



PROJECT PROFILE

Browsing through smart objects around you

Enabling intuitive interaction with smart devices

Mobility has become an essential part of life and will continue to grow in significance. The vision of the future mobile world inherently includes natural interaction between humans and smart digital devices embedded in our environment. SmartTouch is preparing the way for organisations that use radio frequency identification (RFID) technology and the near field communication (NFC) interface and protocol to take advantage of exciting opportunities in building innovative new businesses. The goal is to conceive, design, construct and trial the key elements needed to develop the main concepts for the corresponding business chains.

All kinds of smart devices and mobile services are steadily and surely being integrated into our everyday living infrastructure. More and more people would like easier access to information and to sharing that information, pay for their shopping, access entertainment, seek products and services, and buy things just by touching smart objects. Touch is intuitive and an easy way of showing what you need and want.

SmartTouch communication is based on RFID contactless identification technology and the NFC short range wireless connectivity interface and protocol. These techniques are targeted to users that will be able to access various smart devices in a new way

SMARTTOUCH (ITEA 05024)

Partners

- Alcatel
- Buscom
- City of Oulu
- Dan Company
- Gemalto
- Idesco
- Innovision Research and Technology
- K.U. Leuven
- MedicTouch
- Nokia
- Nordea
- Philips CE - Innovation Lab
- Rhein-Main-Verkehrsverbund
- Robotiker
- Telefónica Investigación y Desarrollo - Unipersonal
- TeliaSonera
- Telvent Tráfico y Transporte
- ToP Tunniste
- VTT Technical Research Centre of Finland

Countries involved

- Belgium
- Finland
- France
- Germany
- Israel
- The Netherlands
- Spain
- United Kingdom

Project start

February 2006

Project end

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Contact

Project Leader:

Tua Huomo
VTT Technical Research Centre of Finland

Email:

Tua.Huomo@vtt.fi

Project website:

www.smarttouch.org





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without exerting too much effort to get what they want. In order to interact, users just need to bring smart devices together – i.e. make them touch.

Simplifying operations

Touch-based communication simplifies use of existing wireless protocols such as Bluetooth by eliminating complex menu navigation and the need to remember passwords or device parameters. It also enables information transfer – such as virtual business cards or an electronic payment transaction.

Simplified operations will support use of wireless technologies in consumer devices, providing new revenue streams for manufacturers. Furthermore, NFC opens a myriad of new product opportunities through the ability to exchange or access content and services.

Increasing mobility

Increased mobility and the drive towards efficiency in modern life are creating a platform for the growth of technologies and services that enable intelligent and seamless interaction with the smart environment. SmartTouch aims to conceive, design and create viable technologies, applications and business models based on the emerging NFC standard – promoting growth in an area of significant strategic importance to an increasingly connected world.

As the market for mobile systems and smart devices is growing, and more and more products, applications and services are

developed, there will be numbers of potential users of SmartTouch results. One of the factors in the success of NFC in smart devices will be the support of a common standard by the major mobile manufacturers and other key players – see www.nfc-forum.org.

Creating new opportunities

SmartTouch technology will create many new opportunities to add product and service capabilities – for example to mobile handsets, home electronics and smart cards. SmartTouch will accelerate the development of successful new businesses by investigating and creating relevant technical and business building blocks.

The SmartTouch technical infrastructure and platform will enable communications service concepts and corresponding scalability for SmartTouch applications and services. The project will respond to the technical challenges related for example to:

- Identification technology;
 - Control mechanism and rules;
 - Design of platform for smart control devices;
 - Security and privacy;
 - Effectiveness;
- and
- Ease of use.

SmartTouch business building blocks will include new business models, earning principles and relationships between different stakeholders. These stakeholders include equipment, applications and content providers as well as network operators, end users and infrastructure providers.

ITEA Office

Eindhoven University of
Technology Campus
Laplace Building 0.04
PO box 513

5600 MB Eindhoven
The Netherlands

Tel : +31 40 247 5590

Fax : +31 40 247 5595

Email : itea2@itea2.org

Web : www.itea2.org

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