



# MIS 3504

## Digital Design and Innovation

Week 4

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

# **DESIGN INQUIRY** / 5 questions to answer:

1. **what** inspired you (good or bad)
2. **who** are the affected stakeholders
3. **what** are their **unmet needs** +  
**why** are they important
4. **what** is your **solution**
5. **what** **resources** do you need to  
**create and sustain your solution**

Inquiry no.1

**what** inspired you (good or bad)

*or*

What can you discover and what excites you about the problem?



# What does *elicitation* mean

*to draw or bring out or forth; educe; evoke: to elicit the truth; to elicit a response with a question. –*

Dictionary.Com

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

# How a BA learns about the specifics of the business environment that the project requires

- Surveys - Well suited to larger groups that you can't talk to directly. Difficult to do well, Bias, poor analysis, etc. – closed end questions
- Facilitated sessions - Good with medium to larger groups. Need strong facilitation and a note taker or two. Keeping control and getting all involved is tough
- Focus Groups - Very rare in internal work, more often customers. Expensive, need to bring in, tape, etc.
- Competitive Analysis - Relatively easy to do an cheap, background research into how they do it, whatever it is? Best in industry may not really be best
- Interface Analysis - Very specific to needing to connect two systems, detailed technically data and process – open end questions

# 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?

How might you learn about a business process without going to the people who work at it? Read up on it,

- Ask experts
- Ask managers
- Read reports
- Study documentation, etc.

Why it is essential to actually go and talk to the people doing it?

- You need their POV's – very often local experts and management don't really know how its done
- You need to understand the context within which they work
- They are comfortable in their own environment, less intimidating

**YOU GO TO THEM**

Discussion: Trust & Observing

Why do you need  
to build trust

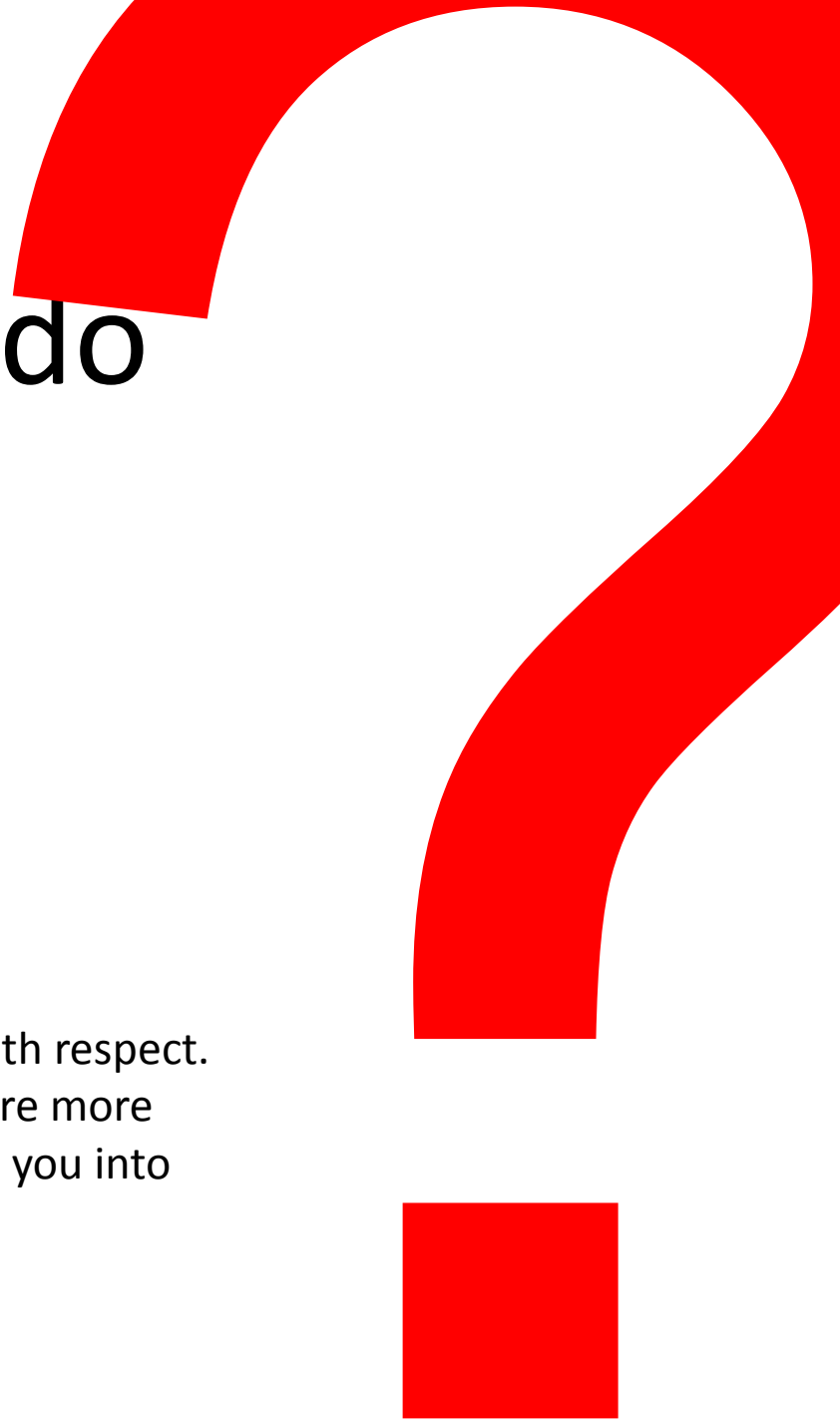


# What is *ethical* research and why do we care

## Saffer Points

- Consent
- Explain risks and benefits
- Respect privacy
- Pay for their time
- If asked, provide data and results

Idea on internal projects – need to treat people with respect. If you are open and above board with them they are more likely to be so with you. Sneaking around just gets you into trouble.



**YOU TALK TO THEM**

Discussion: **Interviewing**

# Definition of *INTERVIEW*

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

2: 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

- See it or hear it once it's a phenomenon
- See it or hear it twice, it may be a coincidence or an emerging pattern
- See it or hear it three times, it's a pattern

Link to core requirement areas

- Nouns are data or people
- Verbs are usually processes
- If's are usually business rules or exceptions

Combine the two

- Are business rules applied to all or just some cases?
- If no one ever explains how particular data is used it probably isn't
- If everyone says that this person is an expert, they usually are.
- Exceptions are the bane of all processes – how exceptional are the exceptions really

“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

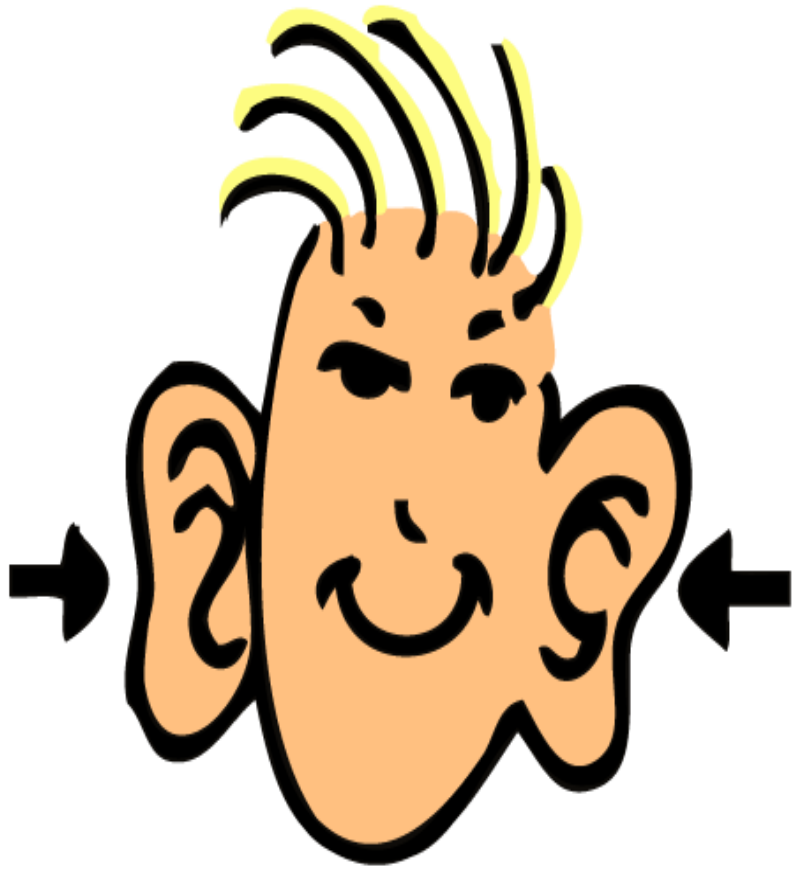
# Socrates was good at follow-up questions

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

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# Active Listening



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

— *Zeno of Citium*

# What does it take to listen **actively**?

- 1. Pay Attention** - Look at the speaker directly. Put aside distracting thoughts. Don't mentally prepare a rebuttal! Avoid being distracted by environmental factors. "Listen" to the speaker's body language. **What is Body language?** Refrain from side conversations when listening in a group setting.
- 2. Show that you are listening.** Use your own body language and gestures to convey your attention. Nod occasionally. Smile and use other facial expressions. Note your posture and make sure it is open and inviting. Encourage the speaker to continue with small verbal comments like yes, and uh huh" I see"
- 3. Provide feedback.** As a listener, your role is to understand what is being said. This may require you to reflect what is being said and ask questions. Reflect what has been said by paraphrasing. "What I'm hearing is." and "Sounds like you are saying." are great ways to reflect back. Suback's "I follow you" . Ask questions to clarify certain point then say "Thank you, please continue". "Otherwise don't interrupt. What do you mean when you say." "Is this what you mean?" "Summarize the speaker's comments periodically.
- 4. Defer judgment.** Interrupting is a waste of time. It frustrates the speaker and limits full understanding of the message. Allow the speaker to finish. Don't interrupt with counter arguments.
- 5. Respond Appropriately.** Active listening is a model for respect and understanding. You are gaining information and perspective. You add nothing by attacking the speaker or otherwise putting him or her down. Be candid, open, and honest in your response. Assert your opinions respectfully. Treat the other person as he or she would want to be treated.

**YOU WRITE STUFF DOWN**

Discussion: **Taking Notes**



HOW do you take  
notes



à la légèreté de ton pied le parapet si peu assuré qu'on doit le maintenir  
de lourdes pierres, ce qui n'empêche pas grand bon lui semble la tempête de  
en jonc de paille, voici le sable fin <sup>constellé</sup> d'ombelles blondes par le pas  
aux. L'île Bonaventure, à quelques milles, garde son mirage: la légende veut  
il été le repaire d'un ogre qui ~~franchissait~~ <sup>franchissait</sup> d'une enjambée la ce  
vastes poches. De retour chez lui, et son repas terminé, il lavait <sup>le grand son et le</sup>  
à sécher sur les hautes falaises. <sup>l'imagination</sup> populaire ne pouvait mieux rendre  
de la persistance accusatrice et rayonnante des maculations de la roche des efforts  
prodigieuse quantité de mousse de saumon en perpétuel repaillissement, <sup>figures par</sup> ces plumages  
ni ont été impuissants à <sup>les</sup> faire disparaître, <sup>Quelle lesira non moins loquace</sup>  
dra à effacer de l'esprit des hommes les grandes cicatrices collectives et les rappels  
ants de ces temps de haine! Quel asile sacré ne doivent-ils pas faire dans leur cœur  
les idies <sup>qui</sup> qui, sels des foyers de Bassan sur leurs nids, lutteront pour le dipass-  
cette époque <sup>de</sup> et librer  
ont à <sup>servir</sup>  
en de <sup>à</sup>  
sion de l'an  
nous mon  
leur seul  
le large. O

What is this for?

ur les moyens de remédier à l'étrange malédiction qui la frappe et accumule <sup>comb</sup>  
ement plus de mécomptes et de malheurs que de bienfaits. Sous préjudice des mesures  
naissance moral qui s'imposent en cette sombre ville de deux fois l'an mil, et qui  
entaillement d'ordre social, <sup>il n'y avait</sup> pour l'homme <sup>pris isolément</sup> et <sup>il ne savait</sup> <sup>valable</sup> d'avoir d'espoir plus <sup>étendu</sup>  
s. Etendu qui dans le coup d'aile.  
perpendiculaire à la crête des vagues, à la <sup>cette</sup> ligne <sup>pointillée</sup> à peine sinuée au ras de  
que <sup>à la file</sup> <sup>les</sup> chercheurs d'agates, le Rocher Percé lui-même <sup>En la</sup>  
l'ont <sup>de</sup> dans <sup>nos</sup> finches et que j'en emporterai très loin la vision. <sup>Rocher</sup>  
nant tout à l'heure je regrettais de ne pouvoir de <sup>plus</sup> pris le découvrir dans son  
le et que des dispositions nouvelles de sa masse fissent surgir des images différentes  
Etant <sup>de</sup> <sup>ne</sup> <sup>pas</sup> <sup>qu'</sup> <sup>elle</sup> <sup>dernière</sup> <sup>des</sup> <sup>qu'</sup> <sup>il</sup> <sup>s'agit</sup>  
C'est d'ailleurs <sup>notamment</sup> <sup>C'est</sup> <sup>à</sup> <sup>ailleurs</sup> <sup>sous</sup> <sup>cet</sup> <sup>angle</sup> <sup>qu'</sup> <sup>il</sup>  
280 pieds de haut à la <sup>pointe</sup>  
1420 pieds de long <sup>dit</sup> <sup>l'aco-</sup>  
un prospectus-reclame et si j'en ne me déplais pas tant à copier ces chiffres, c'est

Andre Breton: Manuscrit d'Arcane #17, 1944 pg 15



# 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 your notes in a quiet setting
- Add observations, conclusions, ideas in another color
- Start a new page with follow-up questions

8/2/12

Rom/Kim/Dave 9:00

1. BU 23(2) web RBT BVA
2. BU web old portal of off <sup>Yes it is enhancing</sup>
3. Key focus replacing DW <sup>very hard to</sup>
4. Key users rolling 2 transition - how many users
5. Lynn said less use and requests than expected
6. How work each functional leader
7. Finance
8. Ask about location of customer type <sup>Tried to</sup> as much as possible <sup>work orders keep time</sup>

HE focus on early work <sup>\*\*\*</sup> <sup>calculate cost</sup> <sup>move cost one cost center</sup>

Batch Reports → Finances of Op reports

IT Skewy team requesting KPI's <sup>need</sup> <sup>\*\*\*</sup> <sup>by January they need help & direction on how to make BVA valuable</sup> <sup>have they done this?</sup>

Dudley → Big Owners must do KPI

Big parcel in org structure (Kiro) <sup>← relatively small</sup>

Data master - ~~Water~~ Infra Steward

ACG's appointed groups <sup>Each area dif categories of customer etc.</sup>

Strong controls environment

IT Skewy, ~~ACG's~~ ACG's, PMO hard to go off the reservation

Discussion:

notes as record vs notes as tool

static vs dynamic

# 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