NIM Åland: the quest for useful mobile services

Ville Harkke
IAMSR/Åbo Akademi University, Finland
Ville.Harkke@abo.fi

Abstract
A programme for developing and testing mobile systems for tourists is underway in the Åland Islands. The aim of the programme is to develop, launch in full scale, and test some innovative services. In this paper two of the services are presented and possible testing methods are discussed.

Keywords: Mobile systems, Tourism, System impact

1 Introduction
Ever since the days of the WAP 1.0 there has been a vision of a world where mobile systems play a major role in the ways we live and handle our everyday routines. The visions have one after another shown to be overly optimistic. The benefits that arise from using the mobile systems have not been able to offset the high cost or the clumsiness of the user interfaces. One of the focus areas for mobile service development is travel and tourism, and a very large number of systems have been tested, piloted and implemented, some of which have had even moderate successes. (Kramer et al 2005, Scmidt-Belz et al 2003)

With financing from the European Union and the regional government of the Åland islands we have started a development programme called NIM Åland. The aim of the programme is to increase knowledge, usage and production of new interactive media on the Åland islands. The programme has three main work methods: a series of seminars, an international conference and a prototype creation programme. Within the prototype creation part we are building and testing new media (Internet-based, mobile, interactive television, other digital media such as podcasts and the like) services in three rounds, the first round started in the fall of 2006 and the prototypes are to be installed before the tourist season (summer) of 2007. The focus of the first round is mobile services for tourists.

2 The services
The New Interactive Media (NIM) project aims at i) enhancing the service level of the tourism industry by using modern technology, media, communication and interactive tools, and ii) developing the production of such public services that do
not require personal presence. The services developed during 2006-2007 include among others:

- A timetable solution for the regional ferries and bus lines, working on mobile terminals
- A mobile version of an information portal
- A fishing-permit solution that enables a tourist to find and purchase a fishing permit via a mobile device.
- A support system for small hospitality entrepreneurs such as cabin and boat rentals
- An experience enhancement for visitors on sites of interest in form of podcasts or similar media downloadable/streamable to the tourists’ own mobile devices
- An interaction backbone for peer-to-peer communication among the tourists, at first in the form of a Blog/feedback system with mobile support.

Two of these services are described in more detail below. The fishing permit and the interaction systems are chosen as examples due to their relative novelty, the rest of the services are close to systems that have been tested elsewhere.

3 The logic behind: the Braudel rule

The services presented above are naturally not completely new in themselves. In fact, most of the systems have been tried out somewhere, with various results. One of the main foci of the NIM project is to explore the impact of the services using the Braudel rule: (as presented by Keen and Mackintosh, 2001) freedom becomes value by expanding the limits of the possible in the structures of everyday life. This is then translated into a travelling setting. The main philosophy for the systems is that a service must not only fulfill a real or perceived need, but using the system must make a profound difference in the way we live – and to the better.

This affects the design of the systems in a profound way. In our previous studies we have found that for the professional users of mobile systems the most important determinant of system usage is the usefulness of the system. All other features, even ease of use are of secondary nature. (Han, 2005, Harkke, 2006)

The systems need to profoundly change the way in which the traveler does or experiences something. To illustrate this we highlight two of the systems developed under the NIM-umbrella

4 The devices of the users

One of the barriers hindering widespread adoption of mobile services has traditionally been the low technological level of the average tourist. The mobile phones carried by the most have not been capable of connecting to the services or using the full potential of these.

The first pilot systems for tourists were tested by using either top-of-the line smartphones or even earlier in concept testing with PDAs connected to the Internet. Even as these pilots (Brown and Chalmers 2003) have given us valuable information on the potential of mobile systems, a successful implementation of such systems must take into account the technological level of the devices the general public is using and the ways they are being used. This limits the
functionalities slightly. Since there are very limited numbers of telephones with built-in GPS (Global Positioning Systems) and tracking of telephones using the GSM networks has some legal implications our services will not in the first phase include location-awareness. This could even be a strength: there is a group of people who think that the systems guiding them should not try and be too smart. (Van Setten et al, 2004)

5 Example 1: The MobyFish fishing solution

The first example is a simple fishing permit system. There is nothing new in selling certain types of tickets and permits through mobile devices. In fact, one of the most successful mobile systems in Finland is a ticketing solution used by the Helsinki City Transport system. (HKL webpage 2007) What is new in this application is that it introduces a novel way of enabling the different owners of fishing waters to cooperate and increase their incomes.

![Figure 1: The MobyFish mobile fishing permit](image)

The system today is completely unintegrated; there are 58 different fishing areas, owned by private owners, fishing water organizations (fiskelag), municipalities and the regional government. For a tourist wishing to do some legal fishing the
situation is not easy, as the permits are sold in various places and with different opening hours. So, introducing the MobyFish system not only helps the tourist in a previously difficult task, but even helps the local water owners to create cash flow from their waters. The system will work across a range of platforms, from Internet to Java-enabled telephones (both with a map-based solution) to simple SMS-messages written according to a paper manual. The usefulness aspect of this system for the tourist is rather straightforward, enabling her to buy a fishing permit easily regardless of location or opening hours of a local shop. This clearly follows the Braudel rule; with the system it is possible to do something that was previously impossible.

6 Example 2 The Interaction system
Another solution, closely connected to traditional information portals is the feedback/information/blog system that runs even on modern mobile devices. The ability of tourists to connect with other tourists sharing the same experiences has been shown to enhance the experience. (Brown et al, 2005).
Figure 2 The Interaction system

The system is designed to include comments and opinions of the tourists, but it will even include a few sponsored messages, enabling the destination management organisation to create cash flow from the system. The system fulfills the need of the user to interact with other individuals with similar interests, possibly changing the way in which the tourists are seeking information about possible destinations/activities for the immediate future. The ways in which the system will actually be used will tell us a lot about the real short-time needs of the travelers.

7 The testing environment

The whole idea of the NIM-project is to use the unique setting of the Åland islands to test the mobile systems in full scale, with real users and tourists. This enables us to evaluate the actual benefits of the systems in the real world, an approach close to the Living Labs concept (LivingLabs homepage 2007). Our results will be directly generalisable due to the real world nature of the testing. The data collection about the systems will concentrate on the impacts and the perceived usefulness of the systems. Once the prototypes are in place and in use, the usage and cash-creation levels will be linked to interview and observation data from the users.

8 Conclusions

These types of systems have created a lot of interest in both public and private sector actors in the tourism industry in Finland. The systems will be in place during summer season 2007 and their impact on tourist behavior as well as the cash creations and awareness of the area will be measured. At this point it is not possible to speculate on the results but this work will definitely add to our understanding of the impacts of mobile systems in travelling and tourism settings.

References


