

Project Results

Making content sharing easier Improving mobile peer-to-peer networking

The ExpeShare project improved the way consumers use, share and enjoy personal multimedia content on the move. The project offered new means to set up and manage peer communities as target groups for sharing content. New peer-to-peer networking technologies facilitate sharing between mobile devices while taking into account content owners' interests. Improved identification and payment solutions simplify use of commercial content and trusted services.

More and more people want to carry around treasured multimedia content in small mobile devices such as mobile phones, MP3/DVD players, memory sticks and digital cameras. However, the experience is defined not only by the content itself, the user interface and rendering devices available, but also by the means available to retrieve, share and manage the content and the social context of the user.

FACILITATING CONTENT SHARING

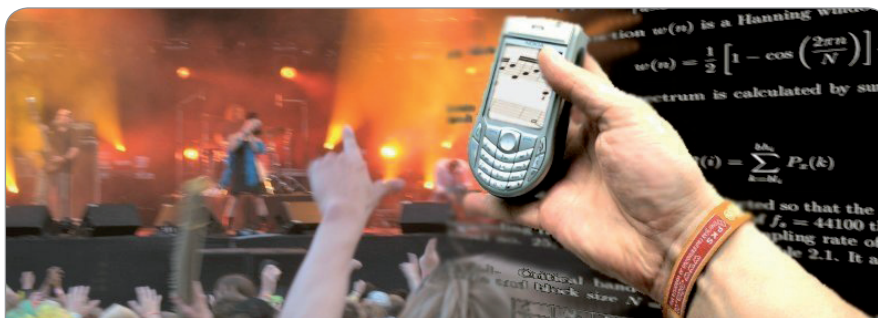
While mobile content is enjoyed by many using current devices, and sales of content in suitable formats have rapidly increased, sharing is still cumbersome and technically demanding. This is down to interoperability problems and legal restrictions. Moreover, content enjoyment is restricted by the limitations of the mobile devices themselves.

ExpeShare set out to resolve technical bottlenecks related to peer-to-peer networking, digital rights management and personal assets security while supporting

building and managing mobile virtual communities, such as managing identity and sharing context information. It has enabled converged multimedia services for communities over peer-to-peer networks and facilitated interaction by initiating exchange of experiences.

Major advances included:

- **Content-creation and management tools**, particularly for mobile use, that are simpler to use and a platform that links them with existing web-based content-management and sharing solutions.
- **Community-management solutions** offering mobile support for managing identities in social networking services, facilitating simultaneous presence in existing communities. Work also included Bluetooth and radio-frequency identity (RFID) solutions for establishing ad-hoc local communities for sharing.
- **Ad-hoc wireless peer-to-peer networking solutions** to enable on the fly multi-hop communications between devices without infrastructure and to deploy multimedia experience sharing, community joining, voting and other services.
- **Mobile payment** with trusted, easy-to-use-services for ticketing and payment by mobile phone. ExpeShare even allows paying other people just by touching mobile phones using near-field communication (NFC) technology and the subscriber's identity module (SIM, USIM/UICC) cards.



Sharing content and experiences right where it happens

ExpeShare (ITEA 2 ~ 06026)

Partners

Brieftec
CBT
CCRTV
CityPassenger
Gemalto
GET-INT
Innovalia
INRIA
Kutalab
Movial
Nextel
Nokia
NXP Semiconductors
Software Quality Systems
Telefonica I+D
Transatel
University of Evry
University of Oulu
Universidad Politecnica de Valencia
VTT Technical Research Centre of Finland

Countries involved

Finland
France
Spain

Project start

April 2007

Project end

October 2009

Contact

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- **Content-rendering environment** that allows mobile devices to use other devices in the environment to improve the enjoyment of the experience.

FEELING PART OF A COMMUNITY

The outcome of ExpeShare is a series of easy-to-use mobile services and infrastructure elements for capturing and sharing experiences. Its main impact will be in service satisfaction, easy purchase of related content and an increased feeling of being part of a community.

Applications will include for example:

- **Mobile social media services**, where the technology provides a mobile extension of web services and allows for secure media content sharing;
- **Hotel and restaurant services** – providing information to make the visit more social and allow for sharing content and opinions as well as assisting in finding the most suitable services and locations;
- **Exhibition and social event services** where ad-hoc services can

be established by exhibitors to share content easily between participants. Simplified payment solutions would also open up revenue-earning possibilities to anyone involved.

The technical solutions will be used to enhance a range of devices and services. Commercial exploitation of the most mature results can be expected in one to two years.

BENEFITS FOR SERVICE PROVIDERS AND USERS

As a result of ExpeShare, Europe will maintain its leading position on mobile technologies and improve its market offer in social media and digital content provision, currently dominated by US companies.

Service providers will be able to supply new offerings with capabilities attractive to the users and fair for all stakeholders involved. Society in general will benefit from easier-to-use mobile devices and services. As social life is increasingly happening in the virtual world, it is important to facilitate access for less technically minded people.

Major project outcomes

DISSEMINATION

- 60+ papers in journals, books, conferences and theses
- Demonstrations at various conferences and events, including best demo award at PerCom '09.
- Articles in local newspapers.
- Joint workshop with the Cam4Home, Wellcom, and Hermes projects on Shaping the future of communities through network-, content- and consumer-oriented technologies.
- A workshop on Community driven mobile multimedia was organised at the ICME conference.
- A Finnish public seminar was organised in cooperation with the Cantata project.

EXPLOITATION

- Partners are currently working on developing products based on the results of the ExpeShare project.

STANDARDISATION

- The project has contributed to the next step of the Smart Card Platform of the ETSI, the HCI (Host Controller Interface) specifications, which is a continuation of the standardization of the Single Wire Protocol used between the NFC reader and the SIM card.
- A community management system standardisation draft has been proposed at IETF and a Social Enabler proposal at OMA.

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■ ITEA 2 – Information Technology for European Advancement – is Europe's premier co-operative R&D programme driving pre-competitive research on embedded and distributed software-intensive systems and services.

As a EUREKA strategic Cluster, we support co-ordinated national funding submissions and provide the link between those who provide finance, technology and software engineering. Our aim is to mobilise a total of 20,000 person-years over the full eight-year period of our programme from 2006 to 2013.

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■ ITEA 2 projects involve complementary R&D from at least two companies in two countries. We issue annual Calls for Projects, evaluate projects and help bring research partners together. Our projects are open to partners from large industrial companies and small and medium-sized enterprises (SMEs) as well as public research institutes and universities.



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