

User Needs

Medium Fidelity

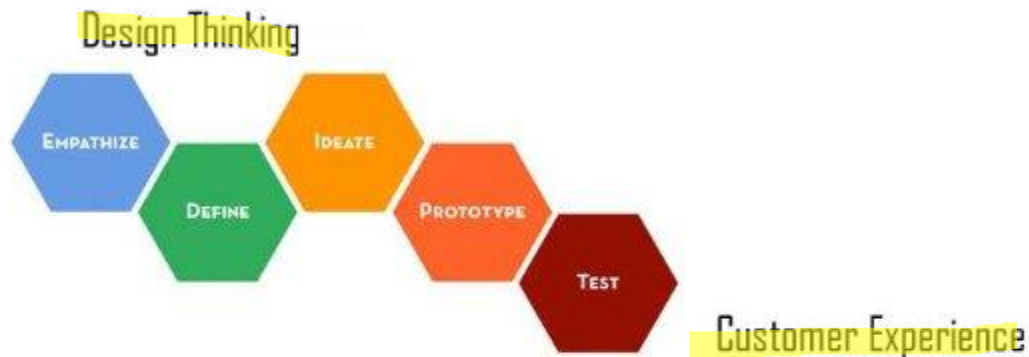
Design Scenarios

User Centered Design

Wrap up



Defining User Centered Design



Defining User Centered Design

A framework of processes where the environment, user goals and characteristics of an artefact are given close attention during the design process.

User Centered Design (UCD), often consults users about their needs and involves them in the design process. UCD can also involve users and stakeholders as designers throughout the design process (more in co-design and participatory design).

UCD has been around since the 80's, originally created by Donald Norman. UCD became popularized since its publication in "User-Centered System Design: New Perspectives on Human-Computer Interaction" (Norman & Draper, 1986).

Abras, C., Maloney-Krichmar, D., & Preece, J. (2004). User-centered design. Bainbridge, W. *Encyclopedia of Human-Computer Interaction*. Thousand Oaks: Sage Publications, 37(4), 445-456.

Norman, D. A., & Draper, S. W. (1986). User centered system design. *New Perspectives on Human-Computer Interaction*, L. Erlbaum Associates Inc., Hillsdale, NJ, 3.



Defining User Centered Design

Gould and Lewis (1985) defined three principles they believed would lead to the simple use of a computing system or environment.

1. Early focus on users and tasks
2. Empirical measurement
3. Iterative design

Sharp, H., Rogers, Y., & Preece, J. (2007). Interaction design: beyond human-computer interaction.





Stories



Proverbs



Personas



Scenarios



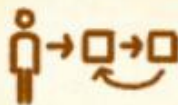
Content Inventories



Analytics



Wireframes



Process Flows



System Maps



Concept Maps



User Surveys



Storyboards



Concept Designs



Prototypes



Narrative Reports



Design Patterns



Style Guides



Specifications



Plans



Presentations

User E^Xperience Treasure Map

by Jeffery Callender and Peter Morville



What benefits do UCD/Co-design bring in practice?

1. Ironing out common errors
2. Hardware advances
3. Measuring success and failure
4. Natural marketplace selection of artefact
5. Ease of use



Defining User Centered Design

What kind of users should we be involving?

Primary, secondary and tertiary.

1. Intended users of artefact
2. Occasional users or used by intermediary
3. Affected by or make decisions about its purchase (stakeholders)

Abras, C., Maloney-Krichmar, D., & Preece, J. (2004). User-centered design. Bainbridge, W. *Encyclopedia of Human-Computer Interaction*. Thousand Oaks: Sage Publications, 37(4), 445-456.



Participatory Design/Co-design

Co-design is:

Working with the community as active participants in the design process, to create shared value



Involving all stakeholders/users in the design process from the get-go.

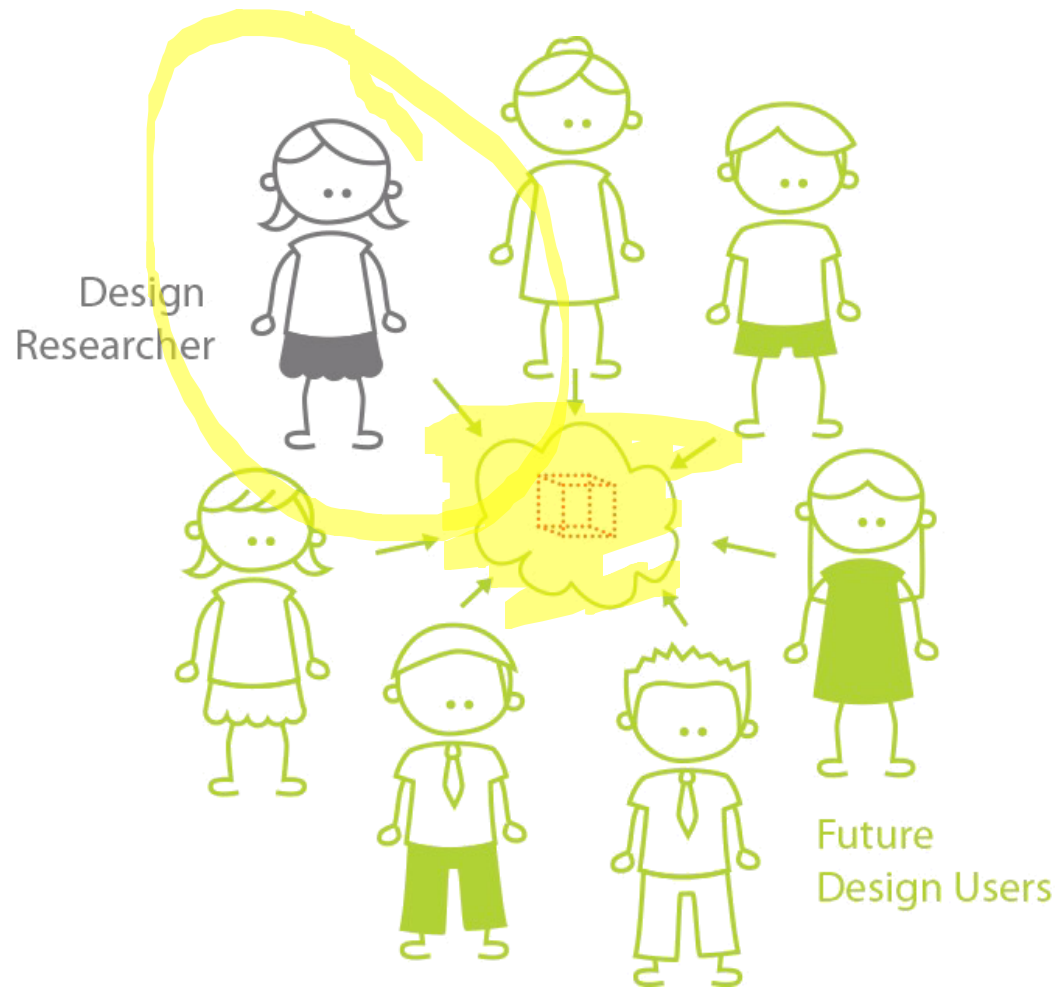
Focused on the processes and procedures of design.

Co-design environments often produce more targeted outcomes.

Schuler, D., & Namioka, A. (Eds.). (1993). *Participatory design: Principles and practices*. CRC Press.



Participatory Design/Co-design

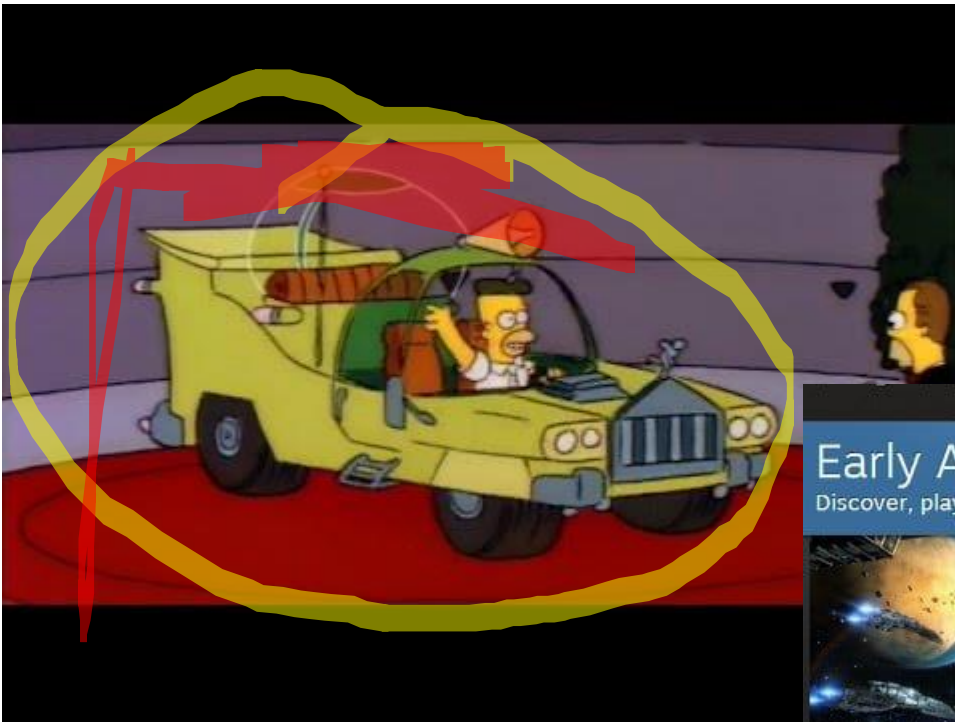


Participatory Design/Co-design



Participatory Design/Co-design

How **not** to implement co-design



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Drawing it **all** together

Understanding your **user needs** and being able to ideate will make you effective at creating a real solution to the problem space you have identified.

Medium fidelity prototypes further our understanding of the design space, as well as contextual tasks for users using **design scenarios**.

You need to involve your users from the beginning, if possible, harness **User Centered Design**.

Next week we will look at **UI Design**.

