Providing premium SMS services for mobile phones

Usability based on networks of user – developer relationships

Petter Nielsen (pnielsen@ifi.uio.no)
University of Oslo, Telenor R&D

Jo Herstad (johe@ifi.uio.no)
University of Oslo

Usability challenges related to premium charged SMS services

- RQ: How to create usability related to premium charged SMS services
  - Appearance, accessibility and connectivity is not only the challenge – also usability not implemented in the networks and devices
  - The nature of providing services for consumption
- Drawing up a complex context
  - The fragmentation of responsibilities of usability among actors
  - Argue for a value network perspective

Nielsen & Herstad, MOBIS 2004

Usability and mobile phones

- Usability related to ICT in general
  - Usability attributes: Learnability, speed of operation (efficiency), memorability, adaptability, satisfaction etc.
  - HCI, CSCW
  - User-centered design, contextual design
- Usability and mobile phones
  - Network: Bandwidth
  - Device: Limitations in screen size and keyboard
  - Context: Continuously changing
- These issues an important part of the context, however not the primary challenge related to usability of premium charged SMS services

Nielsen & Herstad, MOBIS 2004

Usability related to premium charged SMS services

- Consumption relates to the "total experience"
- Trigg and support impulses
- Usability results in extensive and repeated consumption – not an application bought once

Nielsen & Herstad, MOBIS 2004

Example: SMS jokes

- How to design usability of jokes for consumption on mobile phones?

- Suited for all mobile phones (SMS) and the mobile phone interface (text based) and networks (even possible in the US)

- What are the challenges of usability?
  - Access to services (Internet, TV, newspapers, magazines)
 - Means of easy payment of services (CPA platform)

Nielsen & Herstad, MOBIS 2004

Value network perspective
Stabell and Fjellstad (1998)

- Service provision based on actors mediating between other actors with complementary services

- Activities: Network promotion and contract management, service provisioning and network infrastructure operation

- Chains of actors are further interconnected in value networks

Example: Ringtones

- A network of value chains
- Actors together addressing the challenges of usability

Nielsen & Herstad, MOBIS 2004
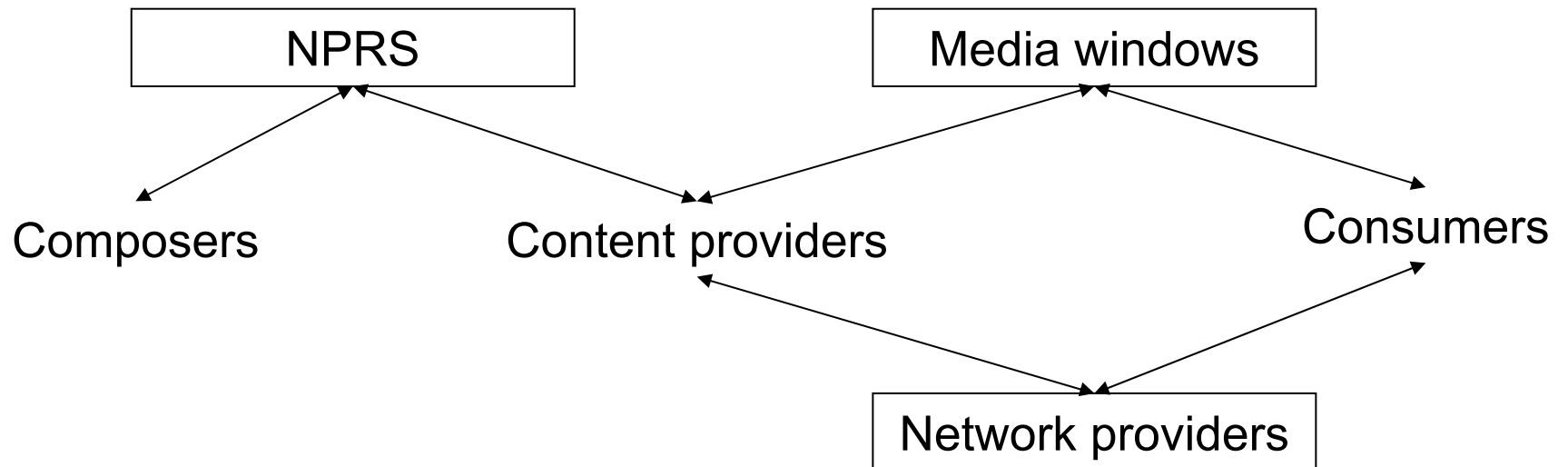
A new context for System Development

- Different contexts related to create usability: Contract development, product development and in-house development (Grudin 1991)
- Consumer service provision context
  - A network of mediations
  - Usability is complex and fragmented
    - Multiple and overlapping timelines
    - Relations are not stopgaps but permanent parts of the design

New challenges of usability

- Not only implementation of usability in the mobile phone networks and devices
  - Not only *one* design process related to usability
  - The importance of understanding, appreciate who the users and developers are
- From product perspective to also consider the process of service provision
- "Usability experts" should know the "golden rules" of building and maintaining value networks - at least know and appreciate them

Nielsen & Herstad, MOBIS 2004

References

- Stabell, Charles B., and Øystein D. Fjellstad. 1998. "*Configuring value for competitive advantage: On chains, shops, and networks*" Strategic Management Journal 19.

- Grudin, Jonathan. 1991. "*Interactive Systems: Bridging the Gaps Between Developers and Users*" IEEE Computer 24: 59-69.