

## Designing the secondary User Experience

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## Brukskvalitet

Gjør livet lettere

### Hva bør kolleger?

08.10.2009

Nå har du muligheten til å møte fremtidige kolleger. Workshop der fagfolk sammen skal finne ut hvordan interaksjonsdesign kan hjelpe.

**VI TRENGER ARBEIDSKRAFT MED DENNE KOMPETANSEN**

Det er i dag en rekke utdannede i disse områdene. Det er et konkret behov for å kunne gjøre utdanningsprogrammer som gir tilbakemelding på skolearbeid.

Vi inviterer derfor alle som er interesserte i hva norske utdanningssystemer kan lære av andre land. Vi inviterer vi sentrale

## Brukskvalitet

Gjør livet lettere

### Et datahistorisk museum

01.09.2009

Compu Museum i Mountain View (California) har laget en gjenstand som viser hvordan regnestaver til dagens datamaskiner ble utviklet.



Googles første filbaserte

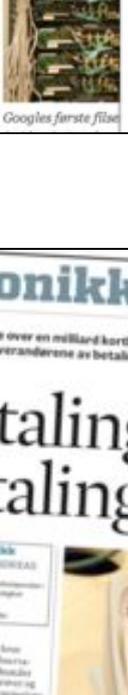
## Brukskvalitet

Gjør livet lettere

### Slik får du til scrolling på papirprototyper

24.11.2008

Scrolling er vanskelig å simulere på papirprototyper, spesielt på mobiltelefoner. Her er en teknikk som løser dette problemet.



Oppskriften er enkel

1. Lag prototypbasisen (en tom skjerm) på et stykke tykt papir.
2. Lag et snitt øverst i hele skjermens bredde (du må selvfølgelig spare på eventuelle navigasjonsknapper). Lag et tilsvarende snitt i nedre del.

# Kronikk

Les flere kronikker på [adressa.no](http://adressa.no)

Utgitt av Adressa / Utgitt 20. januar 2009  
Kronikk sendes til [kronikk@adressa.no](mailto:kronikk@adressa.no)  
Langteller kan være mellom 0000 og 9999 med mellomrom.  
Følg av forfatterens vedlegg.

**Følge BBS ble over en milliard kroner gjennomført i fjor, og sannsynligvis vil enda flere dra kortet i år. Likevel har leverandørene av betalingsterminaler liten grunn til å være stolte av produktet.**

## Betalingstull med betalingsterminaler

**Kronikk**  
AV **ULF ANDREAS**  
ADRESSE

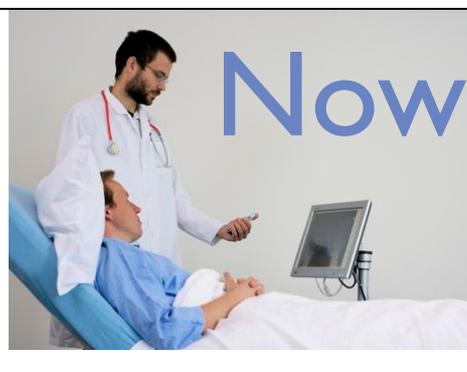
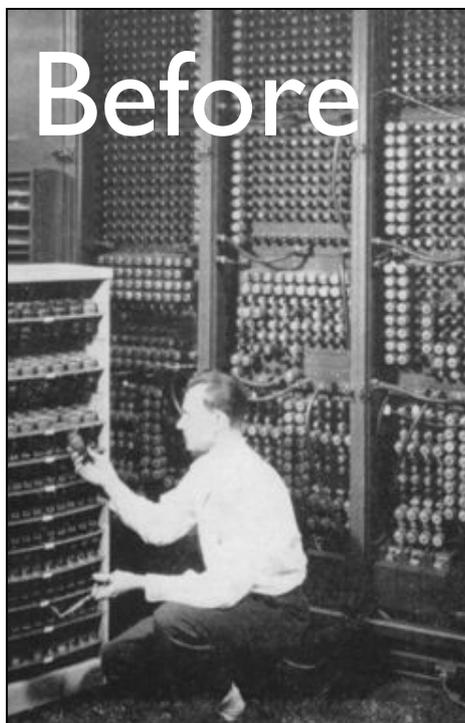
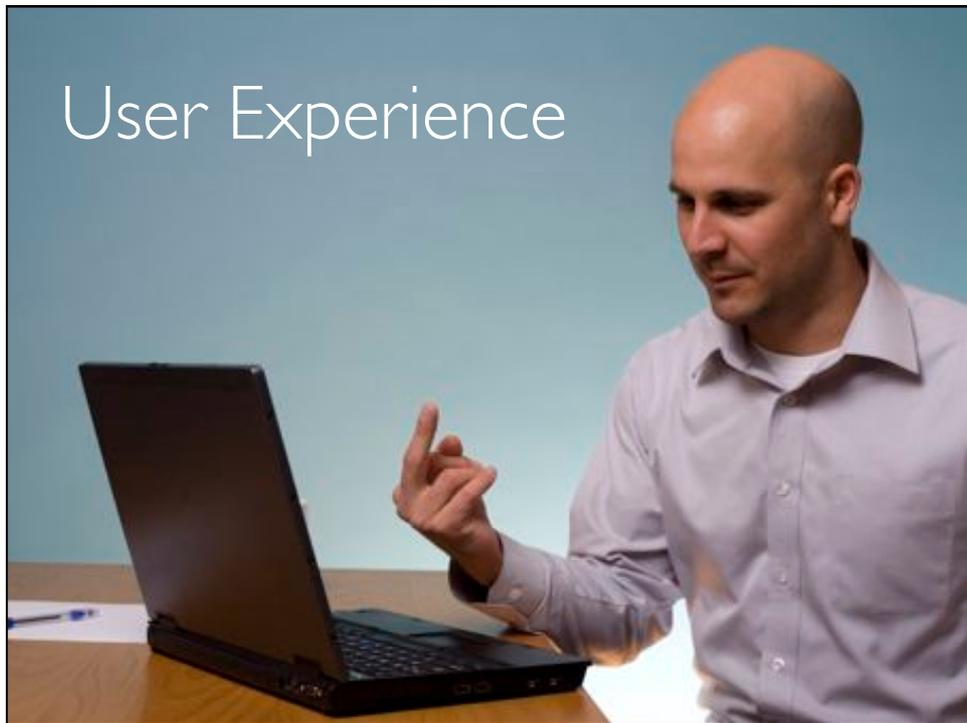
For utdanningen ble leveringsproblemet en utfordring for leverandørene. De hadde ikke nok penger og hadde med betalingsterminaler og leverandørene hadde ikke opparbeidet seg et godt rykte. Det var et stort problem for dem som hadde et stort behov for å kunne gjøre utdanningsprogrammer som gir tilbakemelding på skolearbeid.

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Google define: user experience

Søk: nettsider dokumenter på norsk sider fra Norge

Nett

Relaterte fra...

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.”

**BREAKING NEWS: ISO saves the day!**

at the focal point of design and development  
... it's based on the general concept of

www.itspoint.com/glossary.php

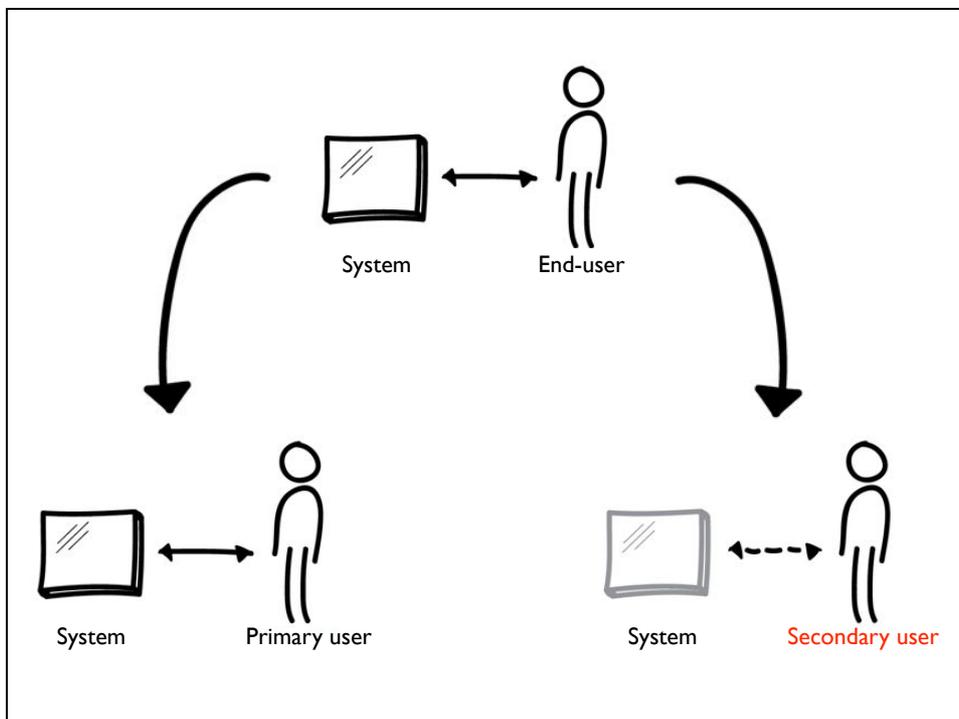
- This is an umbrella term used to describe all the factors that contribute to a site user's overall perception of a system. Is it easy to use, attractive and appropriate? Does it meet user needs?  
[www.publiclife.co.uk/glossary.html](http://www.publiclife.co.uk/glossary.html)
- A broad terms referring to the whole experience a person feels when using a Web site, both online and offline includes such online factors as ease of use and content, as well as such offline factors as fulfillment and customer service.  
[www.ultra-high-speed.com/CM/Custom/Glossary.asp](http://www.ultra-high-speed.com/CM/Custom/Glossary.asp)
- An activity of encounter by a computer user with the auditory and visual presentation of a collection of computer programs. It is important to note that this includes only what the user perceives and not all that is presented.  
[madn.microsoft.com/en-us/library/6d246417d05c55.aspx](http://madn.microsoft.com/en-us/library/6d246417d05c55.aspx)

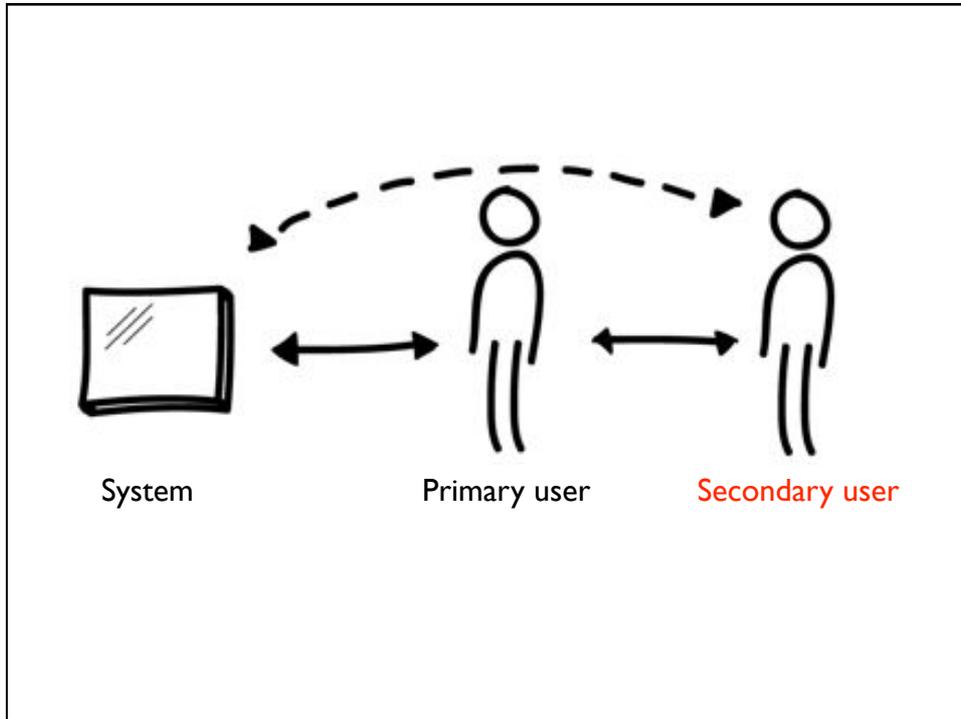
## End users

Faulkner [1]	Eason [2]	Ågerfalk [3]
Direct user	Primary user	Performer
Indirect-user	Secondary user	Communicator
Remote user	Tertiary user	Interpreter
Support user	(Tertiary user)	N/A

## End users

Faulkner [1]	Eason [2]	Ågerfalk [3]	<i>This study</i>
Direct user	Primary user	Performer	<i>Primary user</i>
Indirect-user	Secondary user	Communicator	<i>Secondary user</i>
Remote user	Tertiary user	Interpreter	<i>Secondary user</i>
Support user	(Tertiary user)	N/A	<i>N/A</i>





**BREAKING NEWS: Ole saves the secondary users!**

**OLE 0001-01: 2010**  
**Secondary User Experience**

“Secondary user experience is defined as a person's perceptions and responses that result from another user's use of a product, system or service”

“Secondary user experience is defined as the user experience of the secondary users”

## Usability



### From ISO 9241:11 (1998)

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.'

*Secondary user experience!*

## Examples of secondary user experiences



Pair programming



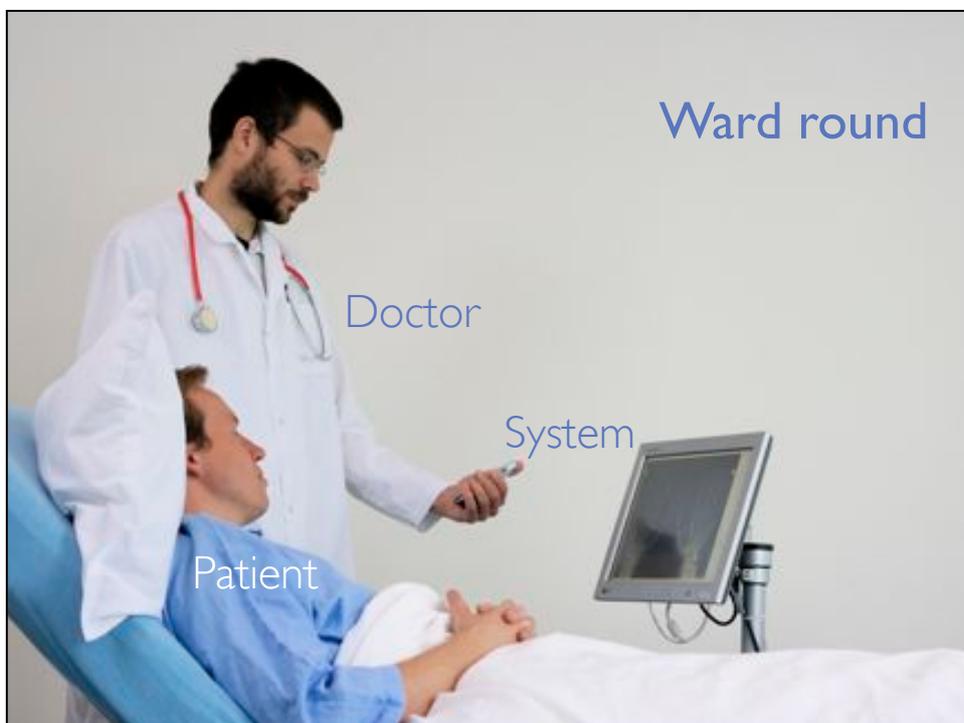
Doctor-patient consultation



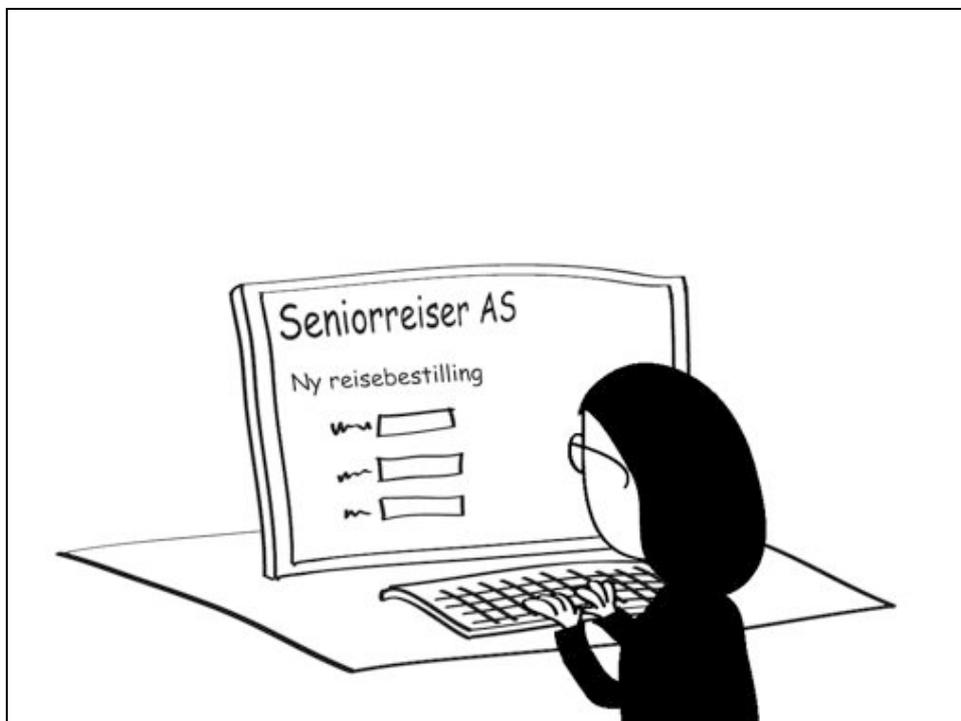
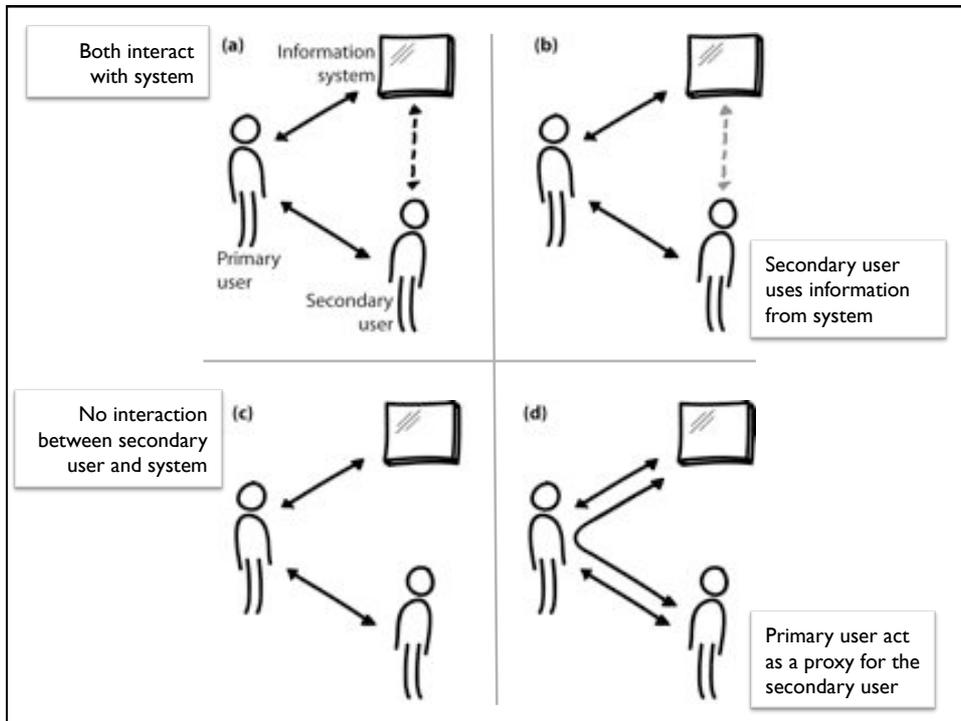
Travel agency

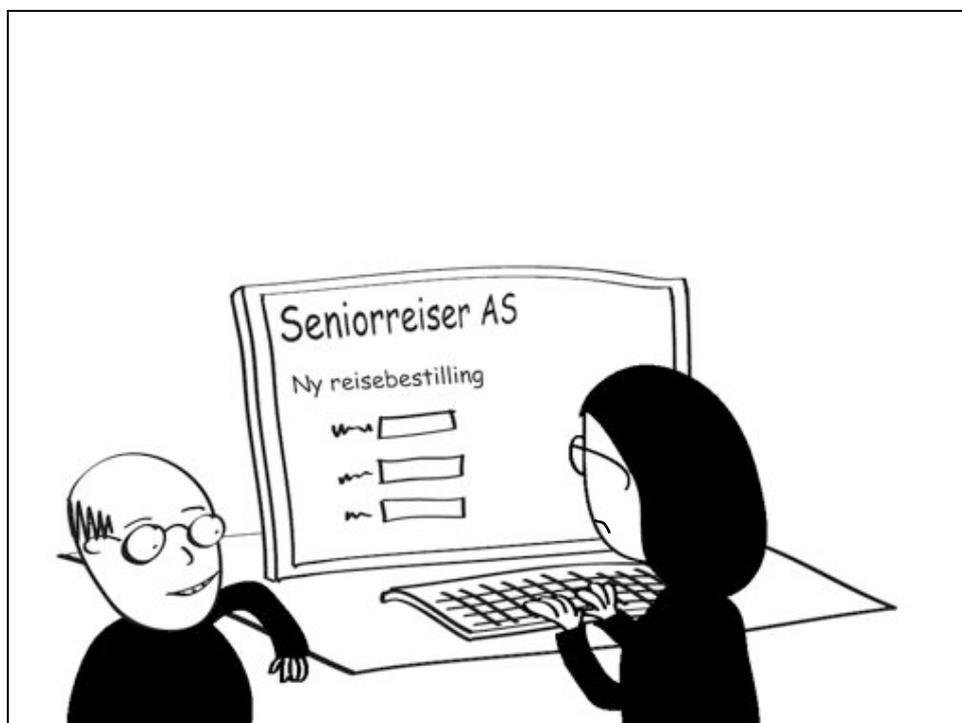
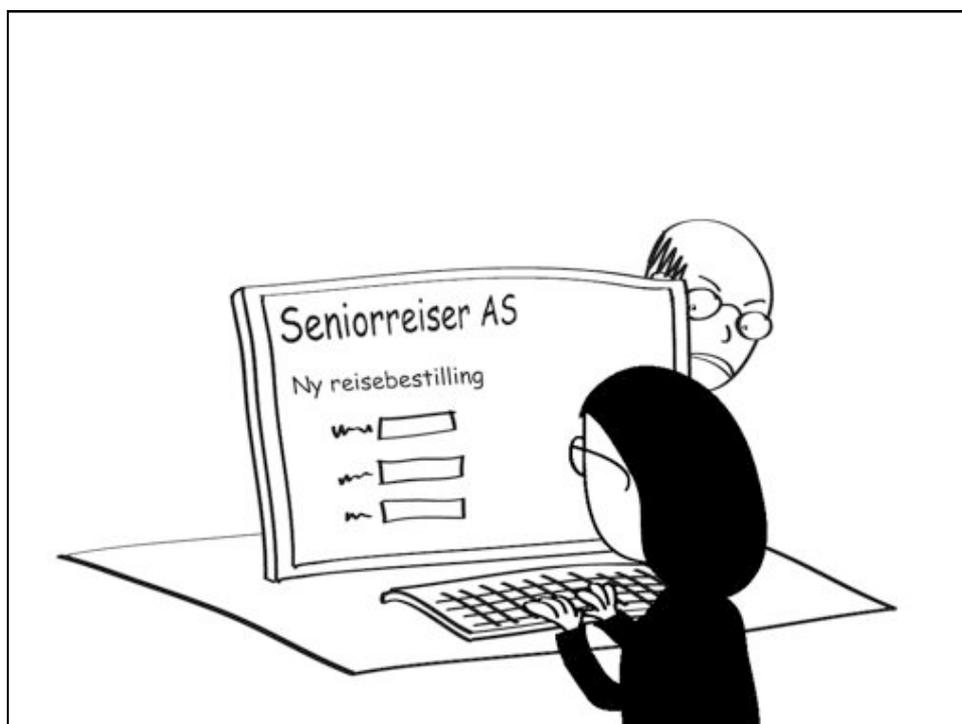


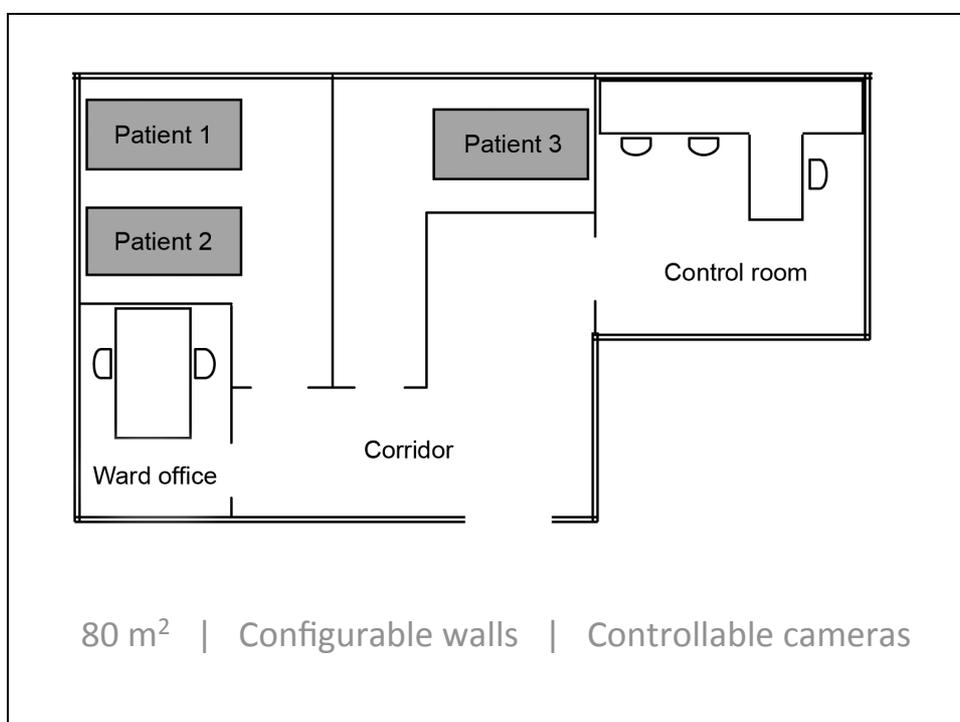
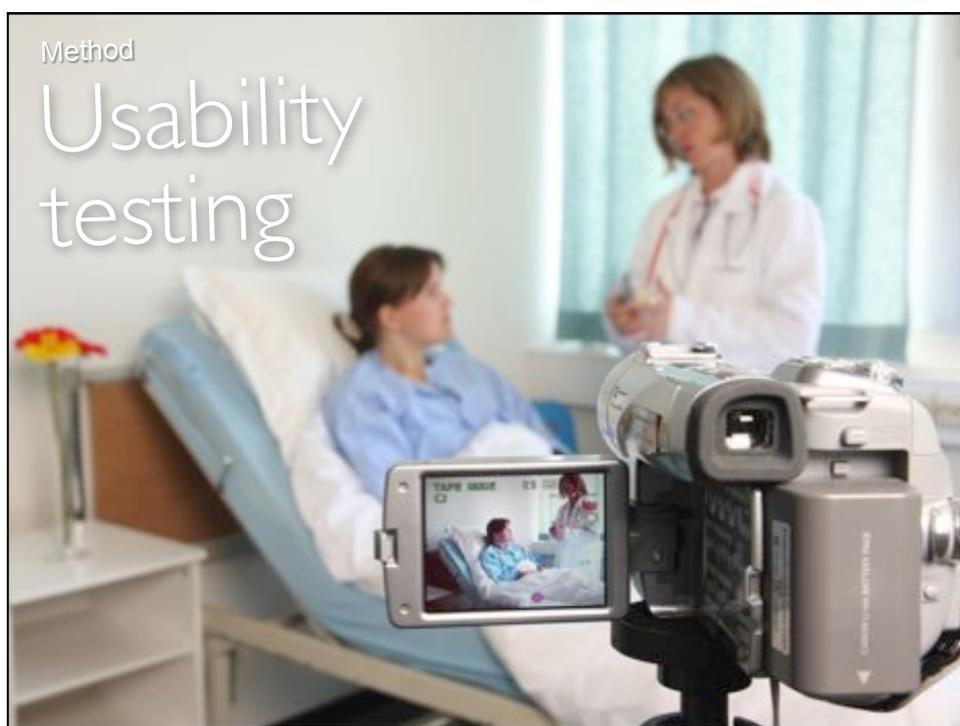
Grocery shop

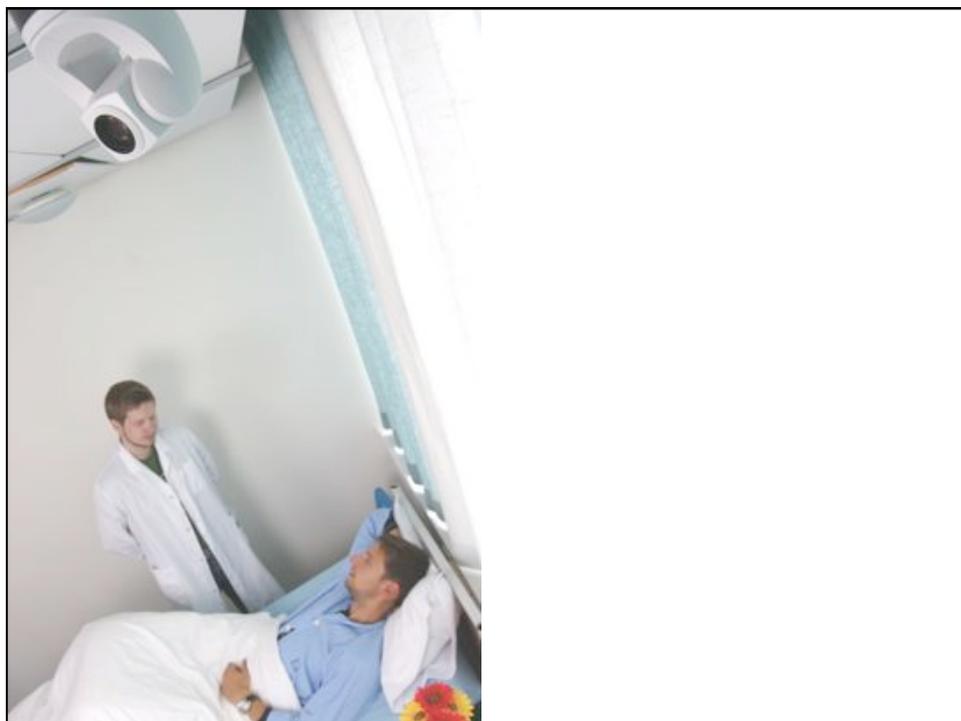












Using handheld devices together with  
bedside mounted patient terminals



Comparing interaction techniques  
for handheld medication system



Evaluating a mobile patient record system

Using handheld devices together with bedside mounted patient terminals

Comparing interaction techniques for handheld medication system

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Study 1

PDA

Paper chart

Study 2

Laptop on wheels

Using handheld devices together with bedside mounted patient terminals

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## 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

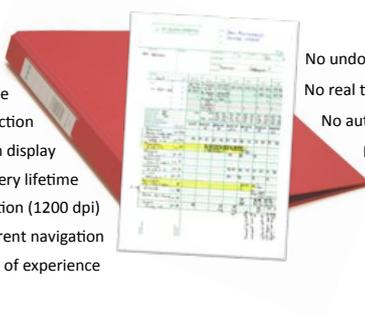
Akward text input

Poor action transparency

Hard to communicate non-verbally

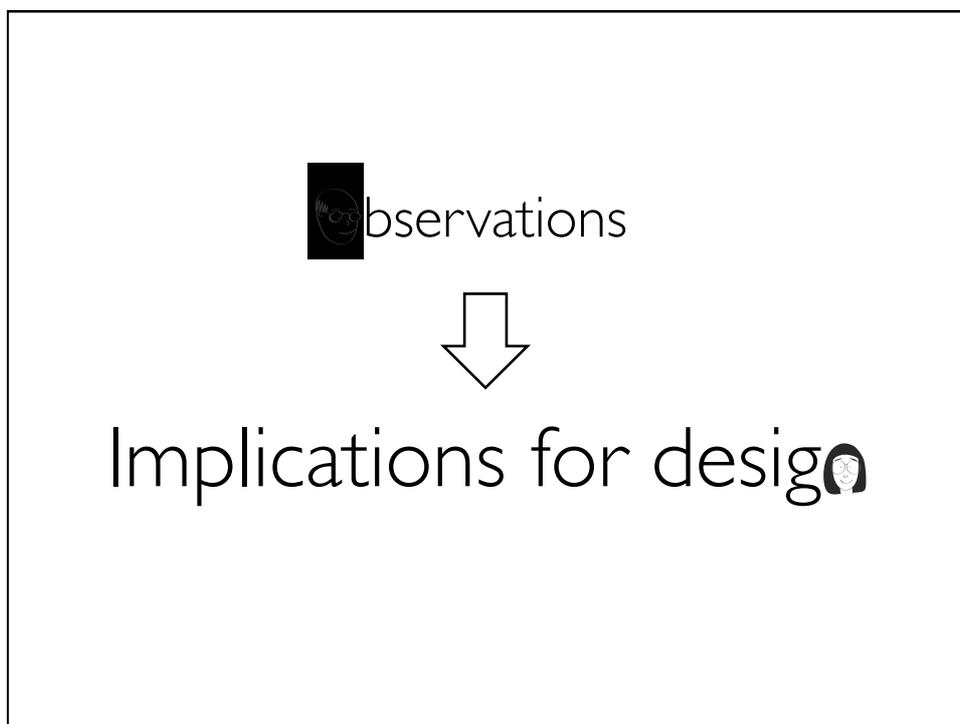
## The benefits and drawbacks of the **paper chart**

- 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



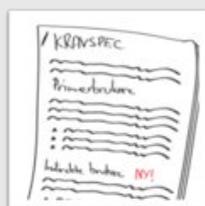
- No undo mechanism
- No real time information
- No automatic error prevention
- Need to remember drugnames, dosages, and drug interactions





## The secondary user experience

SD perspective



Design for the secondary users



Evaluate with secondary users

UX-perspective



Give system feedback to the secondary user



Support nonverbal communication



Adapt the GUI for the secondary user



Use language of the secondary user

Observation  
**User Experience**

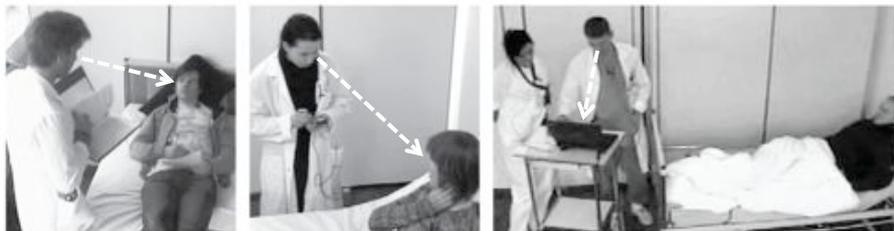


**UX**



**UX++**

Observation  
**Patient Experience**



Observation

## Patient Experience



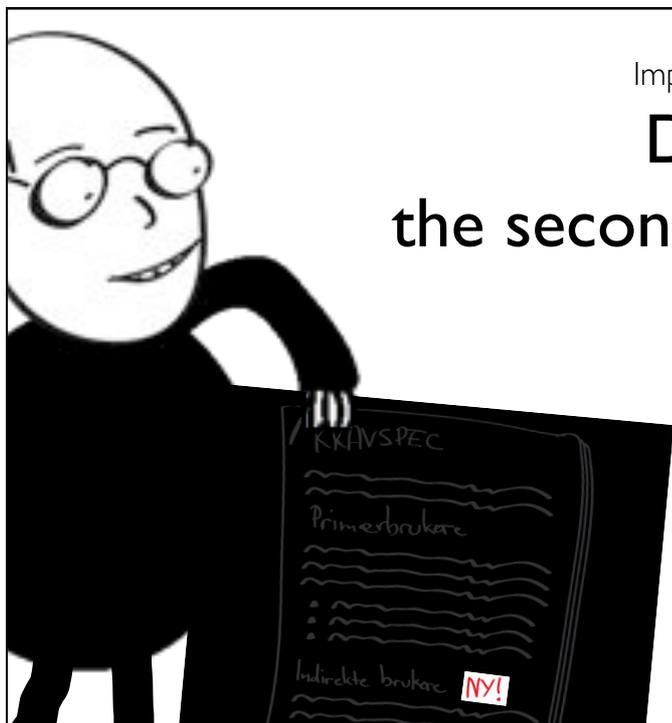
Observation

## Patient Experience



Implications for SD

# Design for the secondary user



A cartoon character with glasses and a black body is holding a blackboard. The blackboard has handwritten text: 'KRAVSPEC' at the top, 'Primerbrukare' in the middle, and 'Indirekte brukare NY!' at the bottom. The character is smiling and looking towards the right.

## Attention-easy



A hand holding a pen is interacting with a PDA screen. The screen displays a medication schedule for 'Wien, Tors 20.12.1974'. The schedule lists 'Ibux 200 mg 2 x 1' and 'Pinosin forte 100 mg 1 x 1'. The screen also shows a grid for tracking medication intake.

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

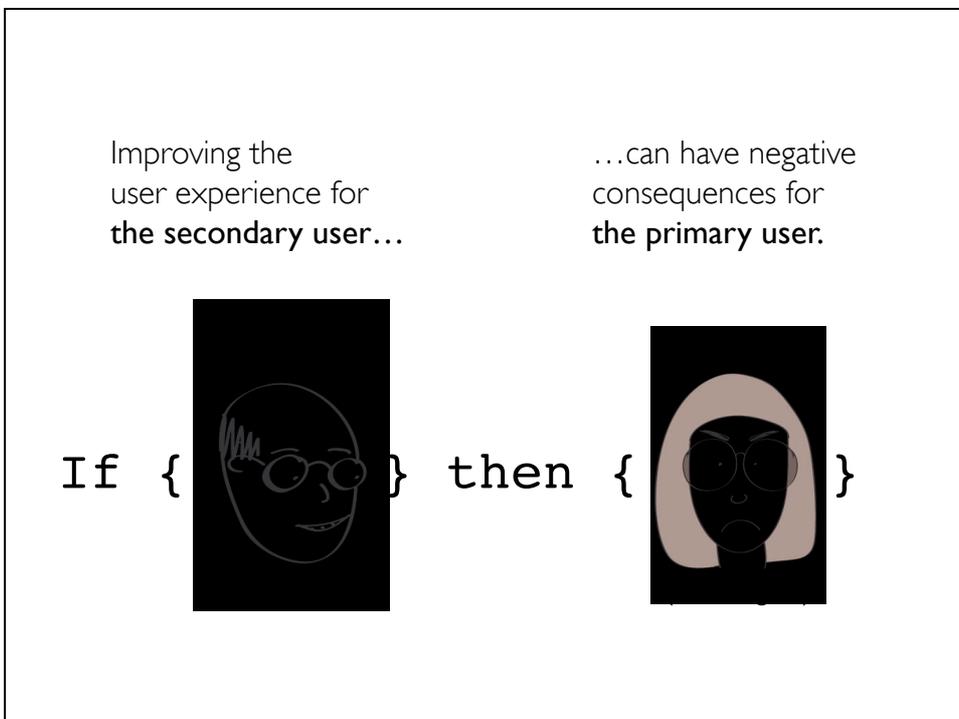
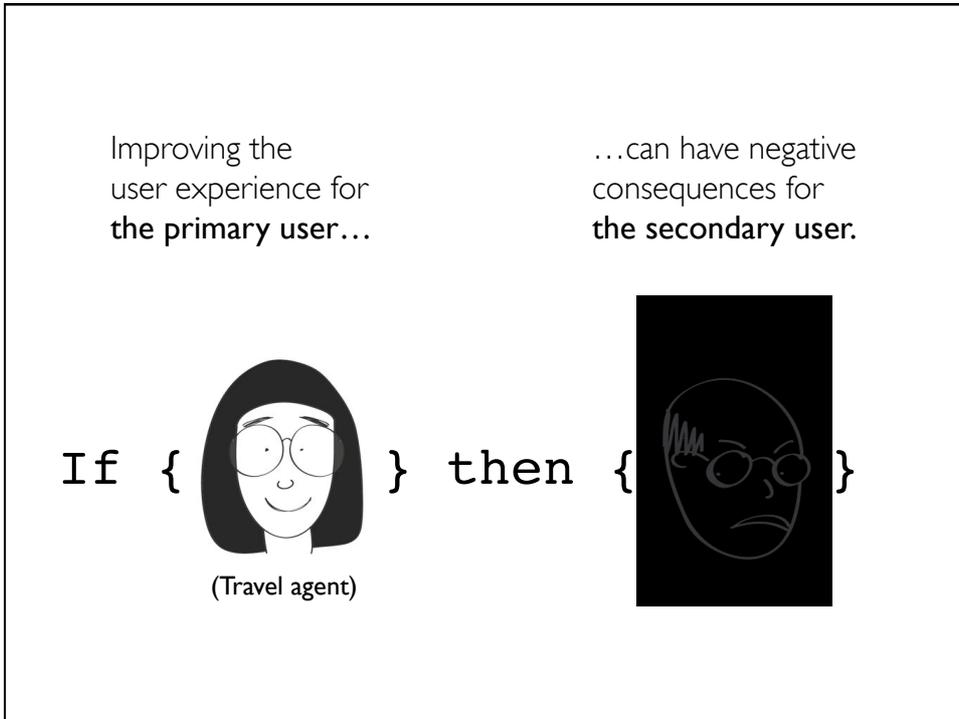


Pocket-sized

Observasjon

## Patient experience

Bilde	Navn	Dato
	Albue	01.12.05
	Albue, side	03.12.05
	Albue normal	14.12.05
	Albue normal, side	15.12.05
	CT Caput	24.09.04



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



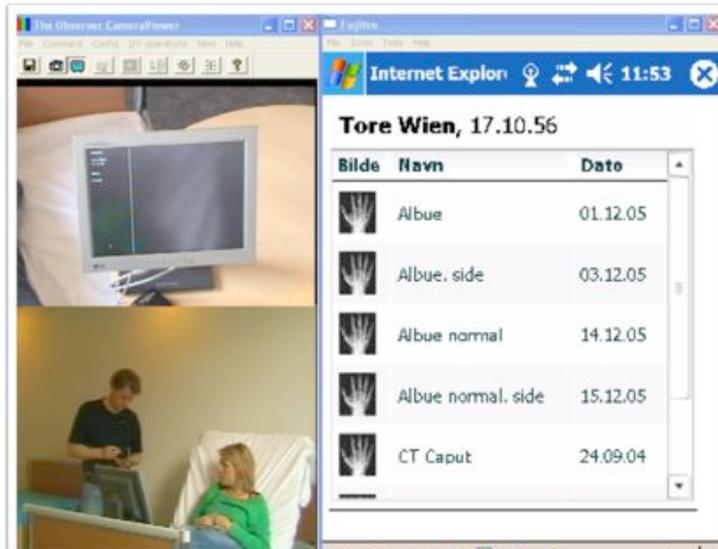
Implications for design

## 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"

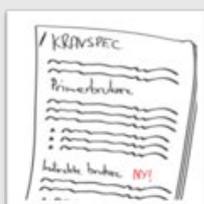
Implications for design

## 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



Support nonverbal communication



Adapt the GUI for the secondary user



Use language of the secondary user

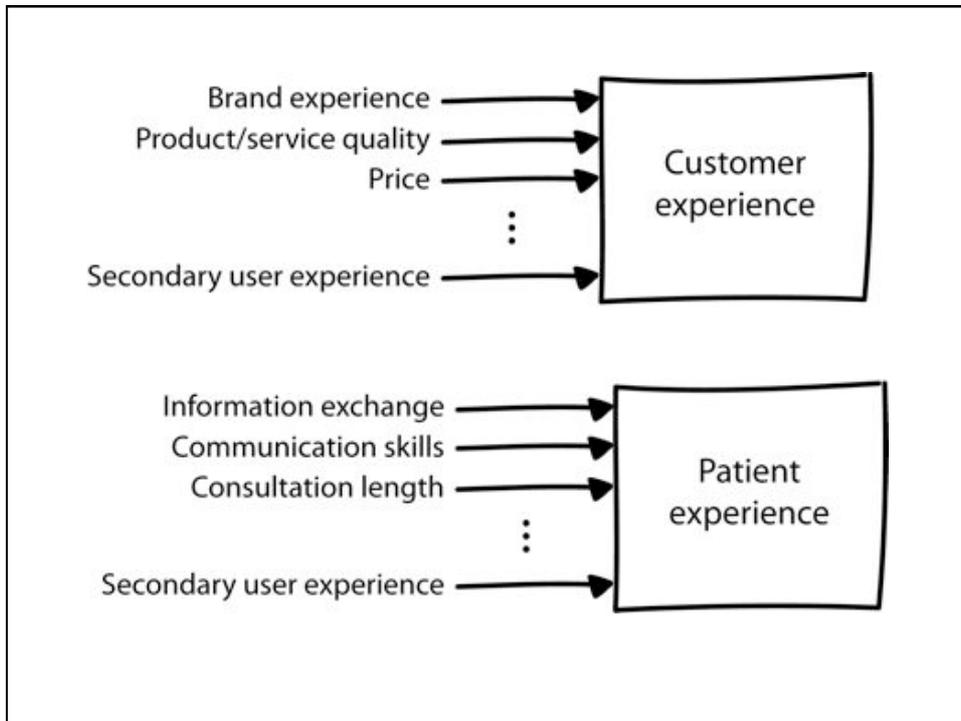


Customer experience

≠



secondary user experience



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