

Traveler information channel in digital television - user centered design and piloting



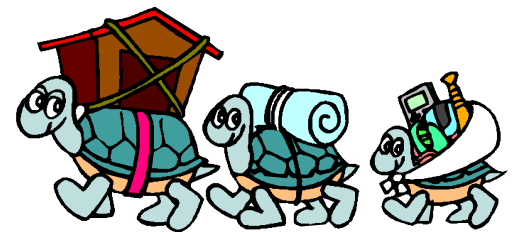
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Background - digital television

Five basic requirements for successful services in digital television (mintc, 2004) :

1. Application or content that makes everyday life easier
2. Solution to one specific problem in a specific situation
3. Often needed
4. Currently needed
5. Needed at home

-> excellent service fulfills 3 - 4 requirements



Digital television vs. www from users point of view

Digi-tv

- 2 m
- TV-user passive, leans backwards
- Remote control
 - Calls for simplification

- Faster!

WWW

- 0.5 m
- PC-user active, leans forwards
- Keyboard + mouse
 - Possibilities to search for specific information
- More detailed and time consuming

+ Everyone has a TV and connection

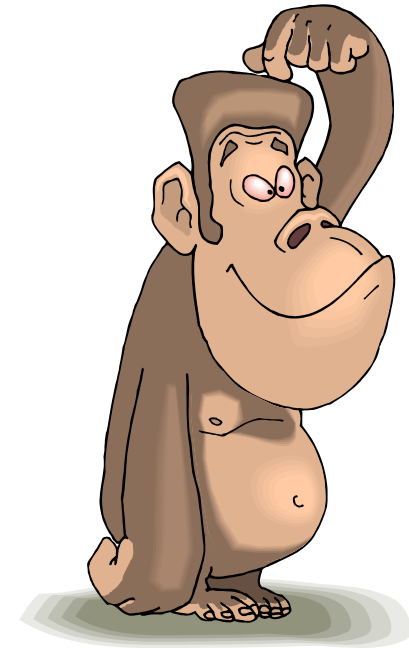
Why more traffic/traveller information

- Possible pitfalls with existing information
 - Service does not reach the user
 - Use of the service is too difficult
 - Information is too general
 - Information is not real time
 - Information includes difficult phrases
 - Information has no effect
 - Consumers do not buy the product...

➡ Iterative user-centered design

User centered design of traveler information channel

1. October - November 2003
2. 169 enrolled
 1. 42 user were selected to the discussion groups
 1. teenagers
 2. students
 3. senior citizens
 4. digi-owners
 5. public transport users
 6. drivers
3. Information was collected both individually and in group discussions
4. The participants were not told that the interview is aimed to create something to the digital television.



The grouping of traffic and traveler information

- Participants were divided into mini-groups of 2-3
- The groups were given 32 "title"-cards (e.g. traffic weather, timetables of trains etc.)
 - closely-related titles to the same group
 - one title can belong to several groups
- prioritizing of the titles in each group
- prioritizing of the groups
- naming of each group
(Puzzle-method)

Result: structure of the traffic and traveler information

- Warnings
- Real time traffic situation
- Public transportation
- Route planner
- Weather and environment
- Traveling
- Related services
- "other"

Structure: warnings

- Weather
- Pedestrians weather
- Incidents/accidents (RDS-TMC)
- Wind warning
- Fire forest warning
- Radiation warning
- Air quality

->only valid warnings

Public transportation information - current situation

- Most important and most difficult to get:
 - real-time information about arriving buses
 - real-time information about the incidents and exceptions
- information about the public transportation outside the home city
 - timetables,
 - how to use?
 - where to pay?

Driver information - current situation

- Most important and most difficult to get currently
 - traffic situation in the capital area
 - accidents - effects and exact place
 - road works: exact place and effects (delays, possible detours)
- ➡ information currently on internet (not all having at home) or radio (not everyone listening just at the correct time)

Opinions on the digi-tv traffic channel

- Benefits of the channel
 - enables better trip planning
 - all the needed information at the same place
 - enables real-time information
 - fast and easy way to get traffic/traveler information
- improves fluency of traffic and traffic safety, increases use of public transportation

How would the existence of traffic/traveler information channel affect on the purchase of digi-television

- Increase willingness to buy strongly 46%
- Increase willingness to buy slightly 20%
- No effect 34%
- Decrease... 0%

What kind of information could be included into the channel?

- Route planner - all modes
 - counts travel time and cost
- Public transportation
 - how to use, where to buy tickets etc.
- For drivers
 - dangerous routes, overtaking lanes, services on the route
- Long-distance public transportation
 - rates, stand-by offers, departing/arriving flights
- Traveling
 - local contacts for tourists, weather outside Finland

Summary

- Participants were interested in the channel
 - all the information at the same place
 - real-time information
 - transportation channel could be as an example to the other public information (health-care...)
- Local services, interactivity
- Transportation channel would have a positive effect on the willingness to buy a digital receiver/television
- Calls for user-centered design/ease-of-use

To be continued...

- User tests during June 2004
- Launching of service on the Helsinki area
September 2004
- *User interviews/feedback and continuous
development*

Thank you!

- Any comments?