

Workshop 2 report: Mobile User Interfaces

Tapio Ryhänen, University Library of Oulu, Finland
Vitodrag Vodnik, University Library of Maribor, Slovenia
Annu Jauhiainen, University Library of Helsinki, Finland

Introduction

This workshop was about mobile user interfaces from the point of view of libraries and current and future library services.

First of all, in order to discuss mobile user interfaces, we took a short look what the term mobility generally means.

Usually the term mobility is related to either mobile devices (the device is moving), mobile users (the user is moving), or mobile services where users get the same service by using different devices at different locations.

Many mobile devices have some kind of network connectivity, although that is not always the case. The terms wireless and wireless networks are closely related to mobility. A wireless device can be either fixed or mobile.

Mobile user interfaces for library services

Internet-based services are still fairly rarely designed taking into consideration mobile users and devices.

Mobility could give libraries a possibility to develop many entirely new services and tools to improve both library automation and customer service.

Some examples of new mobile services and challenges to user interface design could be:

- Designing mobile user interfaces for currently existing Web services and library catalogues (Web/WAP/XHTML-browsing with PDA devices and mobile phones)
- Building personal navigation services: where is that book, that library, librarian, collection, photocopier, reading room, carrel, service point, magazine reading room, meeting room etc.
- Designing notification and payment services accessible via mobile phones (overdue notices, request notices).
- Designing context-based information and notices based on time, user location, profile and presence status.
- Lending WLAN network cards to patrons, so that they are able to connect to the Internet with their own laptops when they are visiting the library.
- Using microchips in books in to locate them with a mobile device and/or to keep the shelves in order and carry out weeding in a simple manner.

Topics which we discussed in this workshop

Should libraries design or redesign their websites and catalogues to be compliant with various PDA devices and mobile phones and what requirements should be taken into consideration?

CONCLUSION:

Generally yes, because various mobile devices are already widely used and their usage will grow all the time quite rapidly. The development of various mobile devices and wireless networks is also very fast.

If the websites and catalogues could already be designed to be for example PDA-compatible, the content management would thus be much easier.

New technology provides complete new possibilities for the design of new services, but which services could really provide added value for customers?

CONCLUSION:

Especially services which are somehow so urgent that they should be available where ever the customer is; for example availability notices for requested books via SMS-messages.

Also services that provide help and guidance for the patrons, like personal navigation services inside the library, could really provide added value.

Should libraries wait for the development of network technologies and mobile devices?

CONCLUSION:

No. Technology is anyway developing all the time, so if you always wait for the next generation technology, you must always wait and wait.

Which technologies are already so widely used that libraries should start developing applications based on them?

CONCLUSION:

At least ordinary web- and other Internet services, SMS-services, and services based on WLANs (wireless local area network).

Is it possible to save costs or manual work with mobile applications or do they just make librarians work harder?

CONCLUSION:

It is possible to save costs and manual work, if services are well planned. Of course, all new services require work for the librarians in the beginning, but in a long run new mobile services should automate the work flow from the staff point of view.

Which are the basic designing rules for mobile user interfaces?

CONCLUSION:

Designers should take into consideration the limitations of various mobile devices, but they also should try to take advantages of the completely new possibilities that mobile devices and wireless networks can offer.

How should libraries survey user needs for mobile services?

CONCLUSION:

Generally, it is very important to examine user needs for all kinds of new services. Some sample methods can be various questionnaires, interviews and general feedback from the customers.

How important is usability testing of mobile applications and services?

CONCLUSION:

Usability testing is very important, and when developing new mobile services, it would be very good to start usability testing as soon as there is some kind of working prototype of the application or service, in order to get real feedback from real end users.

Is it necessary to build separate Web-based library applications, for example ordinary PCs and mobile devices or is it possible to design one application with multiple user interfaces which automatically adapts to the device or browser used?

CONCLUSION:

Generally it is very good if there are possibilities to provide and develop single services for multiple devices, but in certain cases you have to build separate applications for separate devices. For example a library catalogue search interfaces for mobile phone must be much more simple than the version that is meant to be used with ordinary PCs.

What kind of new expertise will mobile services require from libraries in the future?

CONCLUSION:

At least some kind of basic knowledge of the new technology and related standards is required at least from the decision makers and the IT-staff. If library is developing applications by themselves, much deeper expertise is needed. But in the long run, all librarians have to face the development and the usage of new (mobile) technology.

Is this whole talk about the mobilization just hype or should libraries really start designing mobile services, applications and user interfaces?

CONCLUSION:

No, the mobilization is not just a hype: libraries and librarians should take it seriously.