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 an 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.



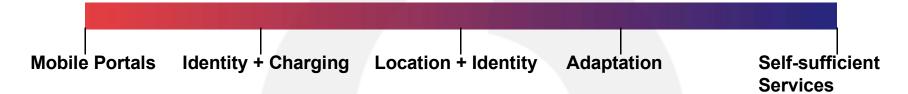
Not The Web, only smaller

- 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: ???

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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