

USER EXPERIENCE  
**Usability Testing example**  
Goal-Directed Design

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My company's application is a currency converter. This is how a usability test would be documented:

1. Preparation

a. Measures

i. Performance measures

- Time to perform each task, in seconds
- Number of errors found per task
- Number of clicks to achieve each task
- Inactive time per task, in seconds  
(i.e., how long does the user stay looking at the page without performing any action)

ii. Preference measures

(rated by the user in a scale from 1 to 7, 1 being very bad and 7 very good, except where indicated)

- Perceived attractiveness of the colours
- Perceived attractiveness of the typography
- To what extent does the application fulfill the user's needs
- Ease of use
- Perceived efficiency (i.e., whether the application is fast)
- Whether each task was finalised successfully (rated as yes/no)

b. Script

i. Scenario 1. You just arrived in Berlin and the price of a taxi from the airport is 50€.

- Tasks:
  - a. Set up the application to convert from euros to Danish kroner.
  - b. Convert 50€ to Danish kroner.

ii. Scenario 2. You have an investment of 2 million Danish kroner in a Danish bank and another investment of \$400,000 in an American bank.

- Tasks:
  - a. Set up the application to convert from American dollars to Danish kroner.
  - b. Convert \$400,000 to Danish kroner.
  - c. Flip the conversion direction so that the application converts from DKK to USD.
  - d. Convert 2 million Danish kroner to American dollars.

iii. Scenario 3. You will travel to France, so you need to exchange Danish kroner into euros.

- Tasks:
  - a. Check out the Danish kroner to euro rate for the day.
  - b. Compare it with the Danish kroner to euro rate for the previous 7 days.

c. Consent form. Just use a standard form.

## 2. Moderation

- a. Notes. For each participant, write down the notes taken during their test performance.

## 3. Analysis

- a. Four users performed the test

- b. Measures:

- i. Performance measures

|  | Measure           | User 1 | User 2 | User 3 | User 4 | Average | Total |
|--|-------------------|--------|--------|--------|--------|---------|-------|
| <b>Scenario 1</b>                            |                   |        |        |        |        |         |       |
| Task a – Set conversion currencies           |                   |        |        |        |        |         |       |
|  | Time per task (s) | 2      | 1      | 2      | 4      | 2.25    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 4      | 6      | 4      | 5      | 4.75    |       |
|  | Inactive time (s) | 1      | 1      | 1      | 2      | 1.25    |       |
| Task b – Convert                             |                   |        |        |        |        |         |       |
|  | Time per task (s) | 1      | 1      | 1      | 2      | 1.25    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 1      | 2      | 1      | 1      | 1.25    |       |
|  | Inactive time (s) | 0      | 1      | 0      | 0      | 0.25    |       |
| <b>Scenario 2</b>                            |                   |        |        |        |        |         |       |
| Task a – Set conversion currencies           |                   |        |        |        |        |         |       |
|  | Time per task (s) | 2      | 1      | 2      | 2      | 1.75    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 4      | 5      | 4      | 4      | 4.25    |       |
|  | Inactive time (s) | 1      | 1      | 1      | 1      | 1.00    |       |
| Task b – Convert                             |                   |        |        |        |        |         |       |
|  | Time per task (s) | 1      | 1      | 1      | 1      | 1.00    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 1      | 1      | 1      | 1      | 1.00    |       |
|  | Inactive time (s) | 0      | 0      | 0      | 0      | 0.00    |       |
| Task c – Flip conversion currencies          |                   |        |        |        |        |         |       |
|  | Time per task (s) | 1      | 2      | 1      | 3      | 1.75    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 1      | 2      | 1      | 1      | 1.25    |       |
|  | Inactive time (s) | 0      | 1      | 0      | 2      | 0.75    |       |
| Task d – Convert                             |                   |        |        |        |        |         |       |
|  | Time per task (s) | 1      | 1      | 1      | 2      | 1.25    |       |
|  | No. errors        | 0      | 0      | 0      | 0      | 0.00    | 0     |
|  | No. clicks        | 1      | 1      | 1      | 1      | 1.00    |       |
|  | Inactive time (s) | 0      | 0      | 0      | 1      | 0.25    |       |
| <b>Scenario 3</b>                            |                   |        |        |        |        |         |       |
| Task a – Check out conversion rate           |                   |        |        |        |        |         |       |
|  | Time per task (s) | 3      | 5      | 2      | 7      | 4.25    |       |
|  | No. errors        | 0      | 1      | 0      | 1      | 0.50    | 2     |
|  | No. clicks        | 2      | 4      | 2      | 9      | 4.25    |       |
|  | Inactive time (s) | 1      | 2      | 1      | 4      | 2.00    |       |
| Task b – Check out previous conversion rates |                   |        |        |        |        |         |       |
|  | Time per task (s) | 7      | 10     | 6      | 14     | 9.25    |       |
|  | No. errors        | 0      | 2      | 0      | 1      | 0.75    | 3     |
|  | No. clicks        | 3      | 7      | 2      | 10     | 5.50    |       |
|  | Inactive time (s) | 2      | 3      | 2      | 5      | 3.00    |       |

ii. Preference measures

| Measure     | User 1 | User 2 | User 3 | User 4 | Average | Rate |
|-------------|--------|--------|--------|--------|---------|------|
| Colours     | 5      | 5      | 4      | 6      | 5.00    |      |
| Typography  | 7      | 6      | 6      | 5      | 6.00    |      |
| User needs  | 7      | 5      | 7      | 4      | 5.75    |      |
| Ease of use | 6      | 4      | 6      | 3      | 4.75    |      |
| Efficiency  | 5      | 4      | 6      | 3      | 4.50    |      |
| Success     |        |        |        |        | 30/32   |      |
| S1 Ta       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S1 Tb       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S2 Ta       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S2 Tb       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S2 Tc       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S2 Td       | Y      | Y      | Y      | Y      | Y       | 4/4  |
| S3 Ta       | Y      | N      | Y      | N      | Y       | 2/4  |
| S3 Tb       | Y      | N      | Y      | N      | Y       | 2/4  |

c. Issues found:

- i. The application is not as easy to use the first time as the second and consecutive times.
- ii. It is easy to log out of the application when looking for the conversion rates.
- iii. Clicking on the left side of the header provokes an error.

d. Relevant feedback:

- i. It is not clear where to find options other than converting.
- ii. The menu should establish different groups of elements  
(e.g., those related to currencies and those referring to rates).
- iii. It is difficult for the users to find conversion rates.