Designing Tasks

Effectively role-playing as representative users

The Cheap Shop Catalog Store

In Cheap Shop, people shop by browsing paper catalogs scattered around the store.

When people see an item they want, they enter its item code from the catalog onto a form.

People give this form to a clerk, who brings the item(s) from the back room to the front counter.

People then pay for the items they want.



Item code	Amount
323066 697	1

- Says what the user wants to do but does not say how they would do it
 - no assumptions made about the interface
 - can be used to compare design alternatives in a fair way

- 2. Are very specific
 - says exactly what the user wants to do
 - specifies actual items the user would somehow want to input

3. Describes a complete job

- forces designer to consider how interface features work together
- contrasts how information input / output flows through the dialog
 - where does information come from?
 - where does it go?
 - what has to happen next?

Do not

- create a list of simple things the system should do
- · present a sub-goal independent of other sub-goals

4. Says who the users are

- name names, if possible
- says what they know
- Why?
 - design success strongly influenced by what users know
 - can go back and ask them questions later
 - reflects real interests of real users
 - helps you find tasks that illustrate functionality in that person's real work context

5. Are evaluated

- Circulate descriptions to users, and rewrite if needed
 - ask users for
 - omissions
 - corrections
 - clarifications
 - suggestions

- 6. As a set, identifies a broad coverage of users and task types
 - the typical 'expected' user, typical routine tasks
 - the occasional but important user, infrequent but important tasks
 - the unusual user unexpected or odd tasks

Task example 1

- Fred Johnson, who is caring for his demanding toddler son, wants a good quality umbrella stroller (red is preferred, but blue is acceptable).
- He browses the catalog and chooses the JPG stroller (cost \$98. item code 323 066 697).
- He pays for it in cash, and uses it immediately.

• Fred is a first-time customer to this store, has little computer experience, and says he types very slowly with one finger. He lives nearby on Dear Bottom Avenue NW.

> JPG Stroller. This well made but affordable Canadian stroller fits children between 1-3 years old. Its wheels roll well in light snow and mud.

> > ...\$98.

Red: 323 066 697 Blue:

323:066r698erg

Discussion

- Fred has many properties of our typical expected user:
 - many customers are first time shoppers,
 - a good number have no computer experience
 - a good number are poor typists.
- The task type is routine and important.
 - many people often purchase only one item
 - a good number of those pay by cash
 - as with Fred, people often have a general sense of what they want to buy, but decide on the actual product only after seeing what is available.

Task example 2

- Mary Vornushia is price-comparing the costs of a child's bedroom set, consisting of a wooden desk, a chair, a single bed, a mattress, a bedspread, and a pillow all made by Furnons Inc.
- She takes the description and total cost away with her to check against other stores.
- Three hours later, she returns and decides to buy everything but the chair.
- She pays by credit card,
- She asks for the items to be delivered to her daughter's home at 31247 Lucinda Drive, in the basement suite at the back of the house.
- Mary is elderly and arthritic.

Discussion

- Like Mary,
 - a reasonable number of store customers are elderly, with infirmities that inhibit their physical abilities.
 - a modest number of them also enjoy comparison shopping, perhaps because they have more time on their hands or because they are on low income.
- The task type is less frequent, but still important.
 - although this would be considered a 'major' purchase in terms of the total cost, the number of items purchased is not unusual.
 - delivery of large items is the norm
 - most customers pay by credit card for larger orders.

Task example 3

- John Forham, the sole salesperson in the store, is given a list of 10 items by a customer who does not want to use the computer.
- The items are:
 - 4 pine chairs, 1 pine table, 6 blue place mats, 6 "lor" forks, 6 "lor" table spoons, 6 "lor" teaspoons, 6 "lor" knives, 1 "tot" tricycle, 1 red ball, 1 "silva" croquet set
- After seeing the total, the customer tells John he will take all but the silverware
- The customer then decides to add 1 blue ball to the list.
- The customer starts paying by credit card, but then decides to pay cash. The customer tells John he wants the items delivered to his home the day after tomorrow. While this is occurring, 6 other customers are waiting for John.
- John has been on staff for 1 week, and is only partway through his training program

Discussion

- This task introduces the clerk as a system user.
 - Because the store has a high turnover in its staff, new employees such as John are also common.
 - Thus John reflects a 'rare' but important group of users.
- The task type is less frequent, but still important
 - The task, while complex, is fairly typical i.e., people making large numbers of purchases often ask the clerk to help them.
 - Similarly, clerks mention that customers often change their mind partway through a transaction i.e., by changing what they want to buy and/or by changing how they want to pay for it.
 - Customers, however, rarely give specific delivery dates, with most wanting delivery as soon as possible.
 - Lineups for clerks are common during busy times.

Your Turn. You do it.

- With team choose a primary task
 - Informed by groupings from affinity diagramming
 - You should have strong support from facts
- Write a task example for the chosen task
 - Good task descriptions:
 - 1. Say what user wants to do, not how
 - 2. Are very specific
 - 3. Describe a complete job
 - 4. Say who users are
 - 5. Are evaluated (will be by us)
 - 6. As a set, describe a broad coverage of users and tasks
- We will evaluate team task examples as a class