

# Project Achievements



## Mobile City Moments

The project was about the development of viable business models for mobile services in Europe. The Mobile City Moments project studied, prototyped and evaluated one mobile service prototype for the customer segment 55+ in four major European cities.

### Main focus

Cities are the growth engines of the economy, and they need more efficient means of service creation and adoption to fill the gaps between demand and supply of information and communication for its citizens, especially during the transition from the labour market to a life as a retiree or in the urbanization context from country side to the city or as an immigrant. Simultaneously, mobile handset is transforming from a simple telephone into a sophisticated information, communication and coordination device, which should generate customer value in terms of being available, simple and safe to use by individuals and groups in the city.

The MCM project produced one mobile service prototype in four major European cities (Barcelona, Helsinki, Santa Cruz, Stockholm) resulting in a test-case of whether the concepts of customer value and niche markets will sustain the business model rather than the concepts of production economics and mass markets.

- ◆ Business model analysis and framework for group-centric network operator independent services.
- ◆ User experience research and group-centred design of service concepts with novel approaches to service creation, discovery and adoption.
- ◆ Open interfaces to service components that allow rapid service creation, and explore the limits and possibilities of novel interaction technologies

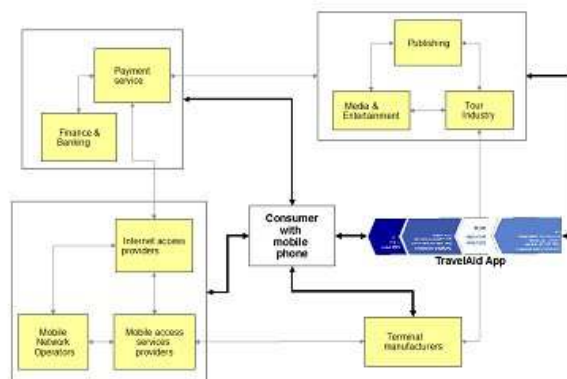
of smartphones, hybrid networks, and web resources.

### Approach

The project combined parallel efforts from three competencies, organized in three "groups" - business, technology, and user research. Each team pursued a number of key questions needed as essential contributions for common conclusions:

- ◆ What are the markets? - Understanding the business opportunities for service providers with focus on the 55+ segment in Europe.
- ◆ Where is the revenue and profit in using mobile data services for a service provider in e.g. banking, tourism or public transportation ? - Understanding and creating new business models. Focusing on the business customer needs instead of telecom supply chains.
- ◆ Which models to apply? – Current diffusion and innovation models are American based, product based, and supply based. They need to be augmented for the European market, for niche markets, for service-based markets.
- ◆ What are the business strategies of different parties involved in service creation?
- ◆ What cultures, common beliefs, and experiences that characterize the 55+ segment?
- ◆ How and when do groups of people share experience?

## The Potential Business Model



## MCM

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Start Date: 1 January 2007

Closure date: 1 July 2009

### Partners:

Appello Systems AB, Sweden

CARSA, Spain

CBT, Communication & Multimedia, S.L, Spain

Helsinki Institute for Information Technology, Finland

HHS - Stockholm School of Economics, Sweden

IDEN Research, Finland

Innovalia Asociacion, Spain

Musiclink, Sweden

Radarspot, Sweden

Sendandsee, Finland

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[www.celtic-initiative.org/projects/mcm](http://www.celtic-initiative.org/projects/mcm)

- ◆ What terminals are people in the 55+ segment using?
- ◆ What are the strength and weaknesses of infrastructures currently in use?
- ◆ What is the role of future technologies, such as Push-2-Talk, WLAN in phones, peer-2-peer(s), multicast, ...?

The project has used different ethnographic methods in parallel to interview and observe people in order to arrive at a first understanding of the underlying conditions for developing the service. These approaches have been combined with traditional surveys in the field and multidiscipline group working method called Quality Function Deployment (QFD) taken from the Six Sigma concept.

The picture below illustrates the project's development of experiences over time and where in Europe these experiences evolved.

## Achieved results

**Our conclusions at the end of the Project are:**

Mobile data services intended as sales and distribution channels for the service sectors in Europe and their customers (the end users) must be managed in a transparent way by mobile networks and terminals regarding e.g. payment and mobile network used by the end users. In a more detailed specification like the following:

- ◆ The mobile service application, in our case MCM TravelAid, must be transparent on any mobile network.
- ◆ The mobile service application must be usable on any terminal.

- ◆ The application must have context specific service offers authorized by the customer, i. e., the application service provider.
- ◆ The application must have a dynamically updatable service catalogue (a portfolio of services).
- ◆ The application payment mechanism must be independent of mobile network and be able to access users bank account.
- ◆ The application must be able to confirm placed service orders by a planning module / calendar.
- ◆ The application must have a feedback channel for users experiences of service delivery.
- ◆ The application must meet user need of safety, planning and control.
- ◆ The application must send confirmations on all reservations and fees to be charged on the tourists bill.

The conclusions regarding future technology are that the mobile networks should function as transparent pipes, and the mobile device limitations on battery life, display quality and processor capacity must be overcome in order to make mobile services usable, not mention valuable. Mobile browsers will hypothetically replace mobile network services.

There is no basis for believing that our conclusions are compatible with existing institutional set-up in the telecom market but that new, intermediate actors are in need for mobile services in Europe to be realized. The equipment manufacturers and the operators of telecom networks appears not to willingly allow change in the direction trading an increased market for lower margins.

## Future Research as recommended activities

- ◆ Business research on the creation of new markets.
- ◆ Business research on the role of the regulator in the creation of new markets.
- ◆ Business research on the creation of specific value constellations in the field of mobile services in Europe.
- ◆ Ergonomic's research on context specific man-machine interfaces for handheld terminals for outdoor use, e.g. noisy environment or for terminals used in full daylight.
- ◆ Ergonomic's research on the relationship between design choices and user learning curves.

## Future Recommendations

- ◆ Mobile services price-setting must be transparent to create a potentially viable market for mobile services.
- ◆ The development of mobile services needs to start with the customer of mobile services (with business demands) rather than producer of the terminal (technical capabilities).

## Impact

The project has developed a deep understanding the niche market 55+, and demonstrated business and service opportunities within this large and growing market. The tour industry are interested in gaining access to their customers mobile handsets to raise both the quality in their service offers but also to widen their contacts with the market.

However, the results demonstrate the limited feasibility of mobile services covering all of Europe at this time – badly designed handsets for elderly people, non-transparent services, nationalistic telco interests et cetera. The project has identified these critical business hurdles for the success of mobile services for the 55+ market, and has been able to initiate a discussion across different business players early enough to develop options to overcome them. One potentially very interesting market is the establishment of an operator-independent payment system for Europe.

The project shows the potential of a niche business for mobile services at European level, a potential that in all probability needs to be exploited by new service intermediaries.

The consequences for the 55+ customers to the service sector in Europe is that they can use any mobile on any network to get access to these services.

## About Celtic

Celtic is a European research and development programme, designed to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions.

**Timeframe:** 8 years, from 2004 to 2011

**Clusterbudget:** in the range of 1 billion euro, shared between governments and private participants

**Participants:** small, medium and large companies from telecommunications industry, universities, research institutes, and local authorities from all 35 Eureka countries.

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