AIR 2008

Breakout session (Adaptive interfaces and systems)

Hideo Joho

• Why do we adapt?
  o Efficient/effectiveness, enjoyable, engagement?
  o A particular media type is not sufficient for supporting tasks
  o Control the complexity of search process for users (or user groups)
  o Tasks and situations vary
  o Scale of information people face is gigantic
• Who adapts?
  o Users
  o Software Systems
  o Hardware Systems
  o Software Architecture (e.g., client-server)
  o Interfaces
  o Contents
    • CSS for different media
    • Augmentation or links to the additional data
• What to adapt?
  o Context
    • Time/Location
    • Interaction history
    • Expertise
    • Devices
  o Individuals or groups
• How to adapt?
  o Blend the media types and sources of data
  o What are the sources for adaptation?
    • How do we know a good source from bad one?
  o Task specific interface design
  o Provides a right tool in right time
  o Change the interface (functionalities or presentations) to a particular situation (or case)
  o Granularity of situation (or case)
  o Steps:
    • Gathering implicit/explicit inputs
    • Learn the situation and infer the needs
    • Do the adaptation
      • Giving a choice to users
      • Learn from the decision made (feedback)
• Further discussion points
  o What is the role of users in AIR systems?
    • How much control does a system gives to the users (transparency)?
- Vertical search engines – is it a form of adaptation?
- Recommendation, personalization (individuals), adaption – are they really different?
- Adaptation to groups?
- Where are we going?
  - Except a nice pub down the street
  - Fan out and see what works (and doesn’t)
  - Forget topical relevance
  - Usefulness, diversity, enjoyment, engagement