## **Project Information**



# Advanced technologies enabling multi-device mobile access to current and future Web applications, services and information portals

The global objective of the MyMobileWeb project is to drive research and development activities on technologies that will foster conversion of the Mobile Web into a reality present at the heart of everyday life. MyMobileWeb makes the connection between the telecommunications sector (operator, device manufacturer) and the content and IT sector (software houses, but also the end users) by providing a complete framework for facilitating the development of new and better services, applications and products for the users (both professional and end consumers).

#### **Main focus**

To achieve the above objectives the project will focus on the following actions:

- ◆ Solving issues still unresolved in Web 1.0 which have to do with enabling development of once-for-all-kind-of-devices for the mobile access channel to Web applications, services and information portals.
- Exploiting Web 2.0 and 3.0 features in mobility, enhancing the mobile Web experience through an extensive usage of Semantic Web technologies.

MyMobileWeb will address both questions by following a holistic approach that will ultimately lead to the practical implementation of the "Semantic Mobile Web" concept. In this respect, the "My" prefix in "MyMobileWeb" reflects the usage of Semantic Web technologies in Mobile Web environments.

#### **Approach**

To achieve the project objectives the following steps will be taken:

 Define a standardized approach to support and facilitate the development of user interfaces for applications and services targeted to the current and future mobile web space. In the future Mobile Web, web sites will publish the semantics associated to the contents, through interfaces that facilitate the automatic search for Web Services and other processes of interest for the user in the context of navigation through pages.

- ◆ Definition of ontologies for the description of the different aspects (user, browser, device, location, etc.) of the mobile delivery context. These ontologies will enable the development of applications that exploit context-awareness to provide a better user experience.
- ◆ Build an open source reference platform for Mobile User Interface development:
  - Implement an evolutionary platform dedicated to software developers that will encompass all the features necessary to build applications and services targeted to mobile devices.
  - ◆ Integrate existing de facto open standards and technologies in the proposed implementation of the standard to maintain independence towards third parties (e.g. WURFL for the management of information related to wireless devices).
  - ◆ Implement the concept of "platformoriented ecosystems", i.e. consensus on a high abstraction of level from a multitude of interested parties around a specific core element and thus creating huge opportunities for independent software vendors (ISVs), such as a core platform for mobile communications.
- Development of technologies enabling automatic correlation and discovery of electronic services and contents based on mobile Web navigation history, user profile, interests, social network, tastes and preferences.
- ◆Integrate the MyMobileWeb technologies into an open source framework dedicated to Mobile Service Creation. MyMobileWeb is a



## MyMobileWeb

Project ID: CP4-020 Start Date: 1 March 2007 Closure date: 29 December 2009

#### Partners:

Answare Technologies, Spain Fundación CTIC, Spain Germinus XXI, Spain Intelli Solutions SA, Greece Internet Web Serveis S.L., Spain

Universidad de Castilla La Mancha, Spain

Technical University of Vienna, Austria

Telefónica I+D, Spain
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#### **Project Website**

www.celtic-initiative.org/projects/MyMobileWeb http://mymobileweb.morfeo-project.org

fundamental component within the building block mechanism represented by Mobile Service Creation. Open and highly flexible environments in the service creation will allow new business ideas to grow rapidly from test cases to commercial deployment. This will help the European industry to boost their technological capacities and strengthen their competitiveness by allowing cost effective development of mobile application and services while reducing time-to-market and improving the quality of their products.

Last but not least, the project will imply a major innovation in the way exploitation of results will be carried out. Actually, business opportunities will not be based on commercializing products being developed as a result of the project (i.e., selling them under some term of licensing) but on commercializing services that will be easier to develop, deploy and be accessed thanks to the existence of an open source reference implementation of the technologies developed in the project.

#### Main results

To the best of our knowledge, MyMobileWeb will be the first attempt to standardize user interface development as well as Social and Semantic Web concepts for Mobile Web 1.0 and 2.0 applications. The proposed reference platform will be the first tool openly available to the programmer in an integrated environment. The following list outlines the results that will be produced under the project:

 Definition of a standard that allows to develop only once the user interface to Web applications and portals accessed from mobile users through a heterogeneous sets of terminals and channels. This standard will be semantic and social enabled. Promotion of the adoption of the standard at international level through the design of an adequate dissemination strategy: maintenance of a Web site, participation in forums and seminars, publications of articles and papers, etc.

- Standard semantic annotation mechanisms for the user interface of applications.
- Ontologies for the description of the mobile the delivery context.
- Development of a semantic content adaptation engine capable of dealing with rich multimedia content.
- Formalisms for the automatic discovery of electronic services and contents during mobile navigation.
- Set of mobile browser plug-ins that improve user experience by means of discovering contents and services.

#### **Impact**

MyMobileWeb will significantly strengthen the foundations for the development of future mobile applications and services. The immediate benefits will apply to both providers and end users of mobile software applications and services. In particular, MyMobileWeb will:

◆ Empower the service creation business through Rapid Application Development (RAD) and at the same time favor job creation and employment growth in Europe by facilitating the devel-

- opment of mobile applications and services.
- Empower mobile service consumption as a consequence of improving user experience. This will lead to the further development of integrated telecommunications.
- Increase competitiveness of companies augmenting the number of electronic services ready for discovery and consumption in a mobile environment.
- It will serve as reference implementation of standards devoted to the development of the Semantic Mobile Web.

The open source released technologies will allow solution integrators to configure a service offer and, as a consequence, to develop business opportunities.

Together with enlarging the mobile industry market potential and maximizing the competitive edge in this area within European companies, MyMobileWeb will also strengthen European competitiveness and maintain Europe's R&D lead in the mobile industry towards existing and potential competitors, like the USA, China, and India.

### **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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