

W3C MOBILE WEB INITIATIVE WORKSHOP: INPUT PAPER FOR VODAFONE

Daniel Appelquist, Vodafone Group Services Ltd

18 October 2004

Since the introduction of Wireless Application Protocol (WAP) as a consumer proposition, the “Mobile Web” has been trying to find its feet and its place in the landscape of interactive data services. The technology of mobile connected devices and the software they run has evolved remarkably in the last five years, but access to applications, content and services through mobile devices is still not as ubiquitous as the Web. The promise of the Mobile Web has fallen flat.

But what was that promise to begin with. The marketing messages delivered to potential users regarding WAP were confusing at best. Consumers were unable to decode these messages. The mobile user experience is qualitatively different from the “fixed Internet” user experience. Mobile terminal users don’t want to “browse” for content – they are not happy flicking through long lists of options – they want relevant information delivered to them now, or they will disengage.

What is the “Mobile Web?”

To answer this question, we must first ask “what makes a mobile phone different from a computer?” Technologically, a mobile phone has a small, lower-resolution screen, it has low bandwidth, a small amount of storage, slow data processing and graphics functions and it lacks a keyboard or pointing device. However, technology is improving in all these areas and today’s most advanced mobile handsets are becoming as powerful as their desk-bound cousins.

The real differentiator of the “mobile web” is mobility itself. In order for the mobile web to become as ubiquitous in people’s lives as the “fixed web,” it has to offer compelling services to users in a mobile context.

An example: When a user accesses an airline Web site from their PC, they might be looking to do a number of things: research fares, look up frequent flyer points balance, find information on in-flight services, read airline news, etc... Their Web home page will reflect these possibilities by giving the user many options to choose from. When they access the same service from a mobile device, they are in a mobile context – they probably don’t want to browse. They are likely to be looking up information that is time-sensitive. A mobile web “home page” for the same service might provide a few links up front to the most commonly used services by mobile users.

Vodafone believes there should be one Web. However, that does not mean that the experience of the Web on a mobile device will be the same experience as on a PC, only smaller. It means that services and content providers should provide access to the same underlying information through user experiences that are tailored to the device and context the user is in.

Furthermore, these experiences must be more seamless and “appliance-line” (meaning simple and intuitive to operate) than the experience of the Web from fixed terminals. The customer expectation of a mobile phone is that it delivers a consistent, reliable user experience – reliable enough to trust that when someone calls you, you will receive the call, for example. Unfortunately, this seamless, intuitive reliability of usage does not extend to mobile data services. Although users may be willing

to fiddle with their settings, or forgiving of software crashes on their PCs, this does not extend to mobile terminals: mobile phones are expected to work and they are expected to be easy to use.

How Can We Create a Better User Experience for Mobile Data Services?

Simplified payment: The SIMPay consortium consists of many mobile operators, such as Vodafone, Orange, T-Mobile and Telefonica Móviles. This consortium has developed a unified payment mechanism for mobile phone customers. This consortium, and other similar efforts, can lower the barrier to entry for service providers that wish to offer seamless commerce experiences to mobile customers. The SIMPay model also simplifies the sign-up process for service providers (providers only have to sign up once to be able to accept payments from users of any member company's network).

Identity: The Liberty Alliance industry group has developed a framework for single sign-on and federated identity management between "identity providers" and "service providers." From a user experience perspective, this means that users could seamlessly authenticate (with trust) from their mobile phone to a number of service and application providers. On the Web, users are often asked to enter a user name and password in order to access services, and this is OK because most users have a keyboard right in front of them. Not so with a mobile phone, where the process of entering text is cumbersome, even for those adept at mobile text messaging.

Mobile OK Brand: We believe that a trust-mark developed within the W3C Mobile Web Initiative is a worthy initiative for the W3C. This "brand" must be based on best practices for the use of existing standards and best practices for deployment of user experiences tailored to mobile devices. Part of the work of supporting the Mobile OK Brand is defining this conceptual framework.

How Can We Create a Better Experience for Content/Service Providers?

Access to Device Profiles:

Content providers are often unable to perform content adaptation because of the lack of device capability information (such as screen resolution, or whether or not a device has a touch screen). Even if this information is available, it comes in different and inconsistent forms. These different forms have to be obtained from different places and at different times. The result is a mish-mash of technologies, some proprietary, some standards based, some partially standards based and partially proprietary, and some based around open source methodology, each with their own ontologies and schemas about what devices can and cannot support. We believe that this is a key issue that has retarded the growth of the mobile web and that it must be addressed. We support the idea of unifying the ragged array of device information solutions out there. We also support a single point of access to reliable device information, and a community based approach to updating that information. We believe that unifying on a single approach to device information will significantly increase the market both for mobile data services and for content adaptation technologies that must support them and will spur innovation in both these areas.

Conclusion

Vodafone sees a spectrum of mobile data services emerging, with services that integrate completely into mobile portal offerings (such as Vodafone Live!) on one end of the spectrum and completely self-sufficient services that have no mobile operator integration on the other side. In the middle will be services that integrate with some operator capabilities (such as billing, or identity management) and do some of the work (such as device adaptation) themselves. Ideally, the work of the Mobile Web Initiative within the W3C should address all of these service types.

We also strongly support pursuing all these goals in partnership with the Open Mobile Alliance. Part of the work of the Mobile Web Initiative should be a joint effort between OMA and W3C to

better define roles and responsibilities with regard to the work going on in both organizations, especially around browsing and content, and to get both groups working better together, in the framework of the recently signed Memo of Understanding.