Mobile Internet

Internet technology provides opportunities for Mobile 'phones and PDA's
Definition

Mobile Internet refers to World Wide Web access for Mobile telephone and Personal Digital Assistants. Previously a set of standards under the group name Wireless Access Protocol (WAP) with its own markup language - Wireless Markup Language, was forecast as the technology of choice for Mobiles. WML has now largely been replaced by a sub-set of X/HTML - the World Wide Web Organisation standard for Web pages. There may therefore be some confusion with the term WAP which is sometimes used for Mobile Internet in the same way 'Web' is used for PC Internet, or may refer to the old technology. The term 'WAP' will here be used in its technical sense.

Mobile Internet up-take is forecast to exceed Internet growth because of the inherent advantages of Mobile telephones and other Hand-held devices. They are more portable than desktop or even Laptop computers; their owners are more familiar with them and are eager to learn more; but importantly Mobile Internet standards are better defined than those of the Web which means Security is better and market domination is less likely.

Weighed against this are the technical restrictions of limited bandwidth connectivity; smaller display and keypad sizes; and less memory for programmes and data storage. Developers used to the availability of broadband connectivity and resource-rich hardware may find it hard to adapt to low level programming with intermittent communications. Graphic Designers will have to re-learn old rules.

Mobile Internet 'browsers' - the software programme in the device that interprets the Mobile Internet page, are unlikely to be used in the same way as the Web, where Presentation (the look of the page) is paramount, and Web visitors are easily side-tracked. With Mobile Internet the limitation of display size means we return to the old maxim 'Content is King'. Mobile Internet users are likely to pay for upload and download per byte and will not appreciate the overheads of many Web sites; they will want the required information as efficiently as possible. 'Cookies' - files planted on the device by the Web-Site to track Customers, will not last very long on most mobiles, a slight headache for some developers, but perhaps with benefits for the public.

Yet for organisations with a properly integrated environment that allows Web and Mobile Internet site maintainers to make single changes to source content, running the appropriate script files will generate the appropriately customised output material. At this time there are changes to standards, and the situation will perhaps never be perfect in this regard, which complicates matters, but having disparate Web and Mobile Internet strategies may be very expensive. From a security perspective, it is reasonable to ask about the possibility of virus in Mobile Internet systems. At some time in the future it is probable there will be such problems but they cannot be compared with those of Web devices. Most of the programmes that run in Mobile Internet devices are embedded in 'Read Only Memory' and cannot be corrupted. Uncertified Java programmes run in a protective 'sand-box' and even certified programmes have limitations. Telephone Numbers and other data are always at risk and the business reliant user will take reliable back-ups of these - as with any desk-top system.

Since the 'dot-com' hype and subsequent boom-bust of the IT and Telecomms industries, perhaps exaggerated claims of the benefits of technology deserve to be treated with healthy cynicism, but there is no doubt that a properly engineered and managed multi-technology system may bring us nearer, at last, to the mythical 'paper-less office'.

See TelForms page for an integrated approach to Web and Mobile Internet Development based on XML Schema.

See http://www.terry-comms.com or http://www.telform.co for Mobile devices.

Mobile Applications

Apart from their networking capability, most mobile devices have processing power and memory capacity far in excess of computers of even a few years ago. The limited display and keypad size is offset by the advantages of convenience and portability in many applications.

Java Devices conform to one or more 'profile's and any number of programming modules providing Java Specification Request (JSR) solutions. There is therefore some need to define a range of target devices.

It may also be necessary to test Mobile Internet access over different service providers, particularly when 'phones are purchased as part of part of a service plan.

Mobile Internet

Mobile Internet (also called WAP after the protocols sometimes used) concerns access to Internet type services using Mobile Phone and Hand-held devices. Mobile Internet takeup is forecast to exceed the growth of the Internet as devices are more portable and familiar than PCs, they are cheaper, and standards are better defined.

However Mobile Internet devices are less forgiving of poorly written programmes and code than desktop systems. Content size and Memory usage are more critical. With over 10 years experience of Developing and providing systems with these constraints Terry can provide the following services:
Mobile Internet Site production from your Web-site or design.
Mobile Internet/Web Site Integration.
Service provision to your Quality of Service standards.
Integrated Mobile Internet Client-Server Solutions.
TelForms Data Collection for Web and Mobiles. Java forms from XML Schema and back again.
Consultancy and Support.