# User Environment Design

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### Introduction





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The User Environment Design is a floor plan of the new product showing the places in the product, the function in that place, and the links between one place and another. It shows the parts of the product from the user's point of view and helps the team think structurally about the product.

UEDs are also used to further identify what functionality your system will provide

Also shows where users need that functionality







### Introduction

### **Design Stages:**

- Interviews & Observations
- Work Modelling
- $\cdot$  Consolidation
- Prototypes
- Evaluation
- Implementation

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### Introduction

### **Benefits of UED**:

Presents structural issues of system

- Goal is to produce a system design that keeps users work coherent
- Formalizes system structure to support work flow, connected activities
- $\cdot$  Any system you think of has UED



- If system seems incoherent, probably structured poorly
- · Banking systems
- Post-its
  - You can reverse engineer systems using UEDs
- · Competing systems, previous systems
- $\cdot\,$  Called Reverse UED

### **Introduction – Tips**

- · Each focus area a single, conceptual entity
  - Should be able to define each focus area's purpose in single sentence
  - User should be able to glean crisp concept of focus area's intent from final design
- Use post-it notes to define your UEDs
- Think in terms of functionality system provides, rather than how that functionality will provided



- You are laying out steps for new way of performing work
- Not separated but parallels work redesign
- $\cdot$  Look at UED to check redesign
  - Are areas coherent?
  - · Do focus areas overlap in purpose

# Instructions **Transforming Work Guidance**

First step is to identify a set of breakdowns that can be addressed

- Generate your vision of a new system from this
- What you want to solve.
- What you want to keep.
- · How you will evaluate success.
- Transform work in a way that incorporates new system you design



# **Instructions** From Vision to Design

- Transform work using HTA to represent new work practice
- · An intermediary representation of system
  - · Allows us to represent coherent chunks of work process
  - · Allows us to define functionality necessary to perform those coherent chunks of work
  - · Want to define the intent of the system independently of how system will meet that intent



# Instructions **Breaking Up System Design**

- Every system has places where user can work
- · Each place has a set of functions available
- Each place has links to other, related places
- UED is like a floor plan for what work will be performed where and on what



### **Instructions** Needed Elements

- Focus areas (the places)
- Links between focus areas
- · In each focus area:
  - Name
  - Purpose
  - Functions provided
  - Objects that are manipulated



### Instructions **Some Clues**

- Logical places within system
  - Screens, views where work occurs
  - No h/w or s/w constraints
- A user-centric view
- Note that UED can represent a simplification of class diagram



# Contact

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