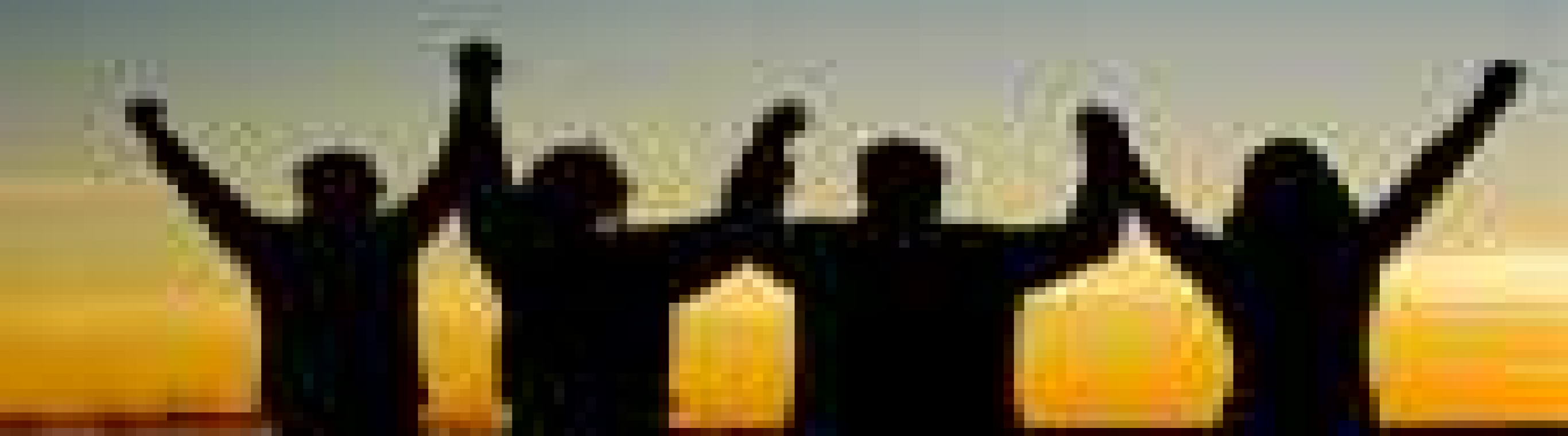


User Service Experience as Key Differentiator A Report from the In-Touch study

Dirk Waasen, Editor in Chief

Nokia World 2008

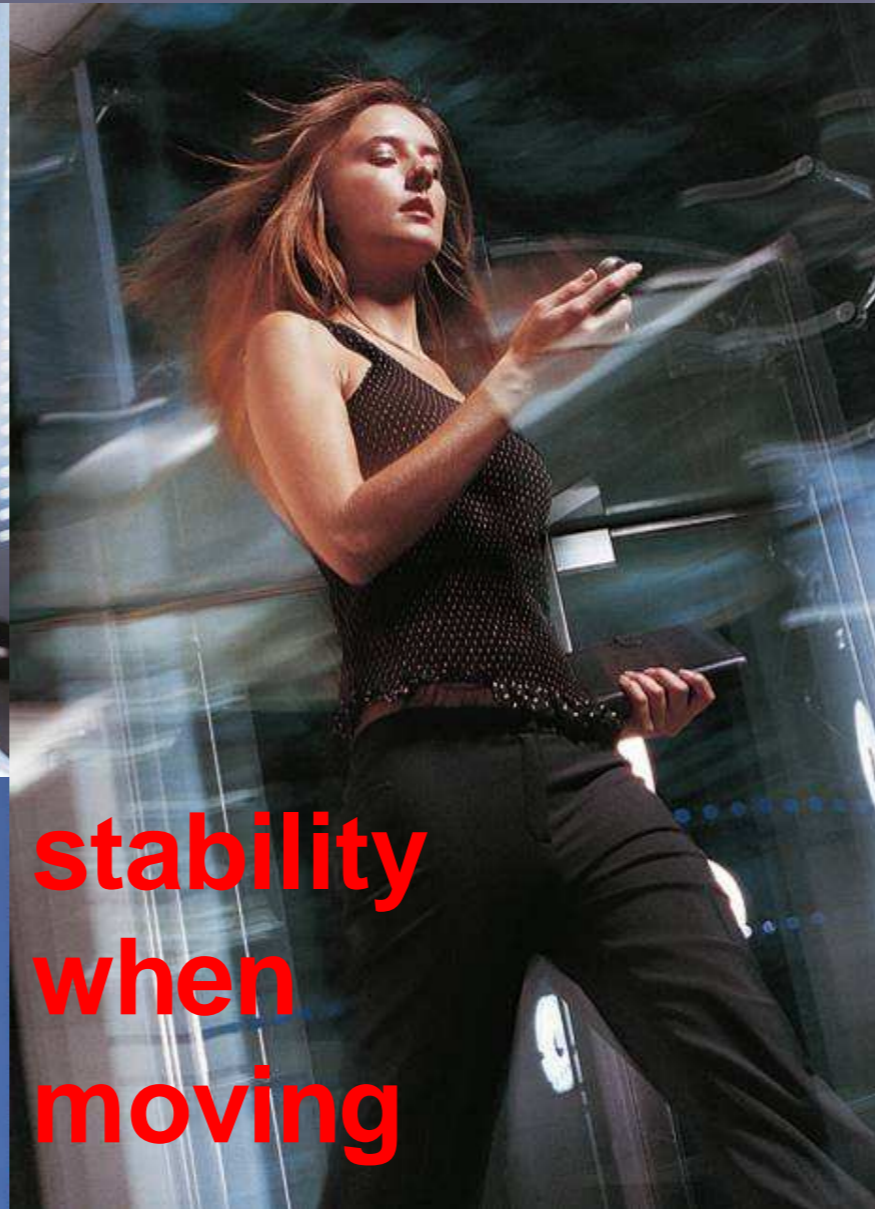
Barcelona, 3rd of December 2008



What is an end-user interested in?



**service
while
traveling**



**stability
when
moving**



**right
tariff**



coverage @ home



**features &
functions**



**fast & stable
data connection**

connect

In-Touch, what is it all about?

- Software runs on standard mobiles
- Passive data collection
- Location information
- Questionnaire function
- Central post-processing

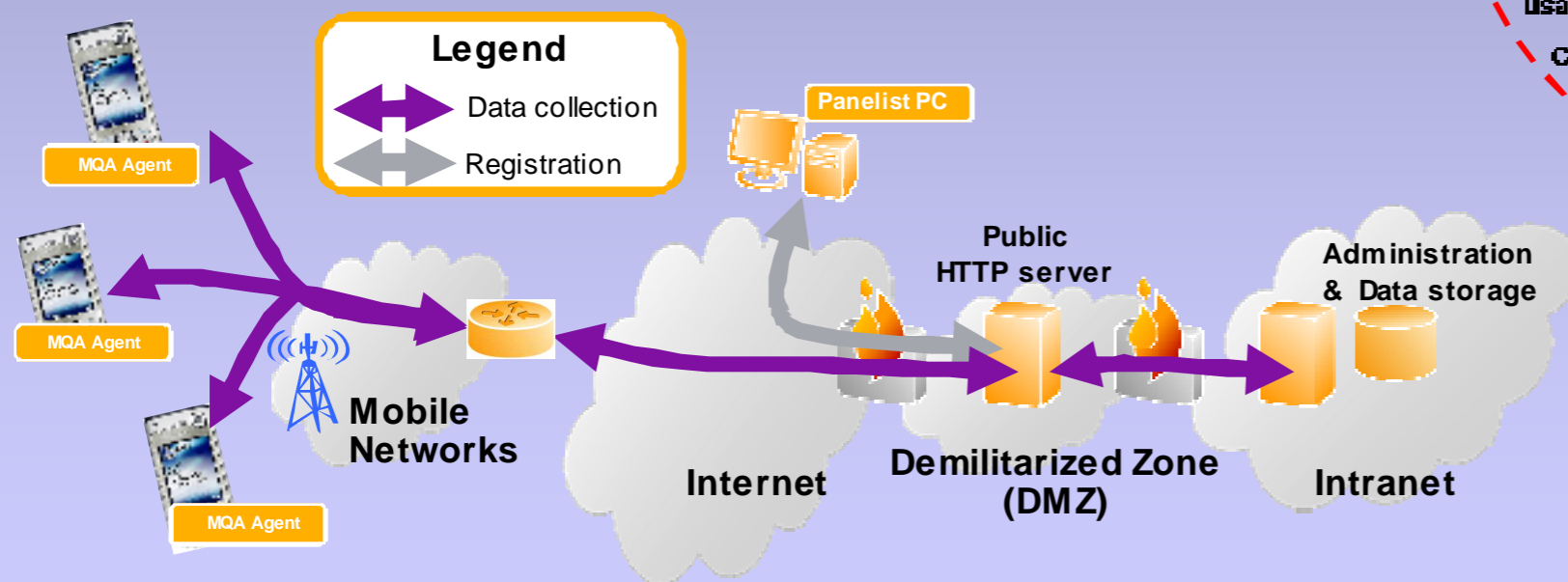
• Statistical analysis and correlation of all four dimensions!

Subjective

Location

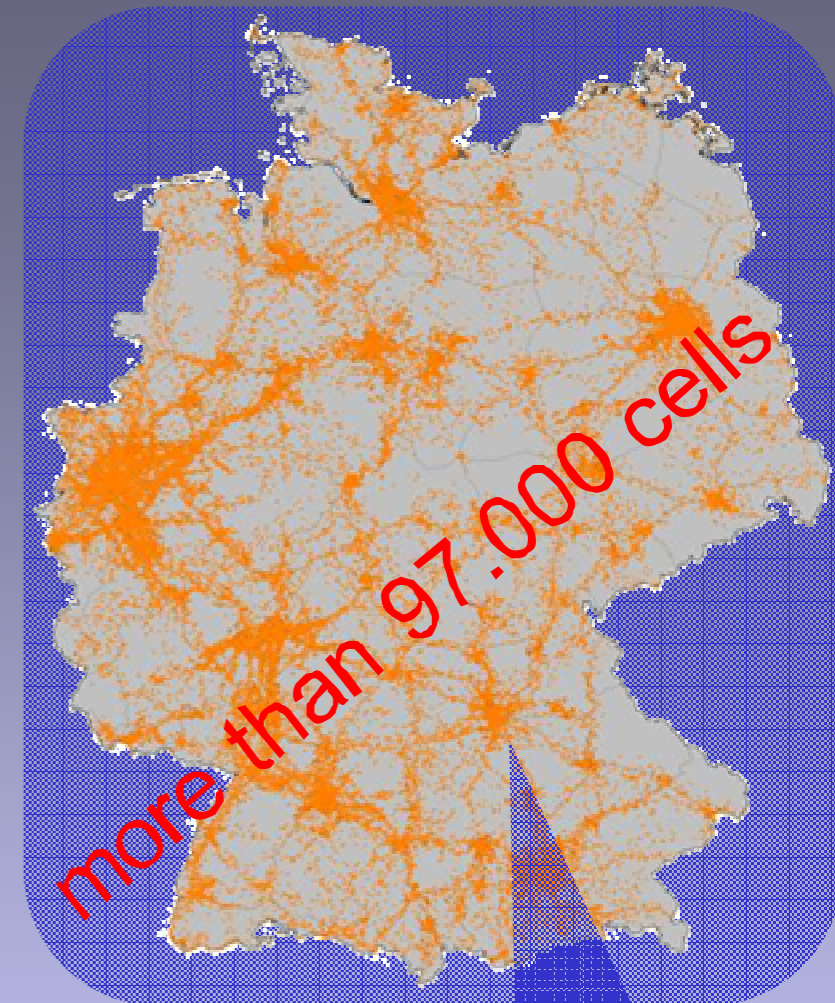
Objective

Behavior



Some facts & figures

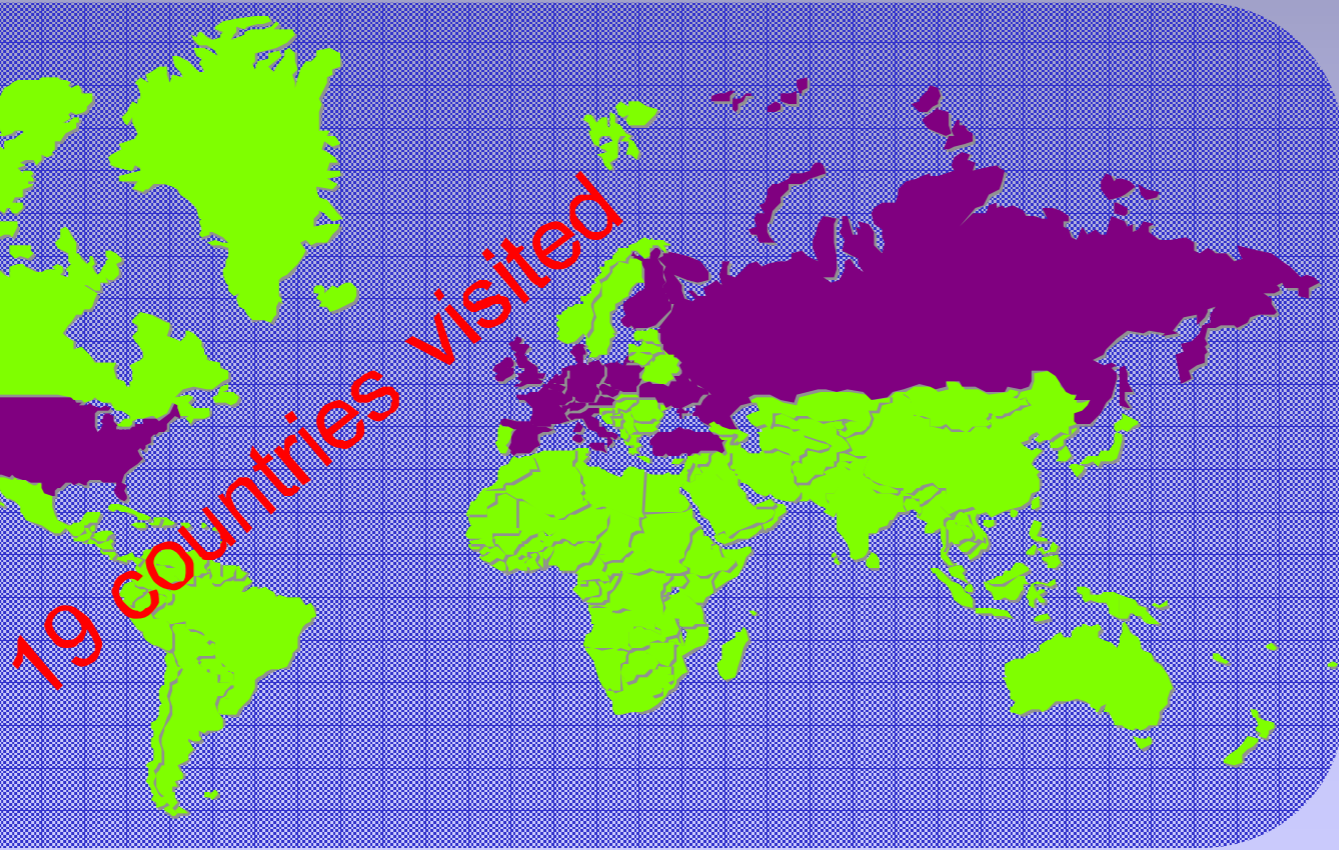
- 421 panelists
- 48 days study period
- almost 70.000 calls
- 50.000 voice & browsing questionnaires
- more than 1.000 used applications



Each dot marks a cell which was visited during the In-Touch study!



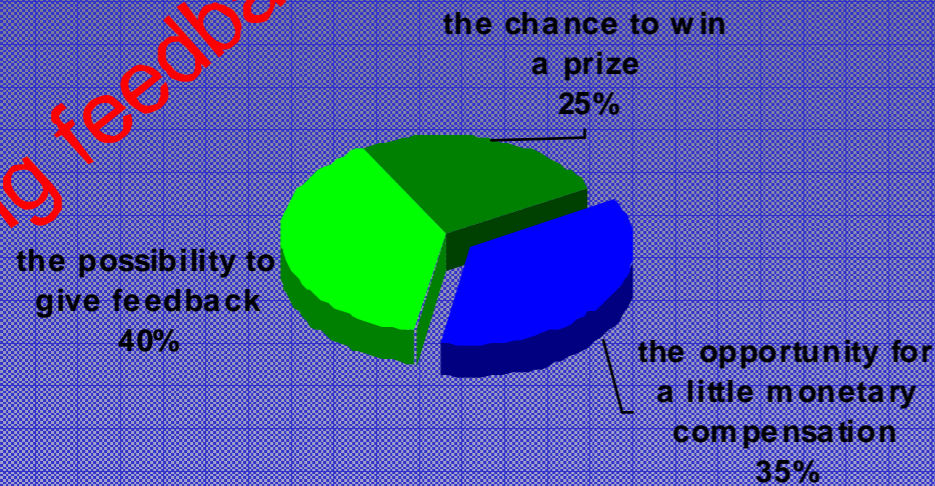
- Austria
- Belgium
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Ireland
- Italy
- Luxembourg
- Malta
- Netherlands
- Poland
- Russian Federation
- Spain
- Switzerland
- Turkey
- United Kingdom
- United States of America



Panelist motivation

What would motivate you most to participate in a later similar study?

Giving feedback!



In case of a new study (e.g. once a year): For how long would you be willing to answer questionnaires after internet surfing / making calls?

Do it again!



“I also would like to participate in such studies for a longer period of time if the user is put in a position to proactively influence services and network quality – the winner always is the consumer. There cannot be better and more practical relevant testers than the end users themselves.”

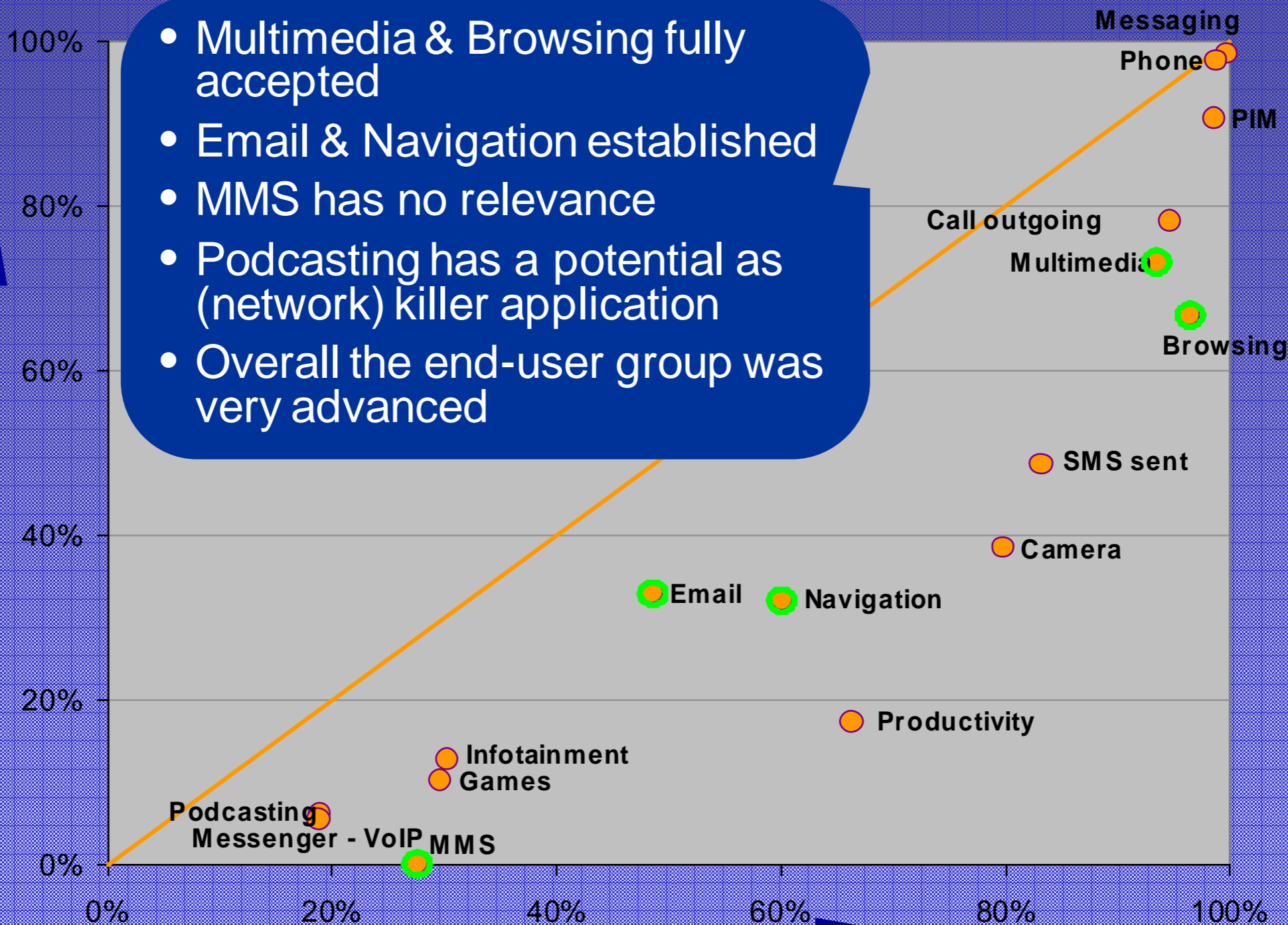
(quote from a panelist)



Application Usage

- Multimedia & Browsing fully accepted
- Email & Navigation established
- MMS has no relevance
- Podcasting has a potential as (network) killer application
- Overall the end-user group was very advanced

used regularly



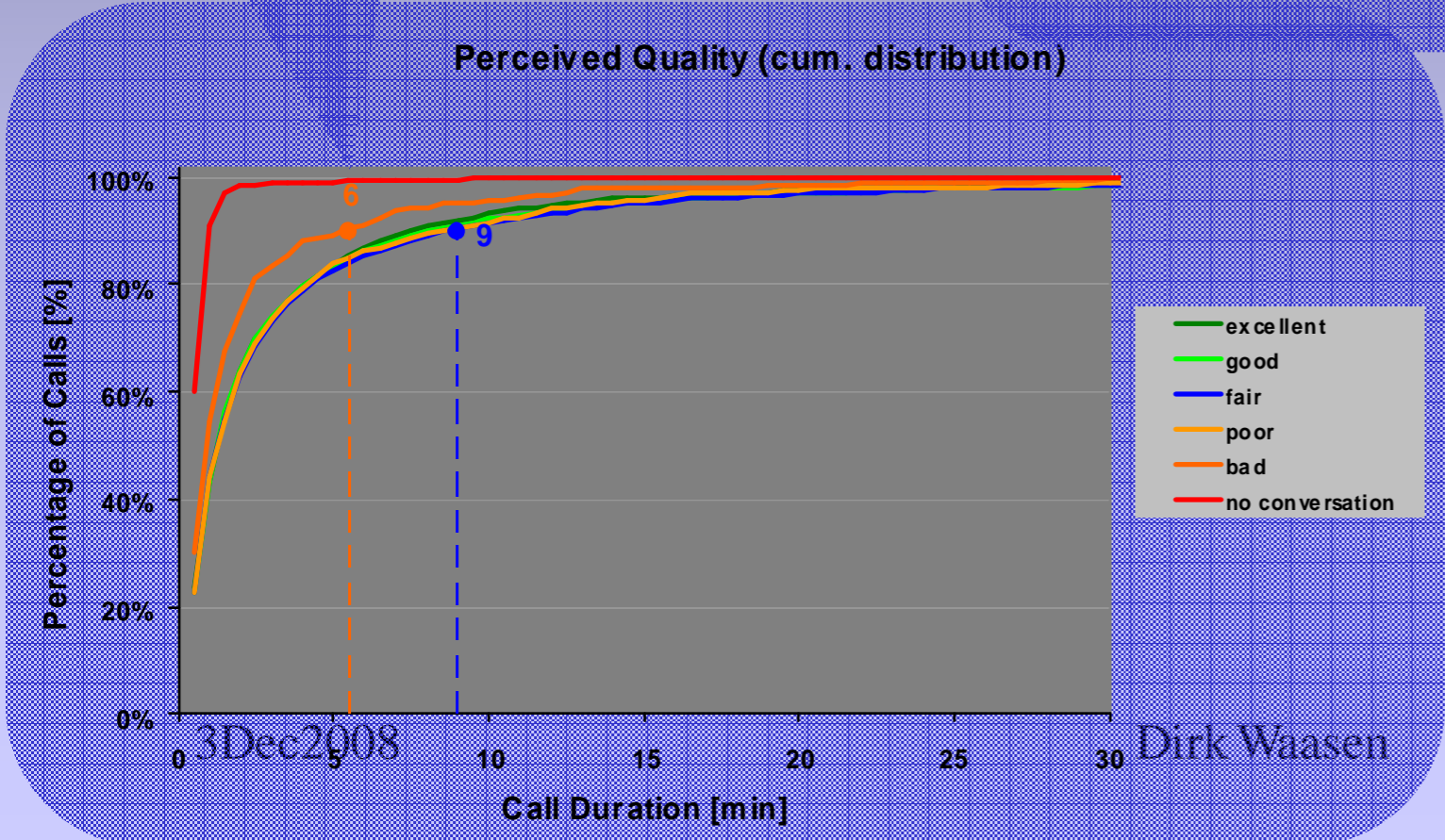
tried at least once



Calls get considerably shorter when coverage gets worse than -90dBm!



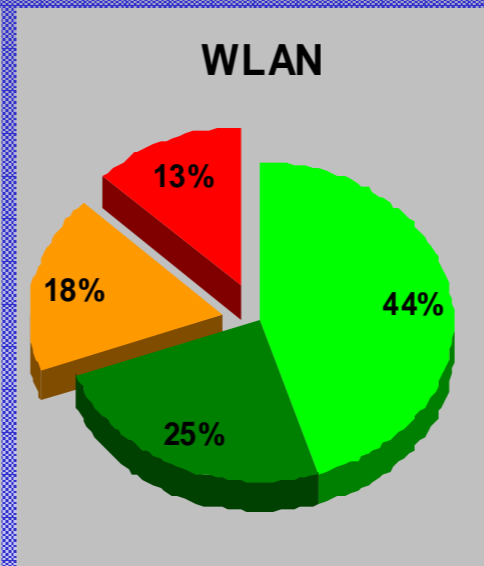
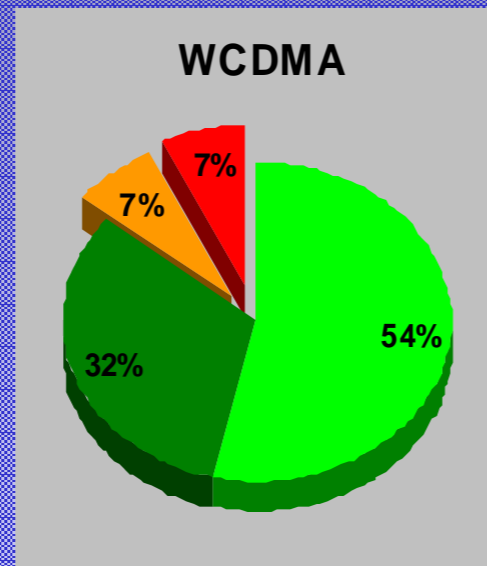
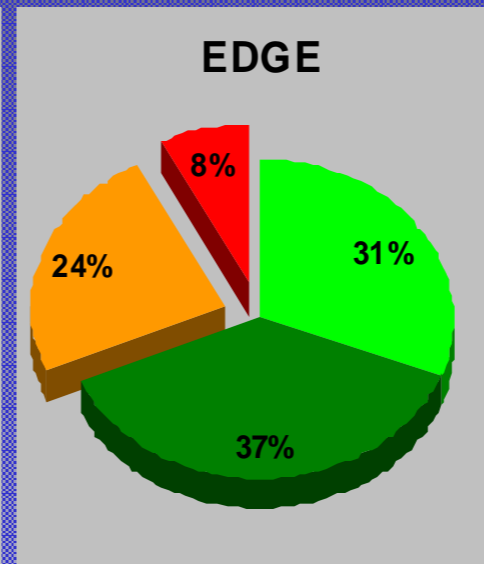
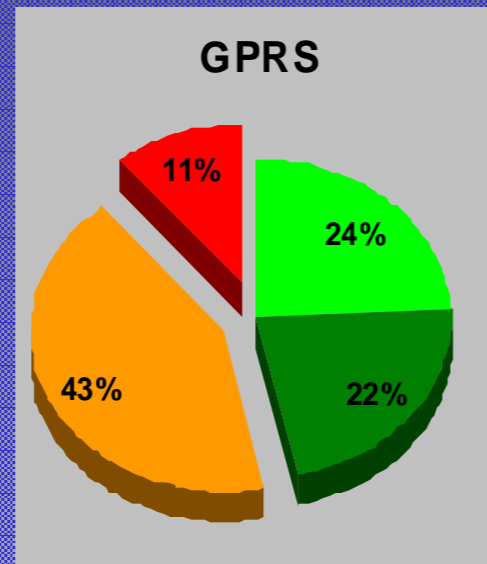
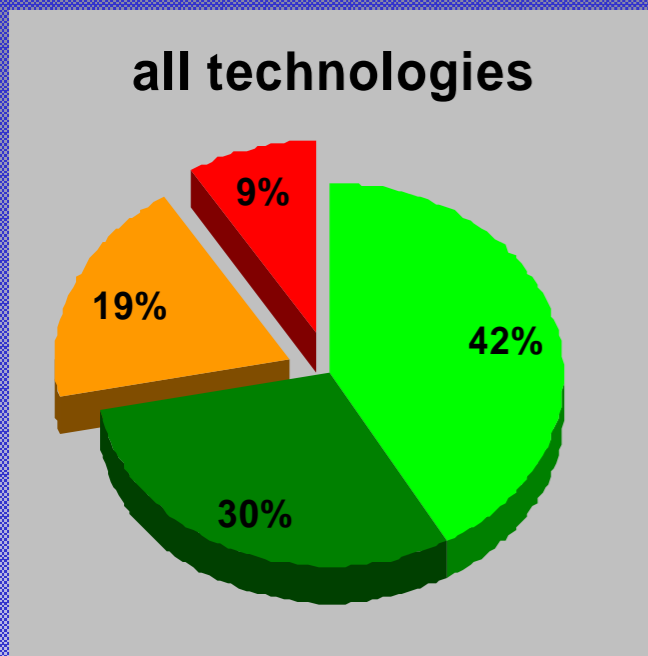
Calls which were ranked "bad" were in average 2min shorter than those being ranked "fair".



Impact on user behavior is measurable

Browsing: 3G/3.5G is fun!

How do you rate the speed of the page download?



■ fast ■ acceptable
■ slow ■ canceled, too slow

- 3G clearly scores best with respect to perceived speed even before WLAN!
- EDGE was ranked comparable to WLAN.
- More than 50% of the browsing sessions over GPRS were ranked slow or even canceled!

More to come... ..outlook to 2009

- The traditional connect benchmarking (“Netztest”) got valuable impulses from In-Touch and there is more to come...
- connect benchmarks mobile networks, services and terminals. By involving end-users it is sure there is more to come...
- 23% of the In-Touch panelists have already registered for the 2009 activity and there are more to come...

Conclusions

- New opportunities by involving end-users in our activities
- This ultimately will lead to better products, networks and services
- In-Touch was meant to be a feasibility study only, but turned out to be a success in many ways (concept & content wise)