W3C Mobile Web Initiative Workshop

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A Use Case (A Mobile Web User)

- I’m flying to Barcelona
- As I arrive at the airport, I glance at my mobile phone and see a note that my flight has been cancelled, inviting me to re-book
- I choose to rebook, I am presented with a set of options, I choose one, and I’m given a confirmation message
- I breeze past a queue of other travelers waiting to rebook with an agent on my way to duty-free

- Achievable with today’s technology
  - Combination of location; context; identity; simplicity of experience
- Result: I feel looked after, I avoid a potentially frustrating experience
The Reality: The Anti-Use Case

- I get to the airport, find that my flight has been cancelled by looking at an information screen.
- I get out my mobile device, launch the browser, go to the obscure menu option that lets me type in a URL, type in wap.<namewithheld>.com, and am told “This service no longer exists. Go to www.<namewithheld>.com.”
- I type in www.<namewithheld>.com and get a very confusing page downloaded with hundreds of links that I need to scroll through one at a time.
- When I finally get to a login form and am able to type in my frequent flyer number (after fishing out my card) and password I get the message “Sorry, this service requires cookies.”
- Meanwhile, a queue has formed at the customer service desk.
- I curse at my phone and never attempt to use the browser again (or throw my phone out the window).
- We are making our users angry.
Not The Web, only smaller

- Mobile devices need to work seamlessly
  - More task-oriented
  - More personal
  - More immediate
  - More like an “appliance”
- Mobile use cases are different because of interaction differences
  - One-handed operation
  - Small screen
- Mobile users are different than fixed internet users
  - Actually on the go, vs. wireless
  - Information needs are more exact
  - (But yet, user interface is more laborious)
- Interaction guidelines based on real human factors are needed
How Mobile Operators Can Help

- Spectrum of services, leveraging different service enablers

  - Identity: Liberty Alliance
  - Payments: SIMPay
  - Location: OMA
  - Adaptation as a service: ???

Mobile Portals | Identity + Charging | Location + Identity | Adaptation | Self-sufficient Services
W3C-OMA Collaboration

- Set the way-back machine for August, 2000: Hong Kong
  - W3C-WAP Forum Joint Workshop on Multimodal Interaction
  - Apart from Multimodal, a focus on convergence of W3C and WAP standards and on the Mobile Web
  - Many companies here today were there
    - Access, Ericsson, HP, IBM, Microsoft, Nokia, NTT DoCoMo, Openwave (Phone.com), Sun, Vodafone, ZoomON

- Fast forward to 2004
  - What have we achieved?
  - A liaison document, signed earlier this year:
    - W3C agrees that OMA exists
    - OMA agrees that W3C exists
  - An atmosphere of mistrust still permeates the relationship between OMA and W3C

- We have to do better
W3C-OMA Collaboration

• Proposed structure: templates for collaboration
  • “Agree up-front”
  • “Requirements-Driven”
  • “Mobile Profile”
• Oversight function that tracks all efforts where joint activity is taking place
• Official channels of communication (in addition to back-channel)
• Recognition that OMA requirements represent industry consensus
• Escalation process when things get out of sync?
Device Capability Information

• Current state of affairs is bad for industry
  • No authoritative source for information
  • UAProf standard is not sufficient
  • Proprietary and open source device information databases / vocabularies proliferate
  • Everybody does it differently, based on a different idea of device classes and capabilities
    • Fragmented experience for users
    • Fragmented experience for content developers
Best Practices

- **Device class vocabulary**
  - e.g. Phone with keypad, phone with touch-screen, PDA, etc…

- **Standard experience metaphors for device classes**
  - e.g. Analogs to the user experience metaphors were all now used to on the Web

- **Metrics for user experience / human factors issues**
  - e.g. Number of links on a page

  - Some of these measures will be qualitative

- **Tools Support**
  - Preview on a desktop/laptop Web Browser
  - Preview on Windows Mobile, on Opera embedded, etc…
    - Preview the adapted user experience
What else can W3C MWI Do?

- Energize the work of the Device Independence Working Group
  - Develop ontologies for adaptation
  - Develop XHTML profiles
- Logo program
- Certification tools
- Interaction guidelines and metrics
- Training
- Outreach
Thank you!

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