

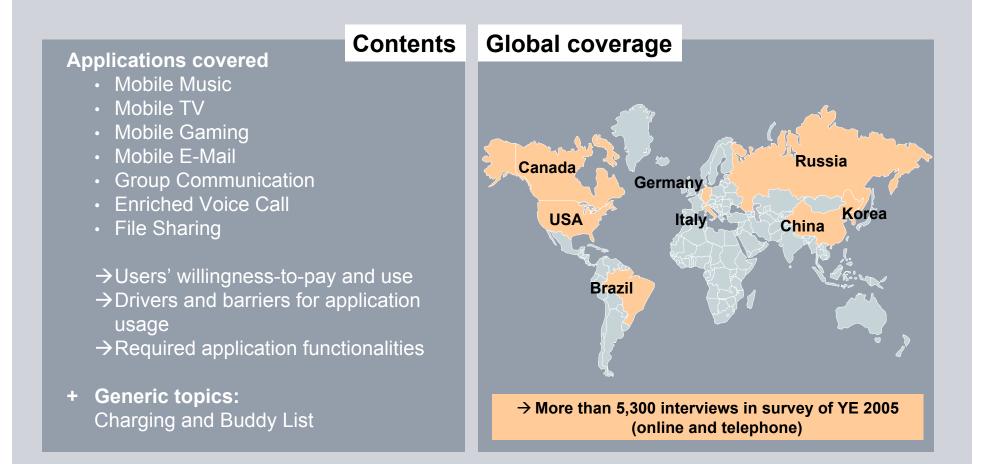


End-User Requirements and Expectations

Siemens Network Evolution Forum 3GSM World Congress 2006, Barcelona



Siemens Mobile Application Tracking – Investigation of end-users' needs on a regular basis

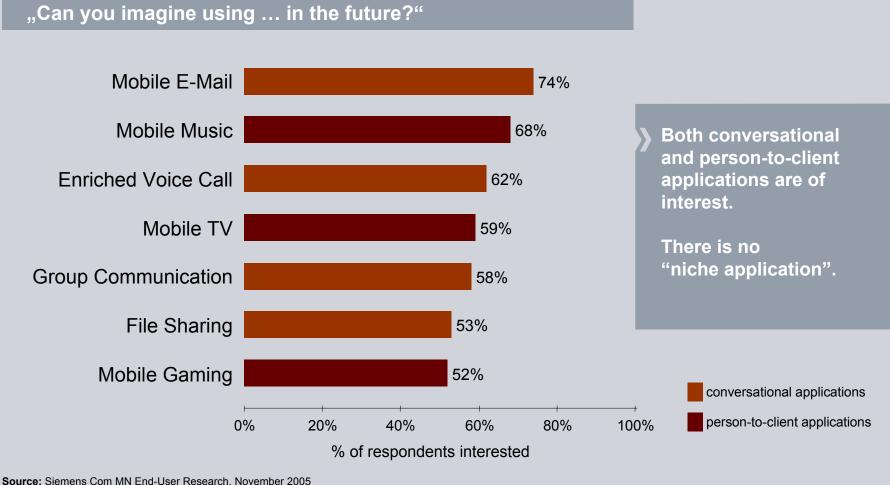


SIEMENS

Our beliefs / hypotheses

- All applications surveyed meet significant interest among users.
- In mature markets both interest in applications and ARPU potential are high – resulting in high revenue potential.
- Needs are very fragmented micro-segments exist for each application separately.
- Users are highly demanding regarding security and cost control.

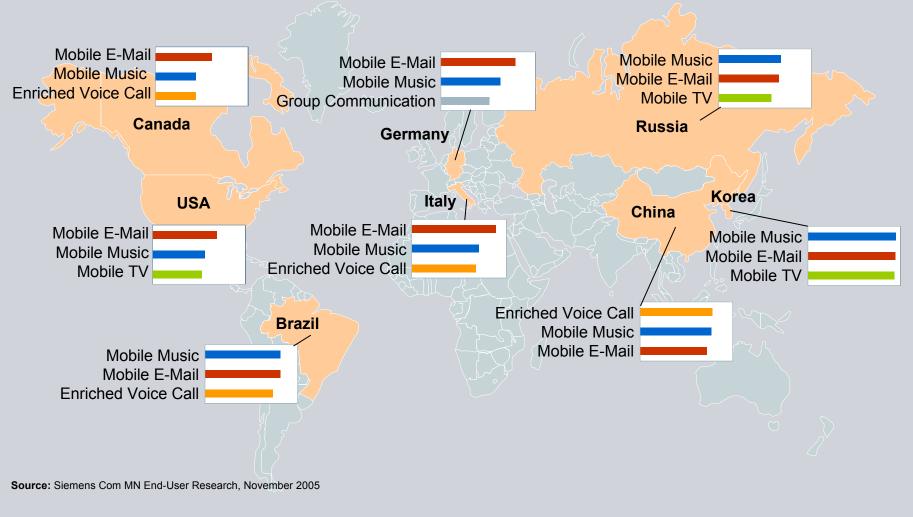
All applications surveyed are of interest to more than 50% of mobile users across the world



ource. Siemens com win End-Oser Research, November 20

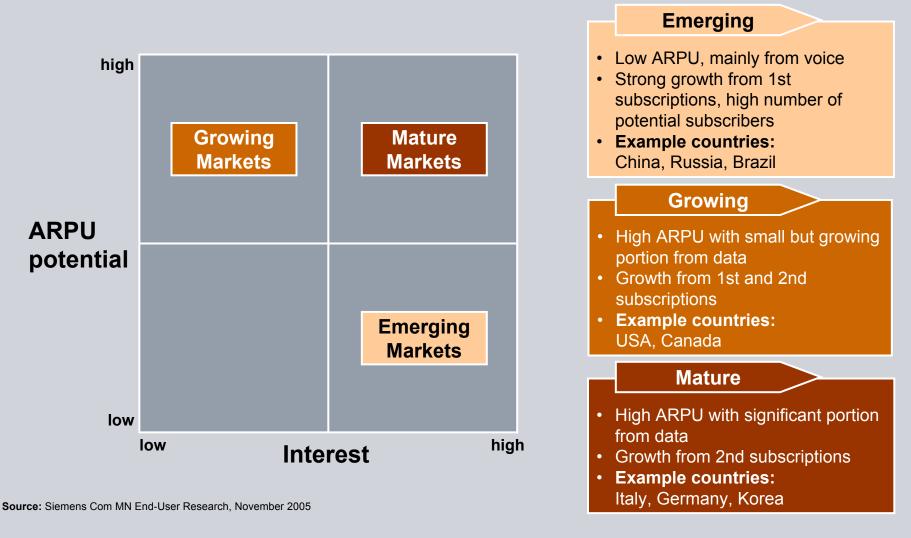
Page 4

Mobile E-Mail and Mobile Music... ... among the top three in every country!



Feb-06

Segmentation of markets **SIEMENS** Highest interest and ARPU potential in mature markets



Feb-06

Segmentation of markets Users' needs across the different markets

Emerging Growing Mature High ARPU with small • Low ARPU, mainly High ARPU with from voice but growing portion significant portion Market from data Strong growth from from data Phase 1st subscriptions, high Growth from 1st and Growth from 2nd number of subscribers 2nd subscriptions subscriptions Example countries: Example countries: Example countries: China, Russia, Brazil USA, Canada Germany, Italy, Korea Across all countries. Mobile E-Mail and Mobile Music are the most attractive applications. Apart from these, the ranking of the other applications varies. Market High interest in all Moderate interest in High interest in all Needs of the applications all of the applications of the applications presented presented presented Low budget and thus • High budget and thus High budget and thus low ARPU potentials high ARPU potentials high ARPU potentials Page 7 Feb-06

© Siemens Communications

High willingness-to-use and good level of ARPU increase indicated

Degree of future service interest ...

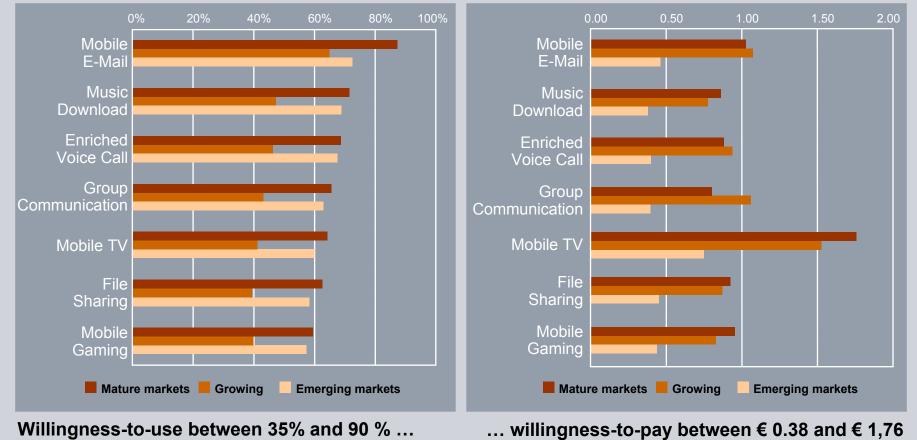
(% of respondents)

Page 8

and willingness-to-pay

SIEMENS

(active users in Euro / month)



Source: Siemens Com MN End-User Research, November 2005

Feb-06

Enriched Voice Call / Call&Share Summary of users' needs



WHO?	Younger usersBusiness users
WHAT?	 Video- telephony Adding self-generated contents to calls
HOW OFTEN?	 <u>Weekly</u> usage
HOW MUCH?	 Willingness-to-pay 6.20€ per month Calculated ARPU potential 0.70€ per month/active user
WHERE?	 Highest interest in Korea, Brazil, and China

Source: Siemens Com MN End-User Research, November 2005

Page 9

© Siemens Communications

Music Download Summary of users' needs

TODAY'S

WHO?

BARRIERS?

HOW OFTEN?

HOW MUCH?

WHERE?

Too expensive

people

Weekly usage

End-users don't know how it works

Interest is higher among younger

Willingness-to-pay 5.50€ per month
Calculated ARPU potential 0.60€

 Highest interest in Korea, Brazil; in Italy and China interest is also

per month/active user

higher than average



Source: Siemens Com MN End-User Research, November 2005

Mobile TV Streaming (live and on demand) Summary of users' needs

WHO?

SIEMENS



	C I
WHAT?	 Event-driven retrieval of programs News, weather and information Movies
HOW?	 Most important features are "fast and easy channel-switching" (for live TV) and "stop and continue later" (TV on demand)
HOW OFTEN?	 <u>Daily</u>usage
HOW MUCH?	 Willingness-to-pay 11.10€ per month Calculated ARPU potential 1.20€ per month/active users
WHERE?	 Highest potential in Korea, Brazil; in Italy and China interest is also higher than average

Broad interest across all user groups

Source: Siemens Com MN End-User Research, November 2005

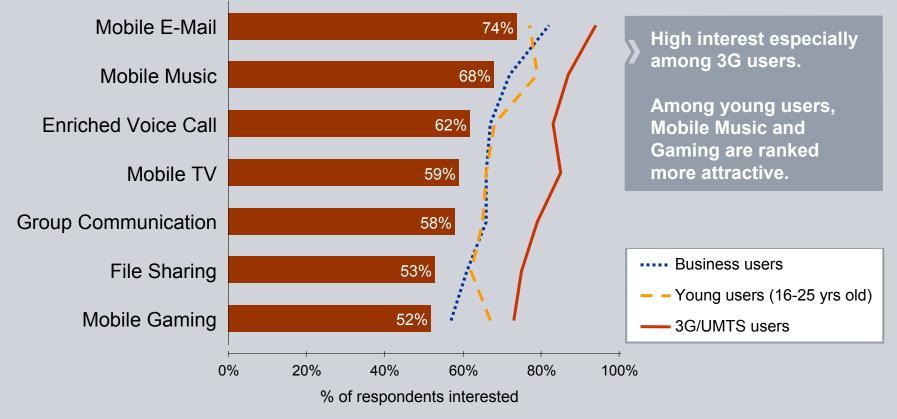
Feb-06

Page 11

Demographic and usage-based differences in the level of interest and ranking of applications

SIEMENS

"Can you imagine using ... in the future?"



Source: Siemens Com MN End-User Research, November 2005

Page 12 Feb-06

Micro-segmentation – A universe of requirements within one application: Example Mobile TV

SIEMENS

- Male prepaid user
- About 50 years old
- Retrieves **news or commentaries** from time to time
- Pays on-demand





- Young female user
- Searching for **entertainment**
- Highly interested in TV on demand
- Demanding Mobile TV features for interaction and sharing
- Low monthly flat fee

Source: Siemens Com MN End-User Research, November 2005

Young male user

- Wants Mobile TV for event-driven usage
- Interested in all types of contents
- **Demanding** Mobile TV features like **easy channel-switching**
- High usage in combination with a high flat fee



... and many other sub-segments with varying motivation and different content, features and charging schemes required ...

Page 13 Feb-06

Across all applications, users require security and cost control

"How important are the following features for you when using each of the applications?" not important nice to have must Secure access – secure access when using 3% 71% 26% e-mail and other data applications (n=2737) Advice of charge – total cost of an application 10% 63% 27% usage is displayed in advance (n=5256) Limit supervision – set a monthly limit, and 17% 44% 39% account will be blocked when the current usage exceeds this limit (n=5256)Personalization create a personal radio 19% 58% 23% program, e.g. play songs of selected artists only (n=2008) Source: Siemens Com MN End-User Research, November 2005

© Siemens Communications

SIEMENS

Summary

- Overall, interest in all applications surveyed is above 50%.
- Needs are very fragmented for each application there is a universe of micro-segments.
- Highest revenue potential lies in mature markets where both interest in applications and ARPU potential are high.
- Users are highly demanding regarding cost control and security.

→ Strong need for technologies that enable flexible and versatile applications and application bundles!

Page 15 Feb-06

SIEMENS

Thank you!



