

I214: 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

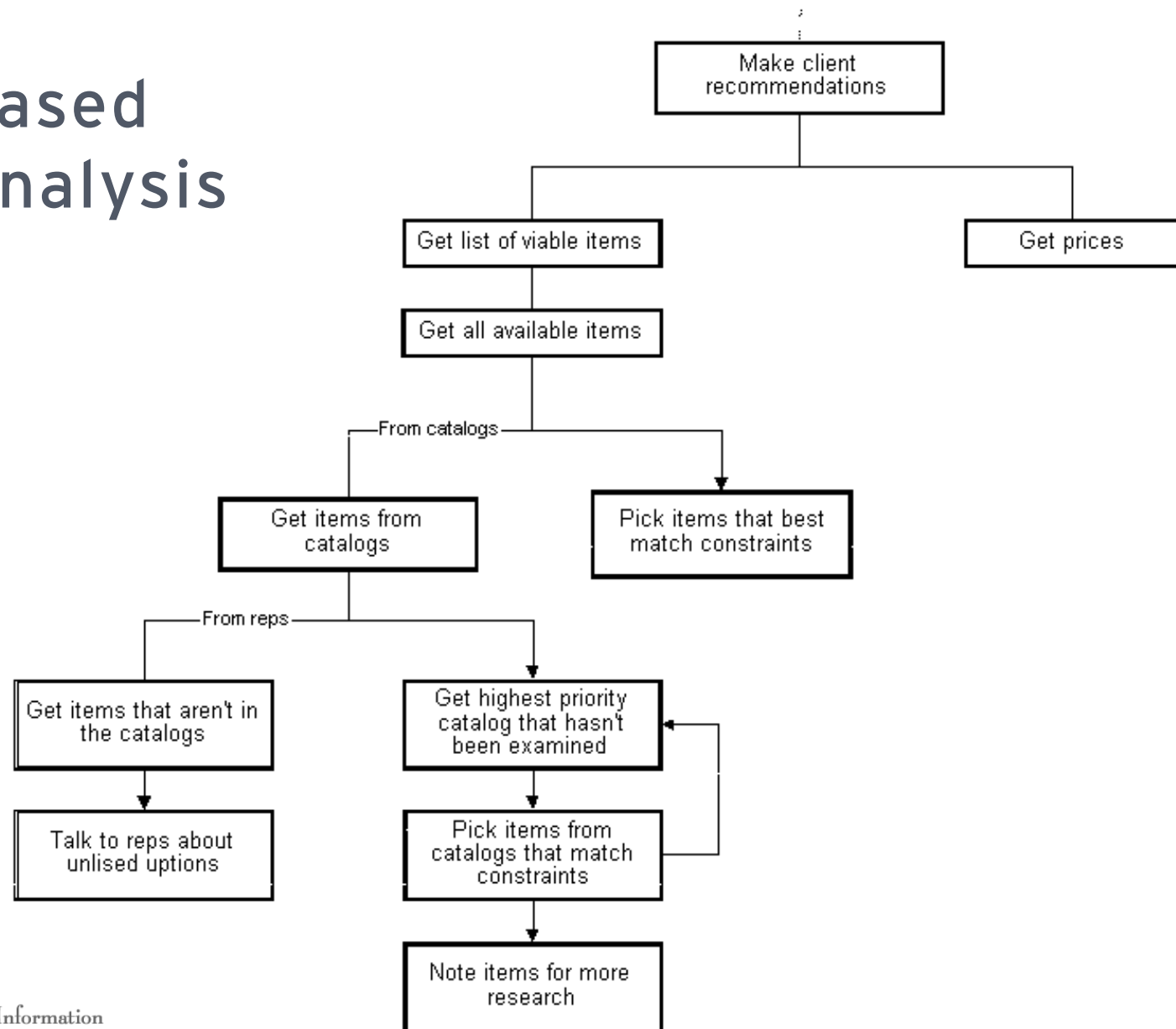
Hierarchical task analysis charts

Grids

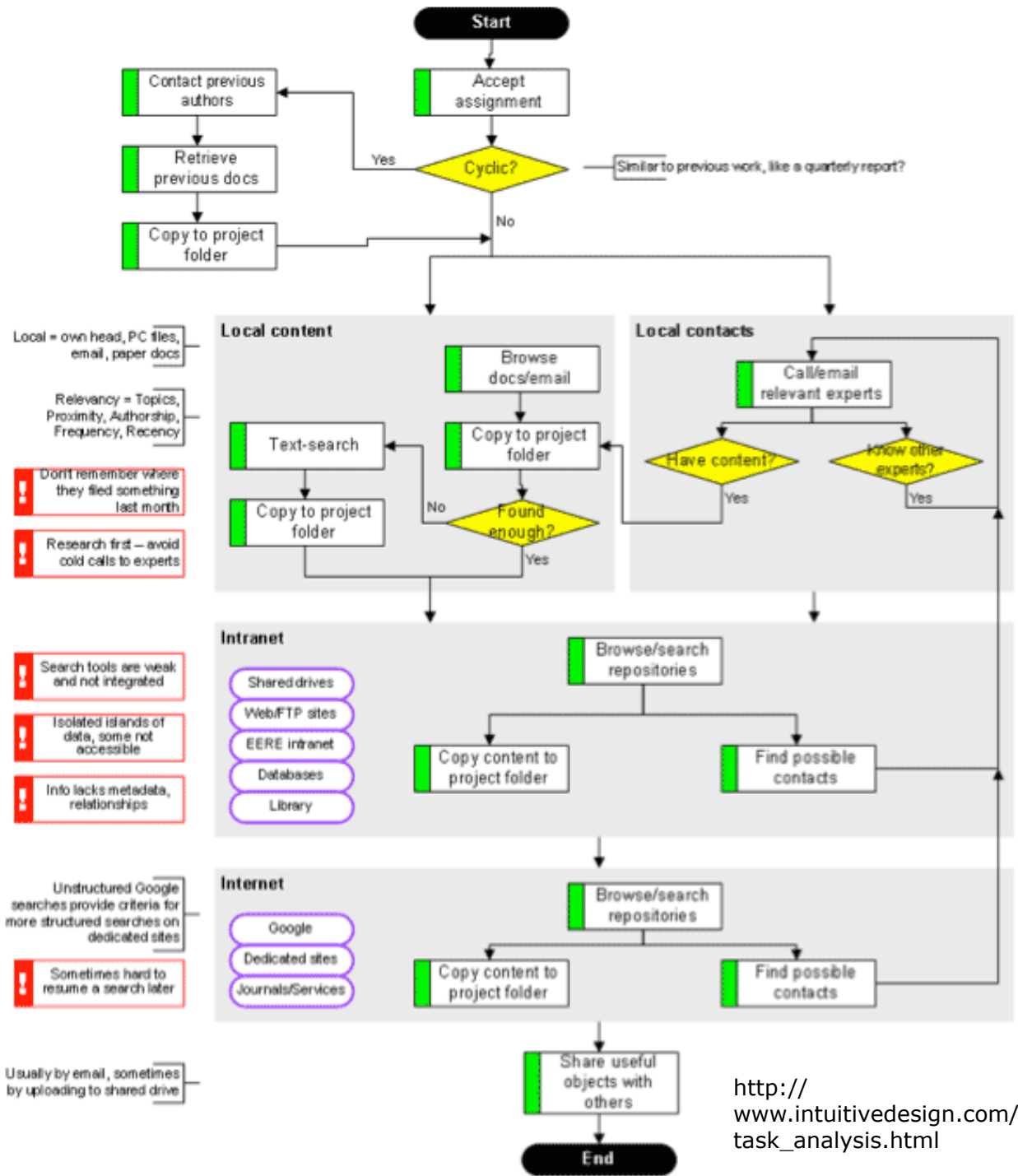
Towers

Swimlanes

HTA-based task analysis



Sequential task analysis diagram



http://www.intuitivedesign.com/task_analysis.html

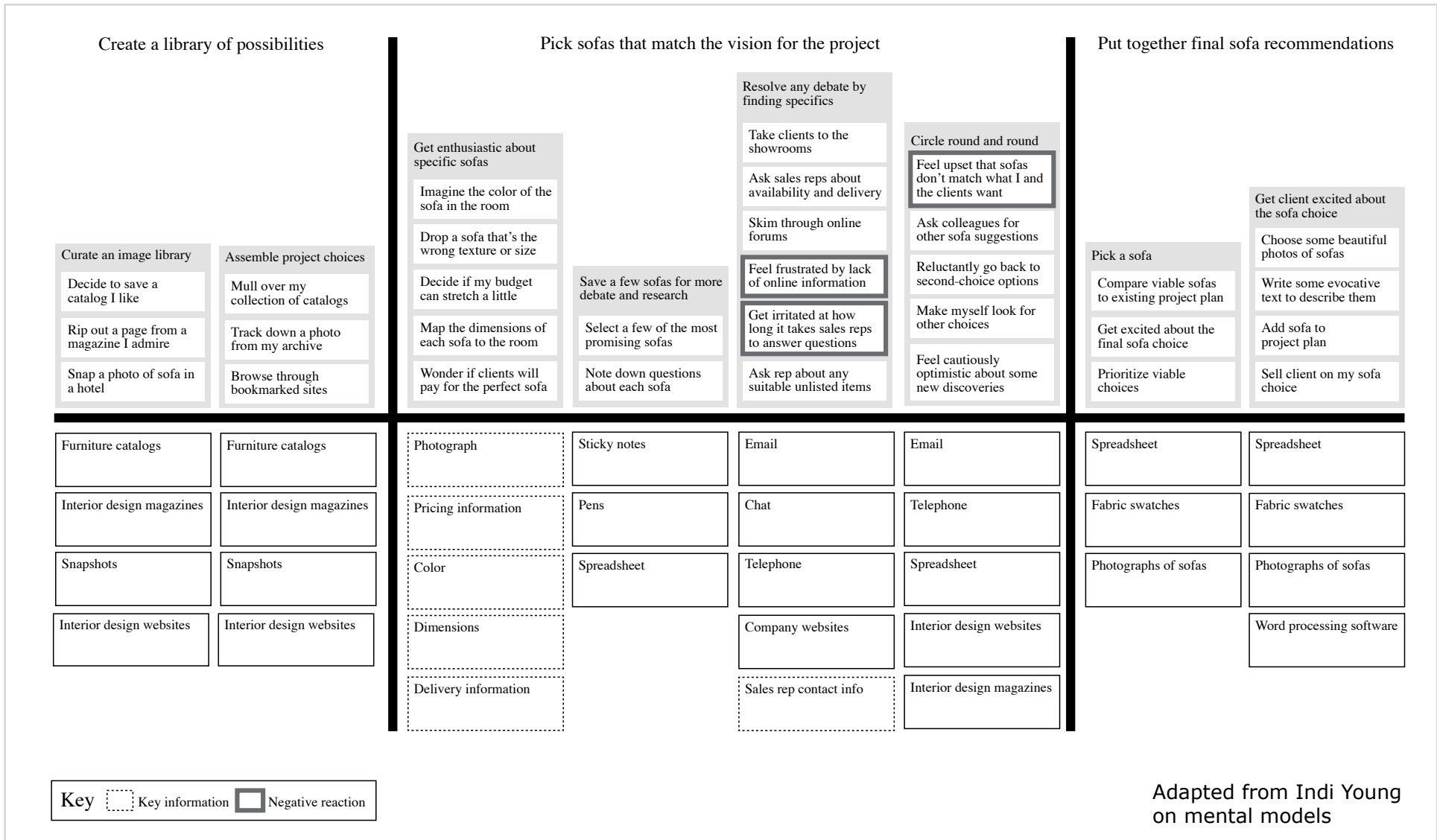
Grid example

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
				Chat		

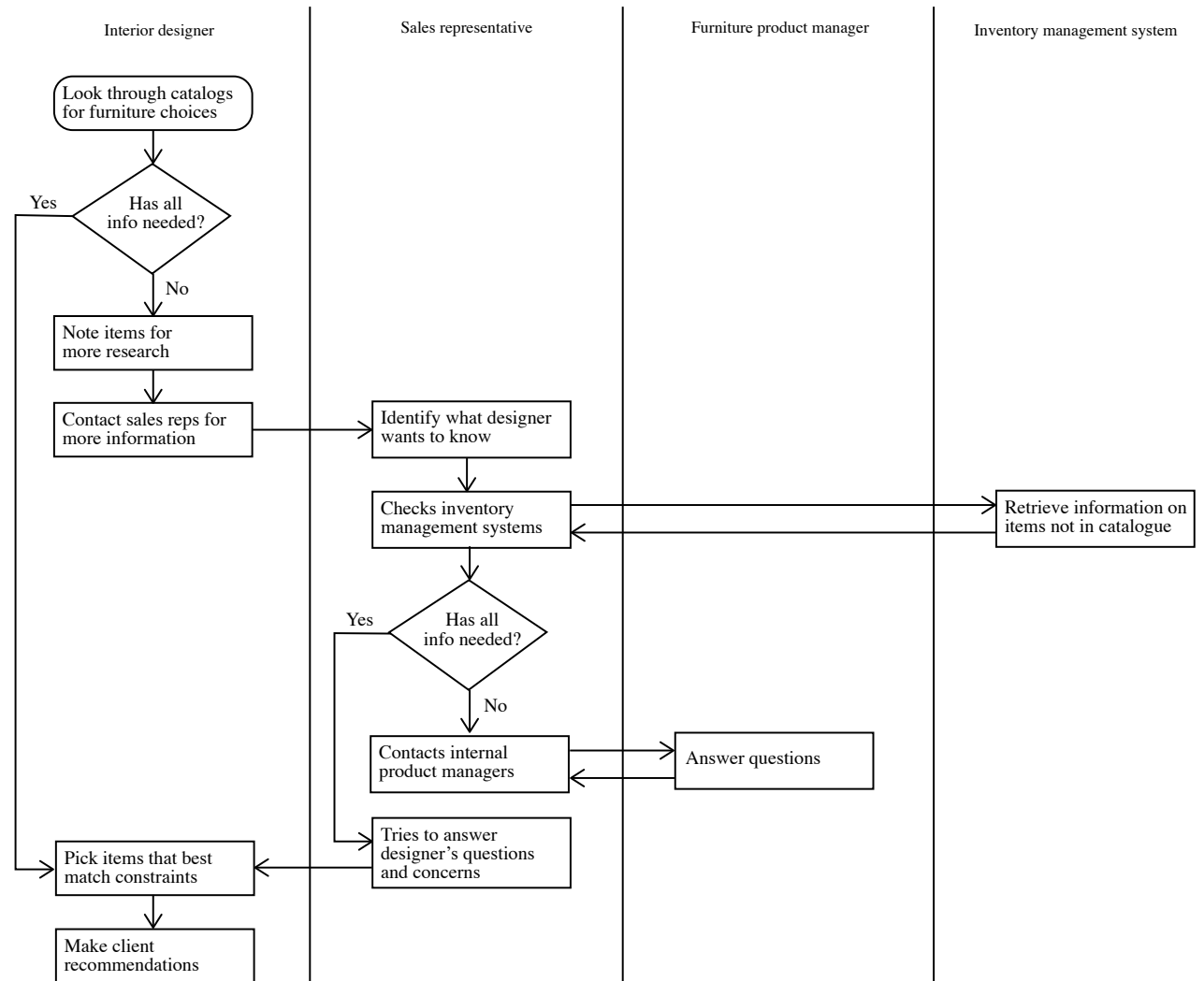
Key Critical to task Helpful but not necessary

Adapted from Todd Zaki Warfel

Tower example



Swimlane



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

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

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

Cooper

“Happy-Case Scenario” Design Example: The Orion VII Hybrid Bus



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

From typology to scenario

Typology	Persona	Problem scenario
<p>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.</p>	<p>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.</p>	<p>Online genealogical research:</p> <p>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....</p>

Maps and paths

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."



Checkout

Kim says she does not watch the screens displayed at the checkout counter



Produce

Kim can't remember which apples she likes best and what the different taste characteristics are for each

Forgotten Items

In Kim's case, there was no recall phase; she left without milk and dressing

Grocery Aisles

Kim doesn't notice or read any of the signs around her. When asked about the 'floor talkers' (advertisements on the floor next to products) in the laundry and pet food aisles, she says she has never noticed them



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.

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.