

Mobile Completes the Web

Presented by Daniel Appelquist
Senior Technology Strategist, Vodafone Group

Fundamentos Web, 3 October 2006



Contents

1. Customer Insight
2. Real Numbers
3. Market Trends and Disruptive Innovation
4. Social Software
5. Interface and Experience Challenges
6. Industry Action



Introduction

- Daniel Appelquist
- “New Business & Innovation” Unit at Vodafone
- American ex-Pat Living in London
- W3C Advisory Committee Representative for Vodafone
- Helped to Create the W3C Mobile Web Initiative
- Chairing the Mobile Web Best Practices W3C working group
- Mobile Technology Evangelist
- Founded Mobile Monday London
- Internet and Web pioneer
- .com Refugee



Do Users Want the Web on their Phones?

Some 90 per cent of users say they would take advantage of mobile browsing if it wasn't so cumbersome and costly, according to the Hostway study. Other common gripes included slow loading times (38 per cent), complex navigation (27 per cent) and lack of availability (25 per cent).

Source: Hostway

28% of Mobile phone users have used the Internet on their mobiles.

Source: IPSOS

10% of Europeans actually use their handsets to go online.

Source: BBC

Over the past year, 5.5m Britons accessed the internet on their mobile phones. [15% of the mobile-phone-owners]

41% of mobile surfers are unhappy with the choice of mobile websites.

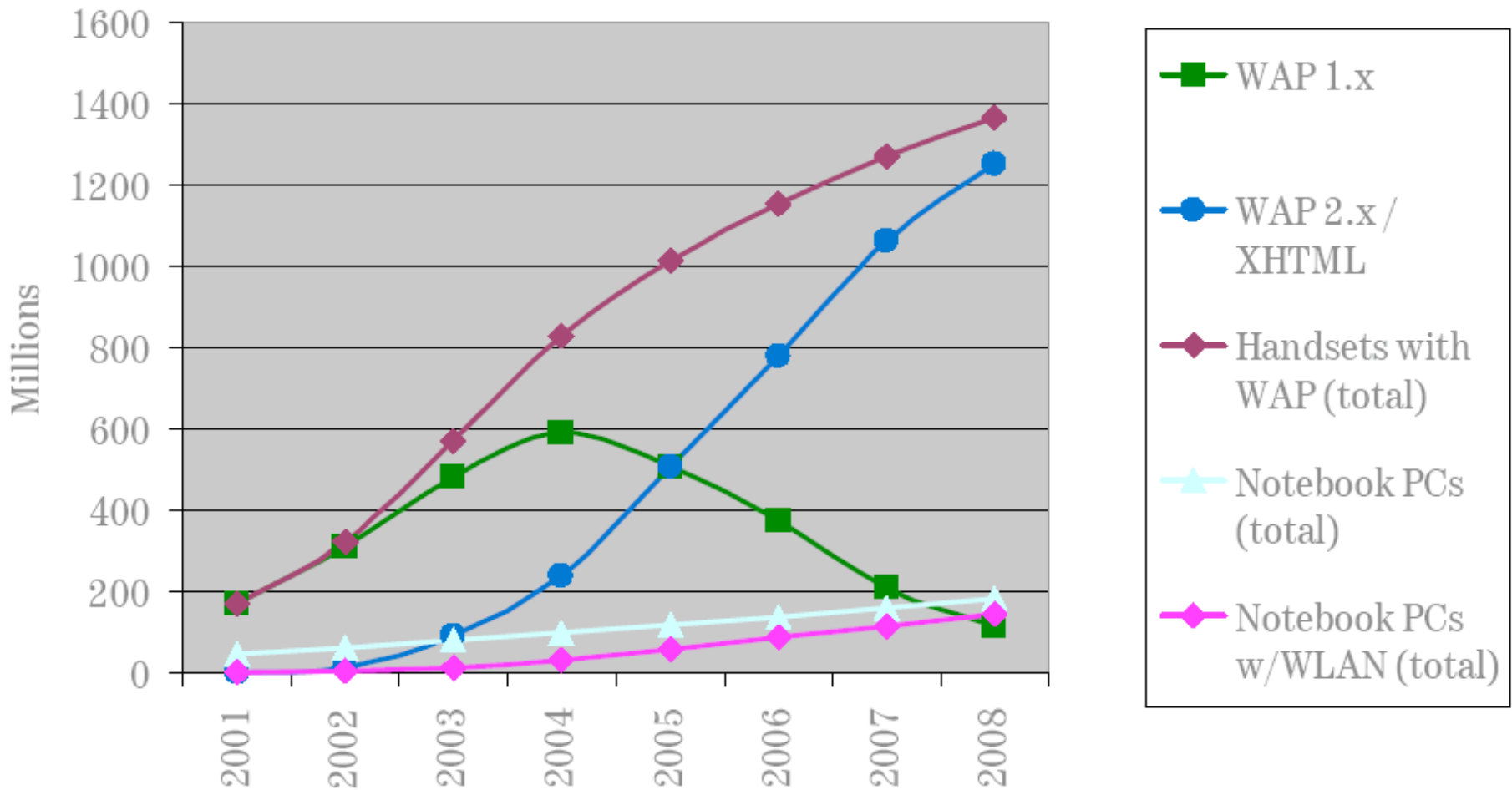
Continental Research (Aug 2006)

3.2 million people in the UK used their phones for downloads and browsing the mobile internet during July 2006 (source: MDA)



A Famous Graph

Installed Base of Mobile and Nomadic use Devices



WAKE UP!

It's audience participation time.



How are Customers Using the Mobile Web Right Now?

Top 10 Sites in Vodafone-Sponsored User Insight Study

1. Hotmail
2. BBC News
3. Google
4. *Holymoly*
5. BBC Sport - football
6. Gmail
7. Orangeworld
8. T-zones
9. *Portugese football*
10. Amazon



How are Customers Using the Mobile Web Right Now?

User Ferrari Parts

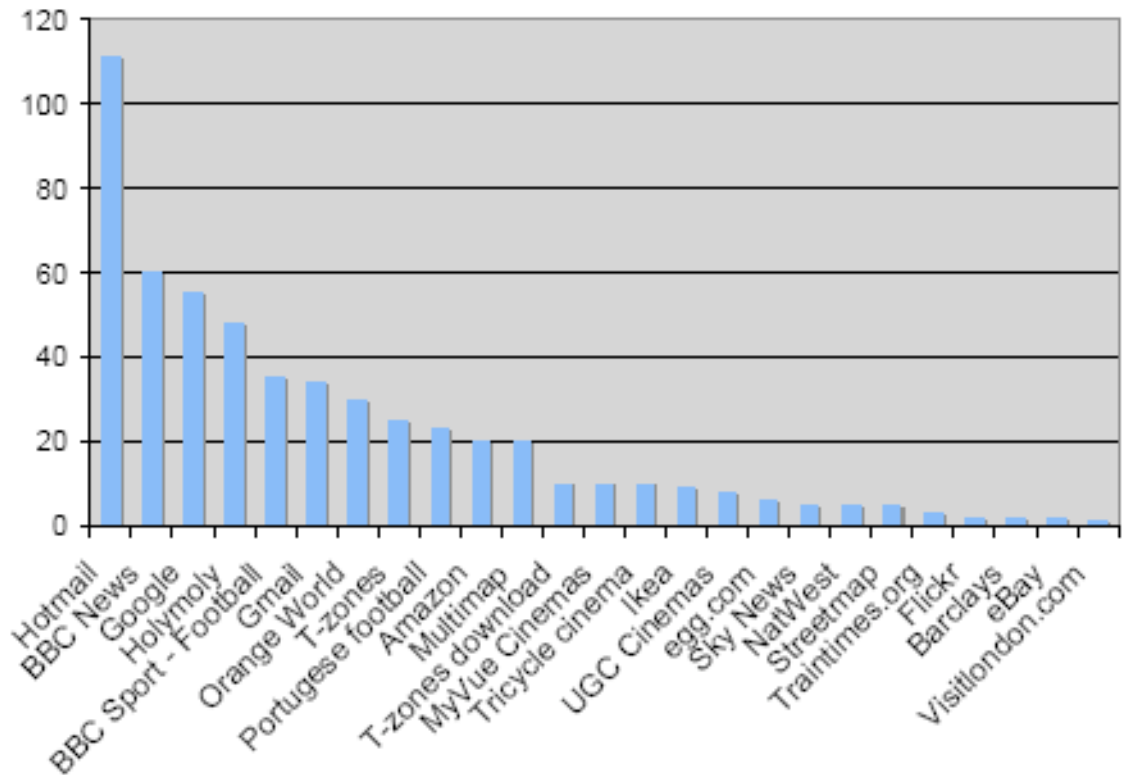


Aubergine Recipes



The Long Tail Rears its Head

- Data from Vodafone-sponsored User Insight
- The distribution of sites follows a classic long-tail distribution, even for a small-scale study.
- The top 4 sites account for 50% of the sessions.
- However 50% of the sessions come from the 84% of the least popular sites.
- Compare this with Amazon's famous 50% of their book sales which come from outside the 130,000 most popular titles (the size of a large book-store).
- Conclusion: the top-ranked sites need to work on a phone, but so do all the other sites, since choice of website is a long-tail phenomenon.



Personal Experiences

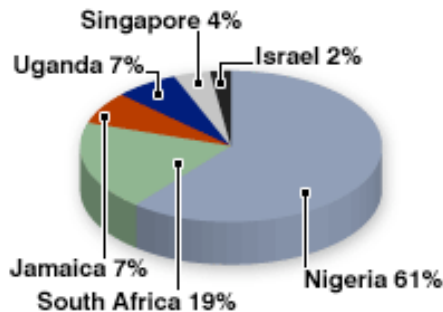
- Rome: October 2005
 - “That’s a famous director!”
 - “What films has he done?”
 - “I’ll check IMDB”
 - Hopeless
- Gijón: September 2006
 - “What’s the History of Gijón”
 - “I’ll check Wikipedia”
 - Success!



Trends in the Marketplace

- Users in developing world
 - Chinese users purchasing smartphones
 - BBC report on Mobile Web in Africa
 - 100% increase in traffic from Africa over the past year

**BBC INTERNATIONAL WAP USAGE:
JULY**



- Advanced Browsers
 - Opera Mobile & Opera Mini
 - Nokia's Series 60 Web Browser
- Innovation in Mobile Phone Architecture
 - Advanced Operating Systems
 - Linux Architecture

- Innovations in Network Architecture
 - 3G, HSDPA
 - Next Generation Mobile Networks
- Tidalwave of Mobile Web Innovation
 - Photo-sharing and blogging apps
 - Location-aware mapping apps
 - Content creation apps
 - Yahoo! Go and other on-device portals
 - Google Mobile Search
 - MSN Mobile



What is the “One Web”?

- URIs are interchangeable between devices
- User experience of a service can differ across different types of devices
 - But the content should be **thematically consistent**
- What?
 - Best example: bookmark sharing
 - If you read a news article on your PC browser, it might include a large picture or slide-show, a video clip (a-la-YouTube), etc...
 - If you now bookmark that article and send it to me on my mobile device:
 - I should be able to read the same article
 - I might see it in a different context (e.g. different information architecture more suited to Mobile users)
 - I might see it with different features (e.g. a mobile-friendly video-stream)
 - But it's none-the-less, **thematically consistent**
- One Web does not mean “same web site with same experience / navigation / features on every device”
- To achieve One Web, you may need server-based adaptation



Designing for One Web

- Use XHTML Basic
- Use CSS
- Use CSS Media Types (handheld and screen) to deliver an appropriate style to the device
- Use device information and dynamic techniques to determine and **adapt** to device capabilities
 - Screen size
 - Cookie support
- Design to support “thematic consistency” and “suitability of content” for the mobile context.
- Test on real devices
- Is there overlap with accessibility? Yes.
- Is there overlap with internationalization? Yes.
- For more insights: check out the Mobile Web Best Practices
 - <http://w3.org/Mobile/>



Social Software

- One of the legs that “Web 2.0” stands on: Social Software
 - MySpace, Flickr, LinkedIn, Orkut, Friendster, etc...
- People who grow up with social software use these systems to communicate
 - Youth are as likely to leave a comment on someone’s MySpace page or Flickr photo as they are to send an email or IM someone: that’s communication
- The mobile is an ideal instrument for social systems
 - It is personal
 - It is connected
 - It is always with you
- MySpace getting into Mobile
- PinPPL (www.pinppl.com)
 - Social Network for Blackberry Users
 - Simple design, built around “one web” concept (works well on BB browser and PC browsers)
 - Exploits capabilities of the device by allowing blackberry PIN messaging from profile pages



Interface and Experience Challenges

- Small screen
- One-Handed Operation
- Usually only a 4-way rocker switch
- Usually not a QWERTY keyboard
- Bandwidth and Latency
 - Yes, even with 3G, though HSDPA addresses some of this
- Device Information is Lacking
- Ambiguously Connected
- Limited Attention
- Mobile means in motion
- Different user goals



Industry Action

- W3C Mobile Web Initiative
 - Mobile Web Best Practices
 - MobileOK
 - Device Descriptions
 - Workshop on Mobile Web in the Developing World
- dotMobi Joint Venture
 - Set up in support of W3C and Mobile Web Initiative



Founded in May 2005

- Mobile Web Best Practices working group
 - Content Guidelines for Mobile Web Developers
 - MobileOK
 - Mobile Web Techniques Wiki
 - Mobile Web Best Practices “checker”
- Device Descriptions working group
 - Develop a better regime for device descriptions
- w3.org/Mobile (Mobile Friendly)



Accomplishments:

- Best Practices just published
- Checker utility online and in Beta
- Techniques Wiki is online and available for content developers
- MobileOK working draft published
- Device Descriptions work ongoing





Powering Mobile Web Content Discovery

MobileOK Trust-mark for Content

Machine-readable trust-mark

Means: This content will more likely work on a mobile device

Based on the Mobile Web Best Practices

How Does it Work?

- Content providers test their content against the Mobile Web Best Practices
- A “report” of this test is generated into a file of signed metadata that is placed on the Web site
- Search engines and other up-stream discovery processes can consume this file (similar to a Google Site-map file)



Mobile Web Device Descriptions

- Conventional wisdom: The User Agent Profile standard (UAProf) from OMA solves the problem of device descriptions for the Mobile Web
- Unfortunately...
 - Screen size vs. Usable Screen Size
 - Cookie support
- MWI Device Descriptions Working Group
 - Core vocabulary
 - Working with OMA to implement this vocabulary in next generation UAProf
 - Developing an architecture for a repository
 - Developing an interface specification for a repository
 - Developing ... a repository!



What's the Deal With dotMobi?



- dotMobi is a new top level domain for the Internet specifically intended for mobile-friendly Web sites and services
- A dotMobi name means: it will work on my phone
- dotMobi is a member of the Mobile Web Initiative and a strong contributor to the Mobile Web Best Practices
- dotMobi in turn encourages its domain holders to follow these best practices and mandates a few of them (e.g. valid markup)
- Do you need a dotMobi domain to be mobile friendly? No. You can be mobile friendly under any (or no) domain.
- Is dotMobi going to break the Internet? No.
- dotMobi is a consumer-visible sign post that says “Mobile-Friendly Web Here” right in the URI, in a consistent way



Call to Action

**Treat mobile users as
first class citizens of the Web**

Design for mobile



Thanks!

Mobile Web Initiative: <http://w3.org/Mobile>

Daniel Appelquist
daniel.appelquist@vodafone.com

