

What You Need to Know About Empathic Design

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My Purpose Today



To share how
Empathic Design
tools complement
VOC approaches and
lead to new
information for
product design and
business
improvement

If you learn how to use Empathic Design techniques, you can learn why you may need something more than a faster horse.





Define empathy

Roots of Empathic Design

- Cultural ethnography—studying the customer in relation to his/her environment

From Morse Code to Baseball Game (1915)



Innovate or Die: S&P 500 from 1999-2009

- 40% dropped off the list for a 60% survival rate during the “lost decade.”
- Value of a dollar invested from 12/31/99-3/31/09
 - In S&P 500: 65 cents
 - In Top 20 of S&P: \$4.26
- Survivors were innovators and “rode the tide.”

Source: Mallak, L.A. (2011).
Lessons from S&P Recession
Survivors. ChangeThis.com.

What You “Need to Know” About Empathic Design

Mission 1: Differentiate
Empathic Design from Voice-of-
the-Customer



What You “Need to Know” About Empathic Design

Mission 2: Discover how ED has been applied successfully in industry



What You “Need to Know” About Empathic Design

Mission 3: Introduce the key
tools of ED



What You “Need to Know” About Empathic Design

Mission 4: Critique a sample
ethnographic interview for ED
content



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Mission 1: Differentiate Empathic Design from Voice-of-the-Customer



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VOC vs. ED



VOC vs. ED

VOC

- Plan the visit.
 - Identify customers to visit
 - Write questions beforehand
 - House of Quality
- Execute the visit
 - Go through questions sequentially.
- Template report

**Complementary
approaches**

ED

- Plan the visit
 - Which users & which part(s) of life cycle?
 - Write EI questions.
 - Secure permission to record.
- Execute the visit
 - Photo, audio/videorecord
 - Modify questions based on responses (live) and generate new ones
 - In context
- Have others view recording
- Make ethnographic record
- Plan next interview/visit.

Empathic Design Yields Five Unique Types of Information.

- Triggers of Use
- Interactions with the User's Environment
- User Customization
- Intangible Attributes of the Product
- Unarticulated User Needs

Leonard & Rayport (1997)

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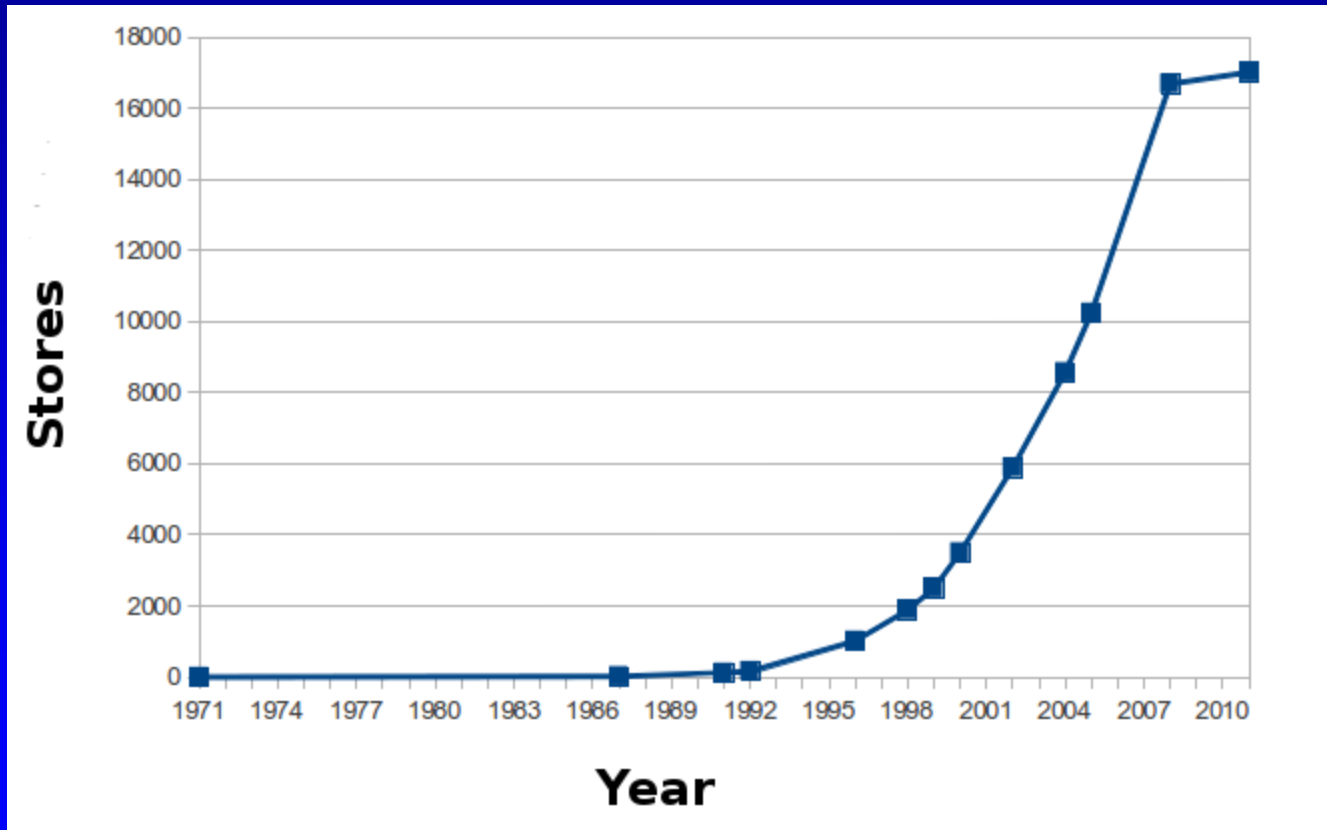
Identify Triggers of Use for a Smartphone



Unarticulated User Needs



Starbucks created a market.



Intangible Attributes of the Product

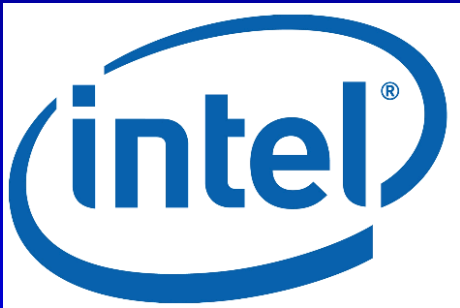


H-D patented engine noise

Summarize how they're different

- **VOC:** You know what you're looking for. Fill out template.
- **ED:** Discover things the users can't tell you.

Mission 2: Discover how ED has been applied successfully in industry



Intel's rugged PC



Quicken's "Follow Me Home" Study

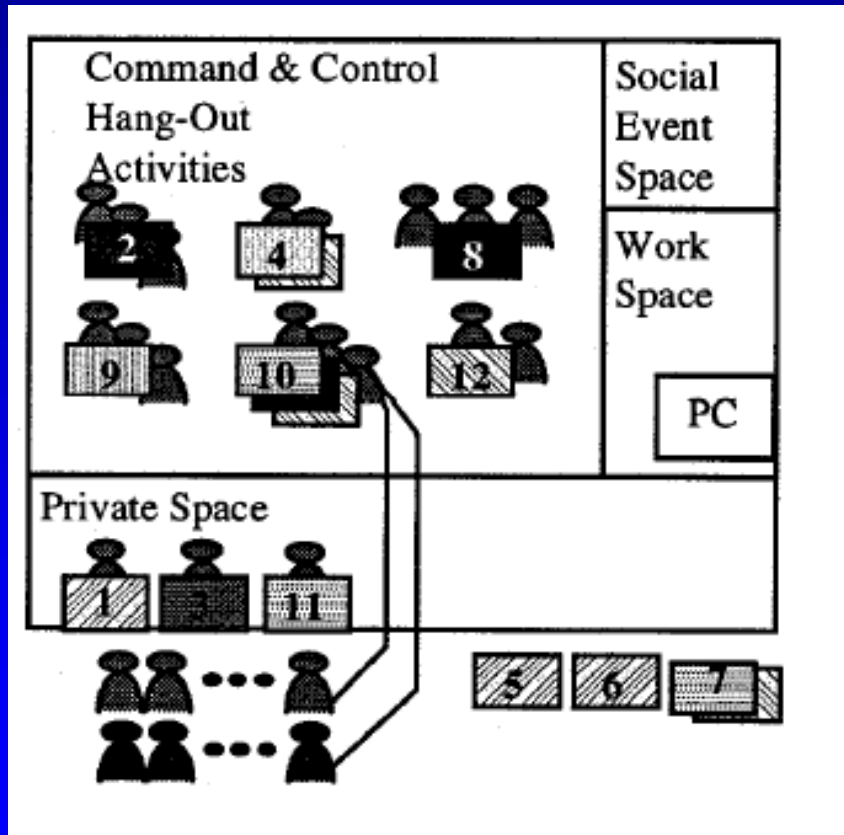


"People don't know what they want until you show it to them. That's why I never rely on market research. Our task is to read things that are not yet on the page."

Steve Jobs, as quoted in Isaacson (2011, p. 566)



Intel's Study of Computing in the Home



PC was "in the workspace," not integrated into the living spaces.

Mission 3: Introduce the key tools of ED

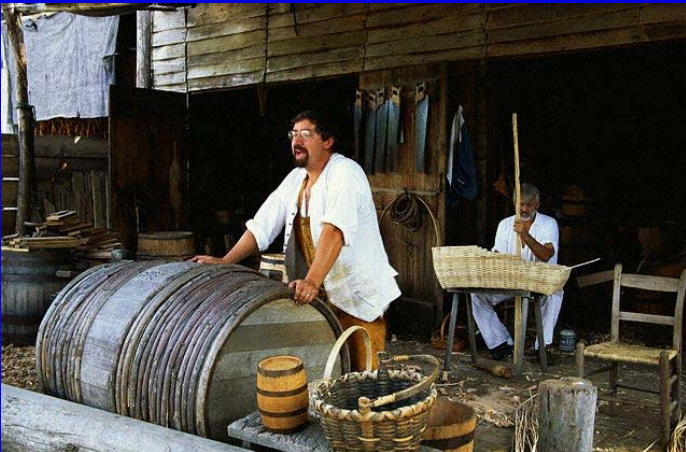


New tools. New rules.

- Spradley's work from '79-80
- Referred to by other names
- Ethnographic interviews
- Different questions and roles
- Not part of typical engineering skillset

What's an Ethnographic Interview?

A series of friendly conversations with respondents becoming informants.



Different roles

- Interviewer is listener.
Informant drives the interview.
- Guide the informant, based on responses.
- Ditch the script or lose discovery.

How Do I Structure the Interview?

- Greeting
- Purpose
- Grand Tour
- Mini-Tour
- ... Probes, LISTENING,
capturing
- Closure
- Next Time

Questions & Answers in Ethnography

Unlike traditional
interviews, they are
related in ethnography.

The Framework for Types of Questions

1. Descriptive questions

- A. Grand tour questions
- B. Mini-tour questions
- C. Experience questions
- D. Native language questions

2. Structural questions

- A. Verification questions
- B. Cover term questions
- C. Included term questions
- D. Substitution frame questions
- E. Card sorting structural questions

3. Contrast questions

Grand Tour Questions

Type of question	What to ask?	Why did you ask it?
Typical grand tour question	"Could you describe a typical night at Brady's Bar?"	Questions ask the informant to generalize, to talk about a pattern of events.
Specific grand tour questions	"Could you describe what happened at Brady's Bar last night?"	Subjects find it easier to respond to a recent situation
Guided grand tour question	"Could you show me around the office?"	Informant actually gives the grand tour.
Task related grand tour question	"Could you play a game of backgammon and explain what you are doing?"	The informant performs simple tasks that aid in the description. Ask "What is this" and "What are you doing now?"

Mini-Tour Questions

Grand tour question	Typical mini-tour question	What are the questions doing?
"Could you describe a typical night at Brady's Bar?"	"What happens when you have a patron that has been over served?"	Questions ask the informant to provide more detail about a smaller part of the experience.

Experience Questions

Typical question to ask	What's going on.
"Could you tell me about some of the experiences you've had working as a bartender, can you recall any of them?"	This question asks informants for any experiences they have had in this particular setting. Questions are usually very open-ended

Native Language Questions

Type of question	What to ask	Why would you ask it?
Typical direct-language question	"How would you refer to it?"	It's the most important question, it gets to the terminology used by the respondent.
Hypothetical-interaction question	"If you were talking to another bartender would you say it that way?"	This question tends to overcome the tendency to translate for the interviewer and gets them to use their terminology and language.
Typical-sentence question	"What are some sentences I would hear that include the word <i>flop</i> ?"	This question provides an informant with one or more native terms and then asks them to use the terms in typical ways.

Quiz Using Field Examples

Mission 4: Critique a sample ethnographic interview for ED content



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Debrief



Final Instructions

Mission 1: Know the difference between VOC and ED.

Mission 2: Understand industrial uses of ED.

Mission 3: Acquainted with key tools.

Mission 4: Experience analyzing an interview clip.

This presentation will
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Your Next Mission..



WMU's Parkview
Engineering Campus
ASEM Top 5 Undergraduate &
ASEM Top 3 Graduate
Engineering Management
Programs

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