Designing the secondary User Experience

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Brukskvalitet
Gjer liv lettere

Hva bør��kollegier? 08.10.2009

Slik får du til scrolling på papirprototyper 24.11.2008

History Museum 01.09.2009

University og Silicon i Mountain View har gjenstander som er tegnet over til dagens

Oppskriften er enkel:
1. Lag prototypehaugen (en tom skjerm) på et stykke tynne papir.
2. Lag et lille sør i hele skjermens bredde (du må sørge for å spare på eventuelle navigasjonsknapp). Lag et tilsvarende sør i midten.
Explore important properties of mobile point-of-care systems in hospitals that support best practice doctor-patient communication
User Experience

Before

Now
ISO 9241-210 (2010)

User Experience

“A person’s perceptions and responses that result from the use and/or anticipated use of a product, system or service.”

B Breaking News: ISO saves the day!

End users

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<tr>
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<tbody>
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<td>Primary user</td>
<td>Performer</td>
</tr>
<tr>
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<td>Secondary user</td>
<td>Communicator</td>
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<tr>
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End users!
"Secondary user experience is defined as the user experience of the secondary users, resulting from another user's use of a product, system or service."
Usability

Satisfaction measures the extent to which users are free from discomfort, and their attitudes towards the use of the product.

From draft of ISO 9241:11 (1997)
Satisfaction as ‘the comfort and acceptability of the work system to its users and other people affected by its use.’

Examples of secondary user experiences

Pair programming
Doctor-patient consultation
Travel agency
Grocery shop
Both interact with system

(a) Information system

Primary user

Secondary user

Secondary user uses information from system

No interaction between secondary user and system

(c) Primary user acts as a proxy for the secondary user

(d)
Usability testing

Method

80 m² | Configurable walls | Controllable cameras
Using handheld devices together with bedside mounted patient terminals
Comparing interaction techniques for handheld medication system

Evaluating a mobile patient record system
Mobile device

The benefits and drawbacks of Mobile devices

Pocket sized
Undo mechanisms
"Knowledge in the world"
Automatic error prevention
Data accessible from anywhere
Automatic drug interaction warning

Small 6" screen
Requires training
Awkward text input
Poor action transparency
Hard to communicate non-verbally
The benefits and drawbacks of the **paper chart**

- Lightweight
- Easy to share
- 100% up-time
- Never malfunction
- Large 20 inch display
- Unlimited battery lifetime
- Fantastic resolution (1200 dpi)
- Easy and transparent navigation
- Users have a lifetime of experience

- No undo mechanism
- No real time information
- No automatic error prevention
- Need to remember drug names, dosages, and drug interactions

**Results**
Implications for design

Observations

The secondary user experience

SD perspective
- Design for the secondary users
- Evaluate with secondary users

UX-perspective
- Give system feedback to the secondary user
- Adapt the GUI for the secondary user
- Support nonverbal communication
- Use language of the secondary user
Patient Experience

**Observation**

Patient Experience

...SALAZOPYRIN 200 MG!

SALAZOPYRIN, 200 MG

SALAZOPYRIN?

NO...

...ARAVA?

Salazosyrin: 100, 250 or 500 mg?

ARAVA: 10, 20 or 50 mg?

**Observation**

Patient Experience

IT'S SO EASY TO GET FOCUSED ON THE DEVICE AND FORGET ABOUT THE PATIENT...

...IT BECOMES A THIRD PARTY IN THE PATIENT-DOCTOR CONVERSATION!

SHE IS SO BUSY WITH THAT MYSTICAL THING!

...AND THIS EMBARRASSING SILENCE REFRAIN ME FROM ASKING QUESTIONS!
Implications for SD

Design for the secondary user

Attention-easy

Simple tasks performed bedside, complex tasks performed in the office
Observasjon

Patient experience
Improving the user experience for the primary user…

…can have negative consequences for the secondary user.

If { } then { }

(Trip agent)

Improving the user experience for the secondary user…

…can have negative consequences for the primary user.

If { } then { }


Observation

**Action transparency**

Add information  Obtain information  Search for information

Implications for design

**Give system feedback to the secondary user**
Observation

Nonverbal communication

Observation

Nonverbal communication
Implications for design

Support nonverbal communication
Observation

Shared screen

Implications for design

Tailor the GUI for the customer
Observation

Realistic usability test with more people

Implications for design

Evaluate with the secondary user
Observation

User interface language

"I will temporary cessate Salazopyrin"

"I will pause the migraine medication"

Implications for design

Use the language of the secondary user
The secondary user experience

**SD perspective**

- Design for the secondary users
- Evaluate with secondary users

**UX-perspective**

- Give system feedback to the secondary user
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Customer experience ≠ secondary user experience
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