, Associate Director, MS Programs

Team Scope: Thurs 9/29

Exam 1: 10/4

Office Hours w/ Derek Mon/Wed 1-3PM A603

What does elicitation mean

How does a BA *elicit* requirements

HOW BA's Elicit Requirements

- Describe these elicitation techniques and how you would use them:
 - Reviewing existing documentation
 - Observation
 - Interviews
 - Surveys and questionnaires
 - Facilitated sessions
 - Focus groups
 - Competitive analysis
 - Interface analysis

More Methods

Observation

- Fly on the wall
- Contextual
- Shadowing
- Secret agent

Activities

- Collaging
- Modelling
- Draw your experience

Interviews

- Directed storytelling
- Unfocus group
- Role playing
- Extreme user
- Purse or backpack tour

Self-reporting

- Journals
- Beeper study

Saffer's Advice on Doing Design Research

- 1. You go to them
- 2. You talk to them

3. You write stuff down

What's so hard about that, seems like common sense?

YOU GO TO THEM

Discussion: Trust & Observing

Why do you need to build trust

What is *ethical* research and why do we care

YOU TALK TO THEM

Discussion: Interviewing

Definition of INTERVIEW

1: a formal consultation usually to evaluate qualifications (as of a prospective student or employee)

2a: a meeting at which information is obtained (as by a reporter, television commentator, or pollster) from a person

Know your audience

Points of view

What are you listening/looking for

"If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes."

Albert Einstein

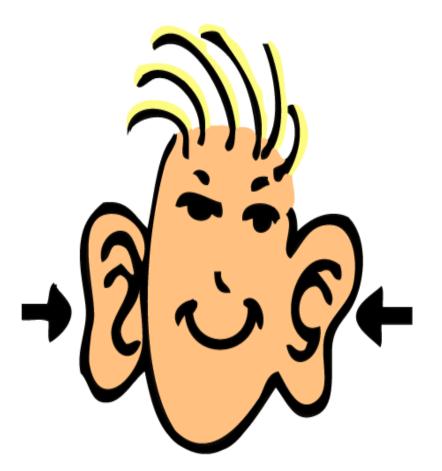
Interviewing

- Prepare questions in advance
 - What do you want to know?
 - Who is best able to tell you?
 - Executives Can usually tell you why?
 - Managers Can usually tell who? where? And what?
 - Workers Are usually the only ones who can tell you how?
- Ask open ended questions
- Ask follow-up questions using the "reflect" technique

Stakeholder Analysis: Template

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Active Listening



"The reason why we have two ears and only one mouth is that we may listen the more and talk the less."

— Zeno of Citium

What does it take to listen actively?

- 1. Pay Attention
- 2. Show that you are listening.
- 3. Provide feedback.
- 4. Defer judgment.
- **5. Respond Appropriately**

Socrates was good at follow-up questions

Clarification	What do you mean by? Could you put that another way? Can you give me an examples?			
Probing Assumptions	What are you assuming? How did you choose those assumptions? What could we assume instead?			
Probing Reasons and Evidence	How do you know? Why do you think that is true? What would change your mind?			
Viewpoint and Perspectives	What are you implying by that? What effect would that have? What is an alternative?			
Probing Implications and Consequences	How can we find out? Why is this issue important? What generalizations can you make?			
Questions about Questions	What does that mean? What was the point of this question? Why do you think I asked this question?			

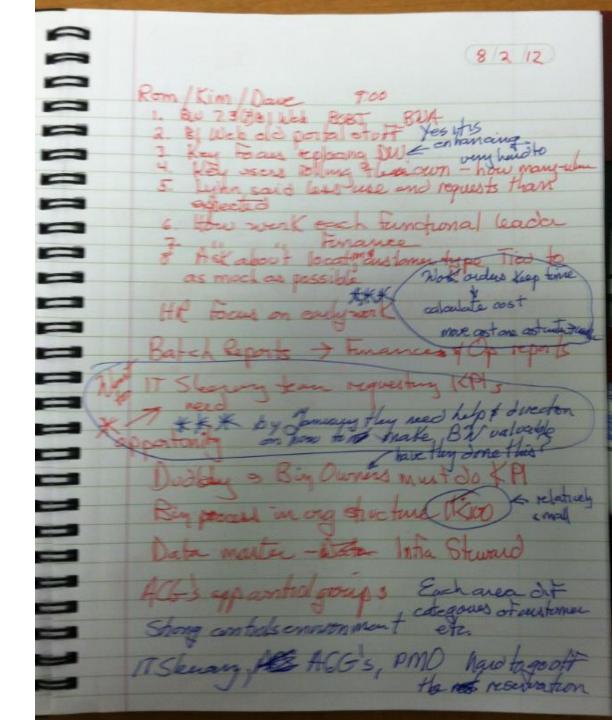
YOU WRITE STUFF DOWN

Discussion: Taking Notes

HOW do you take notes

Rich's Approach to Note Taking

- Prepare your questions in advance
- Take brief notes on comments people make
- If something seems very important or surprising, highlight it
- As soon as possible, review you notes in a quiet setting
- Add observations, conclusions, ideas in another color
- Start a new page with follow-up questions



Exercise:

Dysfunctional Warehouse problem statement, objectives, constraints and assumptions

Dysfunctional Warehouse Case

You have recently been assigned to a project that is focused on improving warehouse operations. The project sponsor, North America's General Manager, has told you that this is her top priority. She pointed out that customer service has taken so many orders for product that isn't available that they have had \$20MM in orders cancelled by the customer when they found out that delivery would be late. The plants are unhappy because their master production schedule is interrupted about 20 times a week with rush orders. The carriers are raising rates because it takes so long to load their trucks as the warehouse tries to locate the needed product. Having the wrong inventory also costs the business as the product's shelf life means it has to be sold at a loss if more than 6 months old and scrapped if older than 9 months.

Customer orders are taken by a customer service representative using an new order system, he then checks for the availability of inventory using a separate old inventory system and places a reservation against that inventory. Customer service has no interest in changing out their new system and has told the project so. The shipping team at the warehouse prints the pick list and shipping papers from their inventory system. Warehouse personnel also record inventory as it arrives from the manufacturing sites. After orders are picked and the prepared for shipment, they are loaded onto the carriers trucks for delivery to the customer which the shipping personnel confirm in their inventory system so that the CSR's can check if needed.

When there is a pending order and no inventory, the customer service team calls the plant and asks them to make a rush order. Rush orders are delivered to the warehouse and often loaded directly onto the carrier's trucks. Paperwork is often created manually to ensure prompt delivery.

Your first step is to write a scope document to share with your project sponsor to ensure that you have understood the assignment correctly. Please write the following parts of that document:

The problem statement
Five SMART objectives
A list of all relevant assumptions and constraints.

What are the major problems?

3 paragraphs:

General context of the organization What is the problem? How will you approach this problem

What are the project objectives?

Specific

Measureable

Actionable

Realistic

Time-bound

What are the relevant assumptions and constraints?

INDIVIDUAL Scope Documents

DUE Thursday.

Bring 2 prints to class



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HEURISTIC Review

definition: heuristic

: involving or serving as an aid to learning, discovery, or problem-solving by experimental and especially trial-and-error methods

<heuristic techniques> <a heuristic assumption>;

: of or relating to exploratory problem-solving techniques that utilize **self-educating techniques** (as the evaluation of feedback) **to improve performance**

<a heuristic computer program>

Self-educating techniques to improve performance

How do you develop a Heuristic Review to use

Part 1:

Develop a Heuristic Review

Each team should work together to develop a review heuristic for evaluating each other's scope documents.

Create a general assessment framework in outline form with questions you would ask yourself about the other person's scope document.

00:15 min

Review DIMENSIONS

1 Complete

a?

b?

c?

2 Correct

a?

3 Unambiguous

a?

4 Material

a?

5 Prioritized

a?

Your questions should generate constructive criticism and suggestions for improvement.

The number of questions for each dimension is up to each team and should represent relevant information needed.

This week focus your heuristic review on Scenarios

Did your heuristic include the following?

Project Scope Document Contents

- Statement of Purpose (Problem Description)
- Objectives
- Problems & Opportunities
- Risks
- Assumptions and Constraints
- Stakeholders Analysis
- Glossary

Does the Statement of Purpose

- Explain the current environment or situation?
- Describe the problem?
- Explain why its important to your client?
- Explais how you will approach it?
- Are there 3 clear and well written paragraphs?
 - General context of the organization and the current condition
 - The essential problem or opportunity
 - Your team's approach to analyzing the problem and designing a solution

Are the Objectives Relevant and SMART?

Specific

Measureable

Actionable

Realistic

Time-bound

Assumptions & Constraints

- Assumption a premise that is assumed to hold true throughout the project
 - ARE THE ASSUMPTIONS RELEVANT AND NECESSARY FOR THE PROJECT?

- Constraint a limitation or restriction on proposed solutions
 - ARE THESE CONSTRAINTS TO THE SOLUTION?

SCOPE Review

Constructive Feedback

- Ask open-ended questions and follow-up on the answers
- Ask why, what, when, where, who and how
- Set a positive, helpful tone
- Identify weaknesses, discuss them and then suggest improvements
- Identify strengths, discuss them, and then offer extensions

Review Process: SCOPE

- 1. Teams sit together / Split into 2 groups (2 or 3 people)
- 2. Exchange your scope document with someone from your team
- 3. Read each other's scope documents carefully and take detailed notes on what you think is good and what needs improvement. **10 minutes**
- 4. Take the lead and give the other person your feedback,then switch it around. Take your time and discuss each point.10 minutes for each person

USE ALL THE TIME YOU ARE GIVEN

5. I'll select two random people to review their scope documents with the class

As a TEAM begin to consolidate your work into one document.
Begin by selecting the best of

each

Schedule:

Interview 2: Tues 9/27

Exam 1: Tues 10/4

- 1 hour
- 30-40 multiple choice questions
- Scope document analysis case study
- Readings/lectures/exercises