1214: Tasks and activities

April 4, 2013



TASK ANALYSIS



Task analysis

What people do to accomplish their goal(s)

Identifies

Pain points and frustrations

Chronological sequences and interdependencies

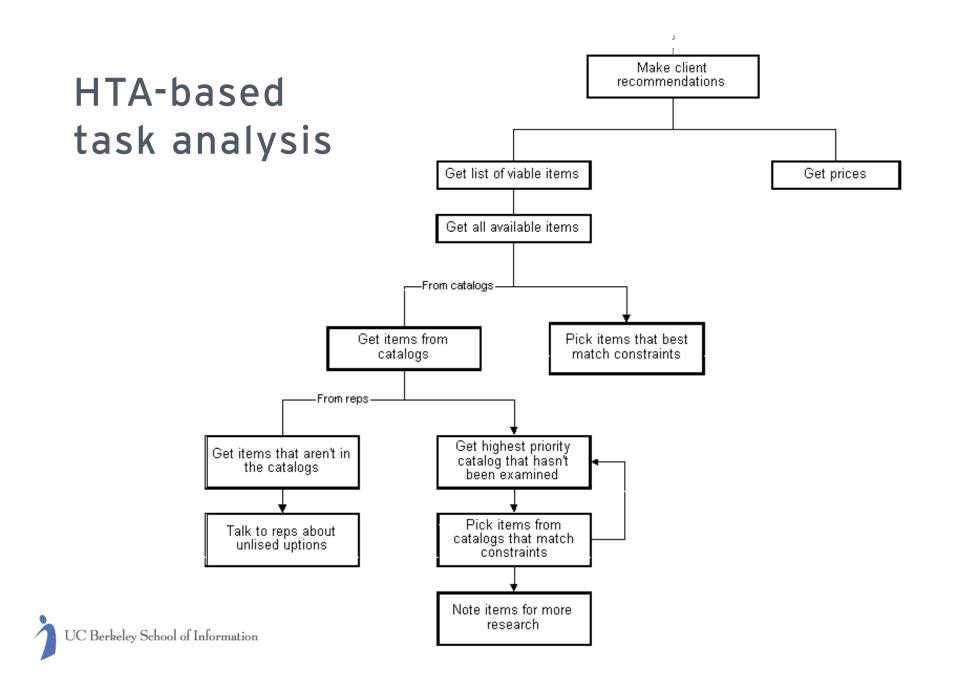
Needed resources, like content or functionality



Outcomes

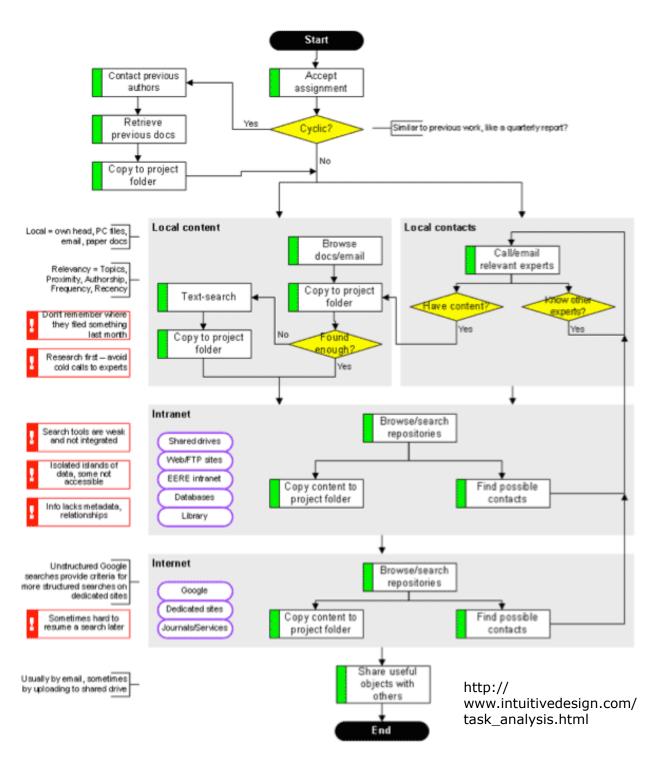
Hierarchical task analysis charts Grids Towers Swimlanes





Sequential task analysis diagram

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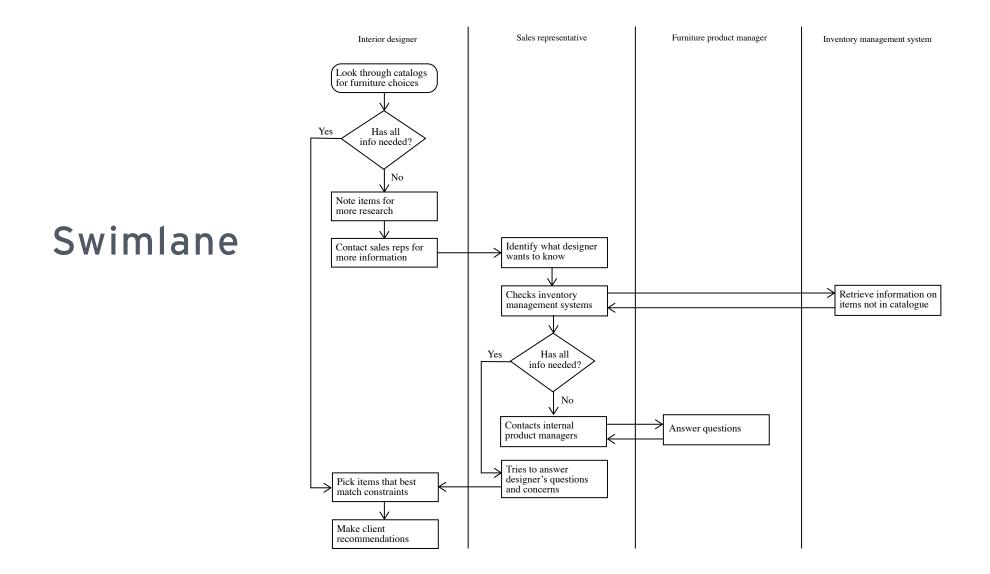
Grid example

Subtasks	Designer gets out catalogs	Designer examines sofa section in a catalog	Designer selects several sofas	Designer contacts manufacturer sales reps	Designer picks sofas that match project constraints	Designer makes final list of sofas
Goal	Get all available items	Pick items that match constraints	Note items for more research	Get more information about selected items	Get list of viable items	Make client recommendations
Considerations/Influencers	How easy is it for me to find the needed information?	What is the appearance? What is the cost, availability, and delivery time?	Do any of the sofas match the constraints and the overall design direction?	Are there options that may be unlisted? Have the designer seen a similar item in person? Is the desired sofa available?	Which sofas best match the constraints of this project and the desires of the clients?	How quickly can the recommendations laid out? How to explain competing or conflicting needs and constraints?
Pain-points	Information is organized inconsistently. A needed catalog is missing.	Catalogs do not show all inventory and are missing information.	Photographs can be inaccurate.	Waiting for salespeople to return calls and emails. Fabric swatches are slow to arrive but without them it's hard to understand texture and color.	There is often no obviously best choice. Both clients and designers may have contradictory desires.	An attractive proposal is important, but can take time designer would rather spend on other projects.
Tools	Catalogs	Catalogs	Catalogs	Catalogs	Spreadsheet	Spreadsheet
	Websites	Websites	Sticky notes	Sticky notes	Fabric swatches	Fabric swatches
				Telephone	Photographs of sofas	Photographs of sofas
				Email		Word processing program
Key Critical to task Help	oful but not necessary			Chat	Adapted fro	om Todd Zaki Warf

Tower example

Create a library	oi possidiiities	Pic	k sofas that match the	Resolve any debate by finding specifics		r ut togetner iinal so	ofa recommendations
Curate an image library Decide to save a catalog I like Rip out a page from a magazine I admire Snap a photo of sofa in a hotel	Assemble project choices Mull over my collection of catalogs Track down a photo from my archive Browse through bookmarked sites	Get enthusiastic about specific sofasImagine the color of the sofa in the roomDrop a sofa that's the wrong texture or sizeDecide if my budget can stretch a littleMap the dimensions of each sofa to the roomWonder if clients will pay for the perfect sofa	Save a few sofas for more debate and research Select a few of the most promising sofas Note down questions about each sofa	Take clients to the showrooms Ask sales reps about availability and delivery Skim through online forums Feel frustrated by lack of online information Get irritated at how long it takes sales reps to answer questions Ask rep about any suitable unlisted items	Circle round and round Feel upset that sofas don't match what I and the clients want Ask colleagues for other sofa suggestions Reluctantly go back to second-choice options Make myself look for other choices Feel cautiously optimistic about some new discoveries	Pick a sofa Compare viable sofas to existing project plan Get excited about the final sofa choice Prioritize viable choices	Get client excited about the sofa choiceChoose some beautiful photos of sofasWrite some evocative text to describe themAdd sofa to project planSell client on my sofa choice
Furniture catalogs	Furniture catalogs	Photograph	Sticky notes	Email	Email	Spreadsheet	Spreadsheet
Interior design magazines	Interior design magazines	Pricing information	Pens	Chat	Telephone	Fabric swatches	Fabric swatches
Snapshots	Snapshots	Color	Spreadsheet	Telephone	Spreadsheet	Photographs of sofas	Photographs of sofas
Interior design websites	Interior design websites	Dimensions		Company websites	Interior design websites		Word processing softwa
		Delivery information		Sales rep contact info	Interior design magazines		L

Adapted from Indi Young on mental models



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Which diagram?

Diagram	Perspective	Ordering	Vocabulary	HIghlight
HTA diagram	Single actor	Hierarchical	Designers'	Goals
Flowchart	Single actor	Sequential	Designers'	Decision points
Tower	Single	Sequential	Users'	Emotions and resources
Grid	Single	Sequential	Mixed	Triggers for use
Swimlane	Multiple	Sequential	Designers'	Interdependencies



SCENARIOS



What are scenarios?

Stories about people carrying on a *well-defined* activity.

Problem/context scenario

activity as it exists prior to technology

Design scenario describes new vision for interaction



Carroll Rossen & Carroll, p. 18

Scenarios consist of....

- Setting context of use
- Actors with high level goals, task goals, and plans
- Actions observable behavior
- **Events** external actions produced by computer or other features of a setting
- **Evaluation** mental activity interpreting situation
- **Plot** sequence of actions & events



Carroll Rossen & Carroll, p. 18

Scenario basics

Establish a goal and context

Why is the persona using the product now What will make this interaction successful

Describe the interaction

Stay at a high level and

Avoid detailed descriptions of the interface

End with the result

What happens as a result of this interaction What made it a success or disappointment



Uses for scenarios

Problem scenarios & personas

Develop and illustrate assumptions about existing users and uses or targeted users and uses

Summarize empirical findings about users, uses

Design

communication within design group

For communication with users (e.g., "is this realistic?")

For evaluation of designs, prototypes (e.g., walk-throughs)



Types of scenarios

Daily use frequent actions

Necessary use

all actions that MUST be performed

Edge case

unusual events



http://uxarts.blogspot.com/2008/03/what-happens-when-your-design-only-for.html

Cooper



From typology to scenario

Typology

Older creators have an average age of 58 and are experienced Internet users. They are highly educated, like sharing pictures, and are the most likely of the creator groups to have built their own Web sites. They are also the most likely to have used the Internet for genealogical research.

Persona

Mary is 58. She is an experienced Internet user. **She has an MBA** and uses the Internet a lot for her work. In her personal life, she is an avid photographer and **shares her "art" photos online.** She has **built her own Web site** for her photography. She also engages in **genealogical research**.

Problem scenario

Online **genealogical research**:

Mary finds a family tree template online.

She starts filling in what she knows. But she's **missing lots of information**. She **asks family members** on Facebook to contribute. As they give her names, dates, and photos, she **enters the text** into her template. But **her template doesn't accommodate photographs...**.

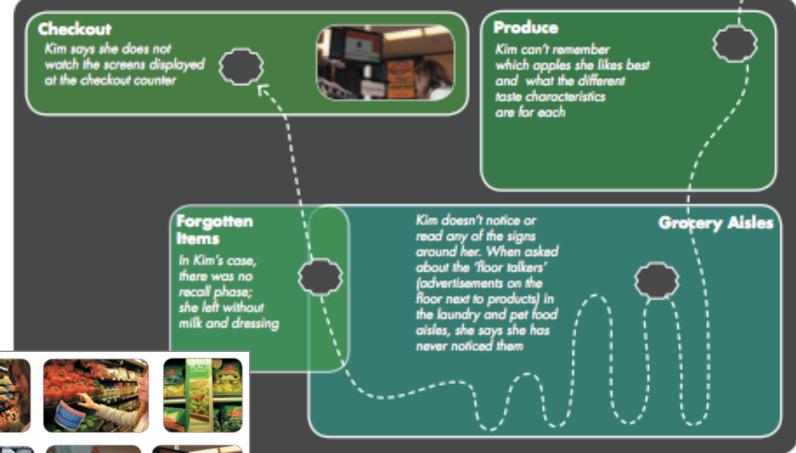
Scenario 1: Kim forgets milk and salad dressing at Jewel Osco



"My challenges are trying to remember what was on the other list that I forgot. And sadly yes, that IS typical for me. Also the challenge of trying to remember which apples I like."

Maps and paths





Rachel Pluto, The Value of Forgotten Items www.id.iit.edu/externalID/index.php?id=680

CONFIGURING RESPONSIBILITY



Configuring the user

Choices about

- who the user is
- which characteristics, actions, preferences matter
- what the user is like

Division of responsibility, capability, power between user and system.



Woolgar, "Configuring the user"

The problem of representation

No representation is an objective, unbiased report of what is real

"Representations of work [are] interpretations in the service of particular interests and purposes, created by actors specifically positioned with respect to the work represented."

Suchman, Making Work Visible, p. 58

Representations create as much as they reflect the world.

