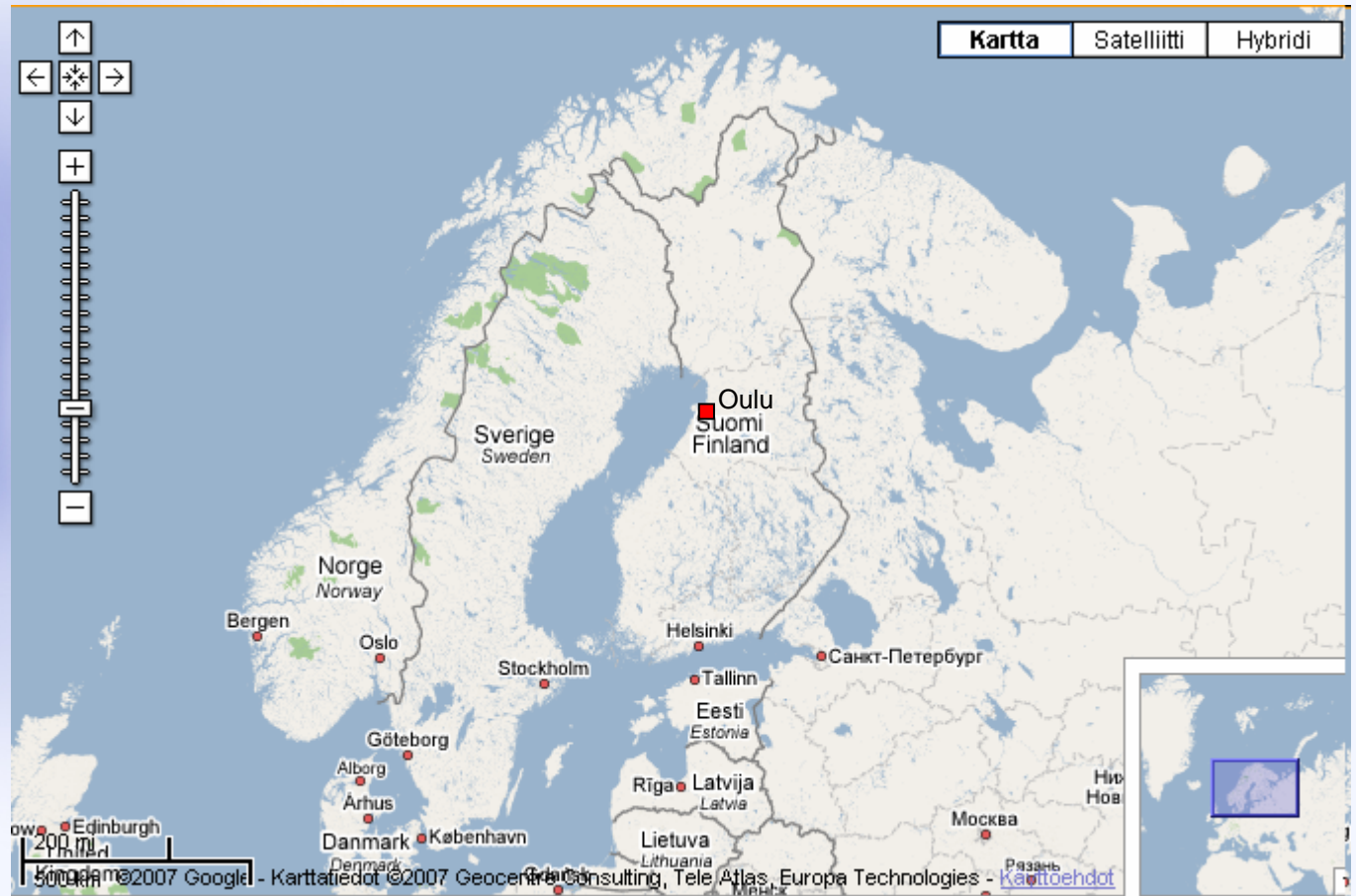


INTERACTION AS SIMPLE AS TOUCH



Tuomo Tuikka
Senior Research Scientist
SmartTouch Project Leader
VTT Technical Research Centre of Finland
Oulu, Finland

Oulu



SmartTouch Consortium



We are 24 organisations from 8 European countries under Eureka/ITEA collaboration framework

9 large industrial organizations and 6 SMEs

4 research and 2 public organisations

SmartTouch partners contribute total of 235 person years

Duration: February/2006 - December/2008

Budget ~30M€

www.smarttouch.org

About Near Field Communication Technology and Applications

- Near Field Communication (NFC) is a standards-based, short-range wireless connectivity technology that enables simple and safe two-way interactions among electronic devices.



NFC device capabilities

- Peer to peer
- Read/Write
- Smart Card Capability for Mobile devices



NFC has wide industry support



- NFC technology is supported by the world's leading communication device manufacturers, semiconductor producers, network operators, IT and services companies, and financial services organizations.
- NFC Forum has 120 member companies
- More information from www.nfc-forum.org

SmartTouch Partners



INFORMATION TECHNOLOGY
FOR EUROPEAN ADVANCEMENT



Potential for business

- "By 2010 more than 30% of all handsets, in other words, some 450 million units will incorporate NFC capabilities."
- ABI Research, 2005



SmartTouch - Objective

- The aim of the SmartTouch project is to prepare the way for new NFC business through **full implementation** of use scenarios including all players of the business chain and analysis of **technology, security and business** aspects.



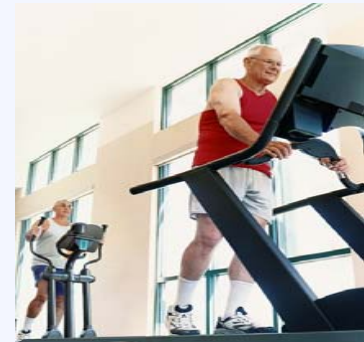
SmartTouch - Objective



City Life



Home Environment



Wellness & Personal Health

Technological Building Blocks

Business Building Blocks

Security & Privacy



Get information by touching smart posters



Use your NFC phone as an event ticket



Print from your camera by holding it close to the printer



Set up your wireless home office with a touch

Many Uses of NFC Consumer Device



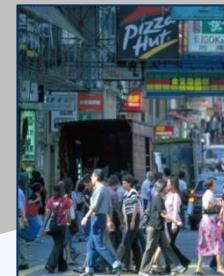
Peer2peer - share business cards with a touch



Get on the bus by waving your NFC phone



Find and initiate services



Pay for goods with a tap of your NFC phone

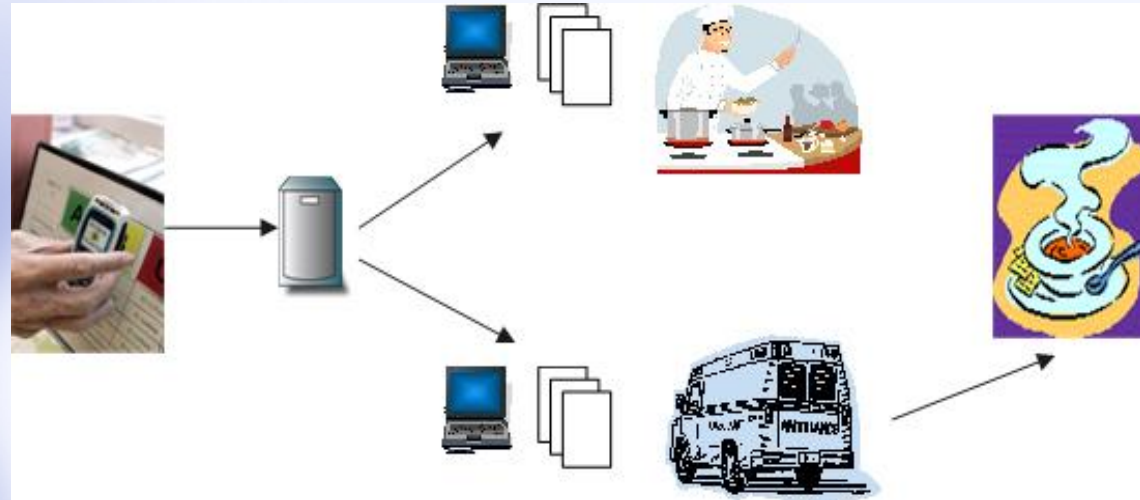
Catering Service for the Elderly



Support elderly people living at home by monitoring and automatic registration of meal orders



Catering Service for the Elderly



1. Meal Order by touching menu

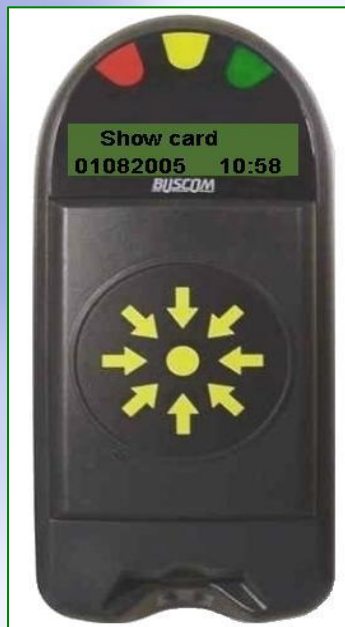
2. Oulun Ateria receives the order and prepares the meal

3. Oulun Logistiikka reports at the start of the delivery rounds, delivers the meals and report the successful delivery and completion of rounds using NFC enabled phones.

4. Real time information to City's elderly care department, Oulun Ateria and Oulun logistiikka



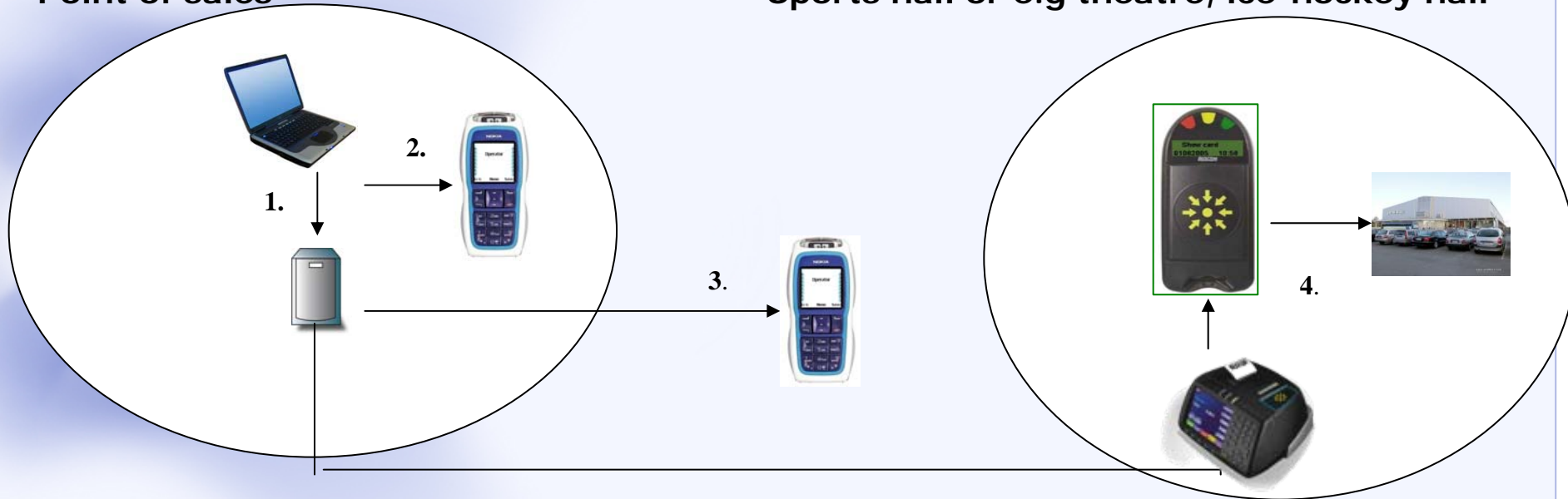
Lock management using a Mobile Phone



Mobile Lock Management

Point of sales

Sports hall or e.g theatre, ice-hockey hall



1. Insert customer information, card IDs and access information to the database
2. Installation and initialization of the applets to the customer clients
-Profile installation e.g. expiry date and access rights
3. Update the customer profile over the air
4. Open the door or access to event for authenticated users with valid access-rights
5. Blacklist management via GPRS/WLAN

Parking using NFC phone

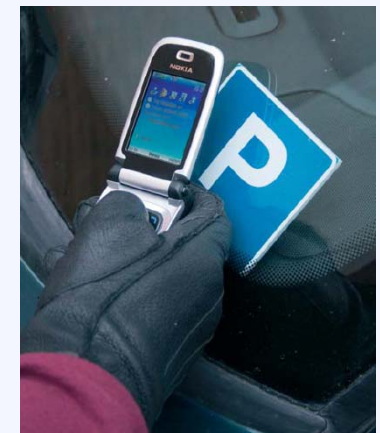


Roadside:

- Tag in car with P label
 - car information
- Tag in roadside with P label
 - Location and tariff information
- NFC phone with Parking application
- NFC phone with Inspector application
- Backend system
 - Parking database
 - Users parking time & location/tariff

Parking hall:

- Gate will be opened when gatereader will be touched by phone



Oulu Theatre



- Oulu Theatre application in phone including:
 - Theatre tickets
 - Value for restaurant
 - Handprogramme
- Information and marketing channel to customers
 - Videoclips from information posters
 - Actors, commentary, history etc.



Restaurant Pannu - Fast track



-Waitress / VIP Customers have a NFC phone

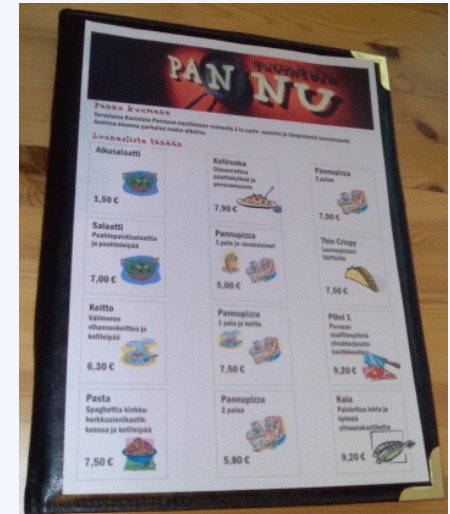
-Tags in menu & table

-Ordering application and backend system for cashier and kitchen.

-User can have value cards

-Value payments

-Lunch couponS



Beerhouse Leskinen



Daily offers/check in



Product information



3rd party content



Order taxi



Print a photo



Information tags in City Environment

- Hundreds of stickers and posters will be in
 - Parking areas
 - Restaurants
 - Buses
 - Theater
 - Parking Halls



KOSKETA KOHDETTA NFC-PUHELIMELLASI

 wap.kaleva.fi tuoreimmat uutiset	 0600-30080 SuoraTaksi-palvelu	 esityskalenteri ja ohjelmisto	 wap.surfport.fi/ autoilijan-palvelut
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www.smarttouch.org OULU VTT TeliaSonera IDESCO NOKIA IDENTIFIED BY top tunniste Nordea Tekes



Seeing Eye Phone - Concept

SmartTouch



- Winner of the 1st NFC Competition in Future Innovations Track
- [VIDEO](#)

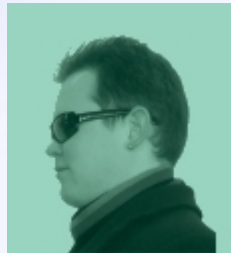
Seeing Eye Phone



1. Product information
e.g. price, nutritional information
and special information via NFC



**2. Speech to
the user**



NFC Places the User in Charge



INTERACTION AS SIMPLE AS TOUCH

A woman with dark hair, wearing a light-colored striped shirt, is looking down at a smartphone she is holding. The background is a bright blue sky. Overlaid on the image are several circular icons connected by white lines, representing various applications: a hand touching a globe (SmartTouch), a wheelchair, a bus, a stethoscope, a padlock, a camera, a telephone, and a medical cross. The text "AS SIMPLE AS TOUCH" is written in a smaller font to the right of the word "INTERACTION".

INTERACTION AS SIMPLE AS TOUCH

SmartTouch





VTT CREATES BUSINESS FROM TECHNOLOGY

