A mobile perspective

Position Paper for the
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T-Mobile
Content

1. Mobile Device and Market Perspective
2. Mobile Internet User Perspective
3. T-Mobile International Operator Perspective
4. Contacts
Content

1. Mobile Device and Market Perspective
   1.1 Ratio for Number of Handsets to Fixed PC and Nomadic PCs sales
   1.2 Development of Mobile Service Subscriptions
   1.3 Development of installed base and proliferation of key capabilities

2. Mobile Internet User Perspective

3. T-Mobile International Operator Perspective

4. Contacts
Handset per PC sales ratio grows to five per one

- Yearly Sales of all PCs grow moderately to approx. 170 Mio in 2009
- Proportion of mobile PCs rises from a quarter today to a third in 2009
- By 2009 the vast majority of all sold notebooks will be WLAN enabled
- In parallel the yearly handset sales will rise from 450 Mio. to 850 Mio.

Sources: Credit Suisse First Boston, Mobile Data 2004; Pyramid Research, Global Mobile Capex Handbook, August 2004
One third of mankind is mobile connected by 2008

Steady growth of the global mobile subscriber base expected

Source: GSM Association
Distribution of Device Capabilities deployed

Installed Base of Mobile and Nomadic use Devices

Sources: T-Mobile, modeled on Credit Suisse First Boston, Mobile Data 2004; Pyramid Research, Global Mobile Capex Handbook, August 2004
1. Mobile Device and Market Perspective

2. Mobile Internet User Perspective
   2.1 Dominant interests of using the Internet on the move
   2.2 Influence of device capabilities on interests
   2.3 Key inhibitors of mobile Internet usage
   2.4 Influence of experience with the mobile use of the Internet

3. T-Mobile International Operator Perspective

4. Contacts
Key interest outside browsing: mobile messaging

Source: T-Mobile, input on Yankee Group 2003, European Connected Consumer Survey (% of respondents who use the service today or are interested/very interested in usage)
Phones capability can push data service interest

Gathering Information
Photo and Video Messaging (MMS)
Download Games
Gaming with another player
Voting

Key Limiting Factors: User Experience, Security, Content, Network and Device Constraints

- Poor Content
  - content too extensive for user context
  - unsupported browser specific markup
  - exceeding displayable page size limits
  - missing/wrong data in device profiles

- Unfamiliar with technology
  - transfer bar knowing if displayable
  - not using caching options
  - lack of using wTCP, wHTTP profiles

- Slow Access
  - user/password login schemes
  - concern of unwanted push

- Security & privacy
  - user can’t predict fitness for mobile use
  - navigation structures adaption: size, I/O
  - non-standard embedded scripting

- Keypad too small

- Navigation Difficult

Source: T-Mobile, based on http://www.atkearney.com/shared_res/pdf/Mobinet_Extracts_2004_S.pdf  N=4496, from 13 leading global mobile markets and on internal data
Experience quickly teaches users to shift their attention to properties of service delivery quality and access.

- **Poor Content**
- **Unfamiliar with technology**
- **Slow Access**
- **Security & privacy**
- **Keypad too small**
- **Navigation Difficult**

- **surpass biggest hurdle: 1st try**
- **radio style, not magazine granularity**
- **time & bandwidth are real money**
- **compact more valuable than extended**
- **quick and immediately clear choice**
- **sharply defined usage objective**
- **focus on mobility context**
- **device and interaction capabilities**

1. Mobile Device and Market Perspective
2. Mobile Internet User Perspective

3. T-Mobiles Mobile Network Operator Perspective
   
   3.1 Approaching usage patterns
   
   3.2 Standards and policy related limiting factors
   
   3.3 Priority action items
   
   3.3 Standardisation issues worth considering

4. Contacts
YAATMUP: yet another approach to mobile usage patterns

- **Focus: Immediacy**
  - Mobile Handsets
  - WiFi PDA

- **Focus: Breadth of choice**
  - PC
  - Notebook
  - WiFi NB
  - Stationary PC

Source: T-Mobile International AG
Overcoming key inhibitors of mobile internet use will expand the benefit of the Internet as a whole

- Promote using device independence standards
  - Content frequently created without device independence anticipation
  - Significant portion of current and mid-term future installed base can not be addressed in an either “Browser-only” or “Server-Only” approach

- Identify and remove limits with applying existing standards
  - Quality of device profiles (lack of defined versioning process, incomplete parameters, diverging vocabularies)
  - Growth of standards complexity exceeds content/service creators adoption rate

- Remove limits within standards creation processes
  - Areas of remit between standards bodies leave too much room for “dialects”
  - Availability of best common practices / references key unmet requirement

- Build trust for the mobile user experience of the Internet
  - No generic way to discover end to end mobility compliance for consumers
    - e.g. search: “try & error, error, error & goodbye”
  - No generic, industry wide brand established that such trust could be bound to
T-Mobile activity: Devices, Profiles, Process, Tools

Building Trust

- Targeting mobile audience by editorial processes & by using device profiles
  - Use authors trained and experienced in creating “to the point” content
  - Classification of device capabilities
  - Definition of a limited set of device classes focusing around device proliferation
  - Map devices to these classes using (heavily quality assured) UA profiles
  - Support creation of standards to describe selection (e.g. per delivery class)
- Influence requirements and compliance testing within device offerings
  - UAprof, wHTTP, wTCP, WAP 2.0
- Orchestrated work in standardization bodies to harmonize efforts
  - 3GPP, ETSI, GSMA, IETF, OMA, W3C, etc.
- Create interoperability frameworks and a best practices
- Engage in industry consortiums that represent mobile customers interests, create mobility brands and grow consumers trust into mobile Internet use
ToDo: Technology, process and non-technical issues need a concerted improvement

- Improve awareness on „the mobile case“
  - Socialize demographics, growth, installed base of the mobile community
- Increase reliability of standards creation results and ease uptake
  - Define vocabulary maintenance processes for device attributes
  - Extend maintenance process for UA profiles
  - Support clarification of areas of remit between OMA and W3C
- Expand usage of standards
  - Create best practice guidelines / styleguides / examples
  - Support definition of compliance analytics
  - Support definition of testing tools and procedures
- Create predictability of user experience for mobile use
  - Define technology brand that reflects the promise to support mobile use („mobile OK“)
  - Identify some means to make the brand available for all
  - Support creation of non-technology related brand quickly
  - Caveat: Limiting change in the installed base of standards compliant sites & services
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Your Questions? Our Contacts!

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Thank you!