

**Social acceptance of proactive mobile services: observing and anticipating cultural aspects by a Sociology of User Experience method**

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**Adaptive Mobile Services**  
Design Parameters and User Experience Factors

**A French/Finnish research and development project**

- Identify design parameters for proactive mobile services
- Identify the factors of adaptability which impact the user experience in proactive environments
- Explore to which extent these factors are dependent on the cultural context
- Develop design guidelines and evaluation principles for future proactive services
- Define adaptation architecture: system of technological components required to create experimental proactive services

## Goals of the sociological inquiry

Prospective elements for development of proactive services:

- potential limits to the social acceptance
- “meaningful” proactive features, expected services, social opportunities...

French/Finnish cultural differences in the user experience of proactive mobile services

## Concept of services to be tested

### **Technical requirements :**

- Mobile device (phone, PDA...)
- geo-positioning (outdoor/indoor)
- personalization (profile data)

### **Functional requirements:**

- Functional characteristics of ambient intelligence
- User's proactive interaction with people and devices:
  - **Ubiquitous** communication (enhanced presence)
  - **Unconsciousness** of communication between users and devices
  - **Autonomy** of communication within objects

### **Scenario requirements:**

- Features based on technical and functional requirements
- Mobility = Context switching (private, public, professional spheres)

## Film demonstrator

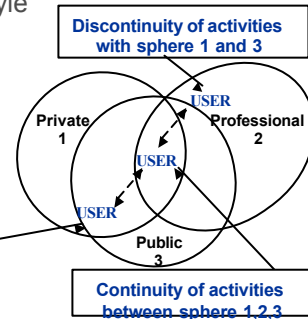
### Suitable to an acceptability approach of uses:

- Anticipative vision
- Non developed features and technologies
- Large area/several test users in the same time
- Similar experiments in two countries

### Scenario (*Paul's Day*):

- Synthesis of typical use situations in mobile lifestyle
- Documentary style: made as realistic as possible
- Addressed sociological issues:
  - Elasticity of activities within user's social spheres
  - Porosity of social spheres towards user's activities
  - Impact on private/professional relationships
  - Privacy

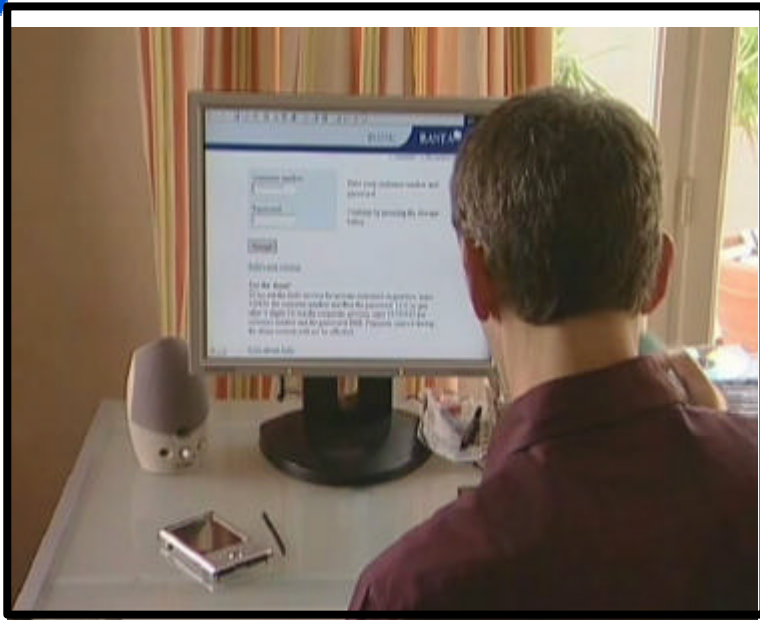
Continuity of activities between sphere 1 and 3. Discontinuity with sphere 2



### A sample of *"Paul's day"*

Continuity of  
activities in  
switching  
context

From private  
sphere to public  
sphere...

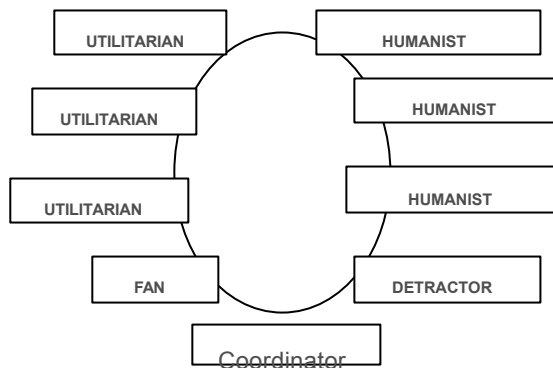


## Sample group of potential users

- 4 focus groups = 2 in Finland, 2 in France
- 2 focus with **experienced** and 2 with non **experienced** users
- 8 participants to each focus group (31 altogether)
- Finland : 10 women / 5 men
- France : 8 women / 8 men
- 21-59 years old
- Mixed social and occupational groups

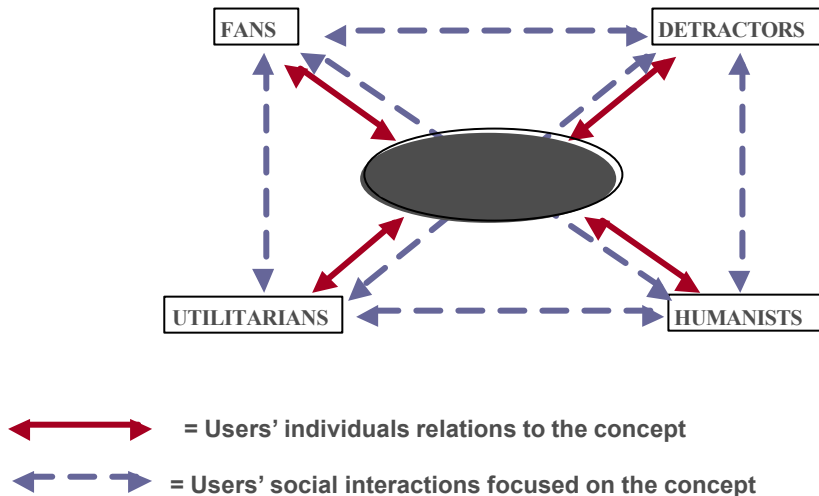
## Sample group of potential users

- Typical user profiles distribution in each focus group



User Profile	Fans	Utilitarians	Humanists	Detractors
<i>total</i>	4	14	11	2

## Observation of the focus groups



## User profiles feedback towards the concept

- Similar French/Finnish group dynamics
- Predictable feedback towards the concept
- Coalitions within similar user profiles
- Divergences towards other profiles
- Extreme positions of non negotiator profiles
- Moderation role of negotiator profiles

## French and Finnish cultural tendencies

- **Men/women relations: the gender of proactive services**
  - A support of women power in Finland
  - A male tool in France
- **Conception of work: “The Cicada and the Ant”**
  - Encouragement to the hard worker in Finland
  - Promotion of lounging time in France
- **Relation to proactive environment: natural symbiosis or domestication of objects**
  - Ambient intelligence as a natural thing (objects ecosystem)
  - Master/slave human-machines interaction

## Conclusion

- Archaic elements of users' culture could condition social acceptance of high tech
- Meaningful ICT innovations are already known consciously or not by user
- Today with proactiveness, ICT claim to know user better than he knows himself so that they can anticipate what user will do or what user will require.
- It becomes so important to take into account users' cultural background that anticipation and personalization become the main characteristics of proactiveness
- With so high ambitions, the least ICT could do is to learn user's culture.
- Designers of proactive services have to teach smart objects with cultural background
- Designers have to take into account cultural elements in order to supply the users with systems taking into account lifestyle, values, beliefs ...