

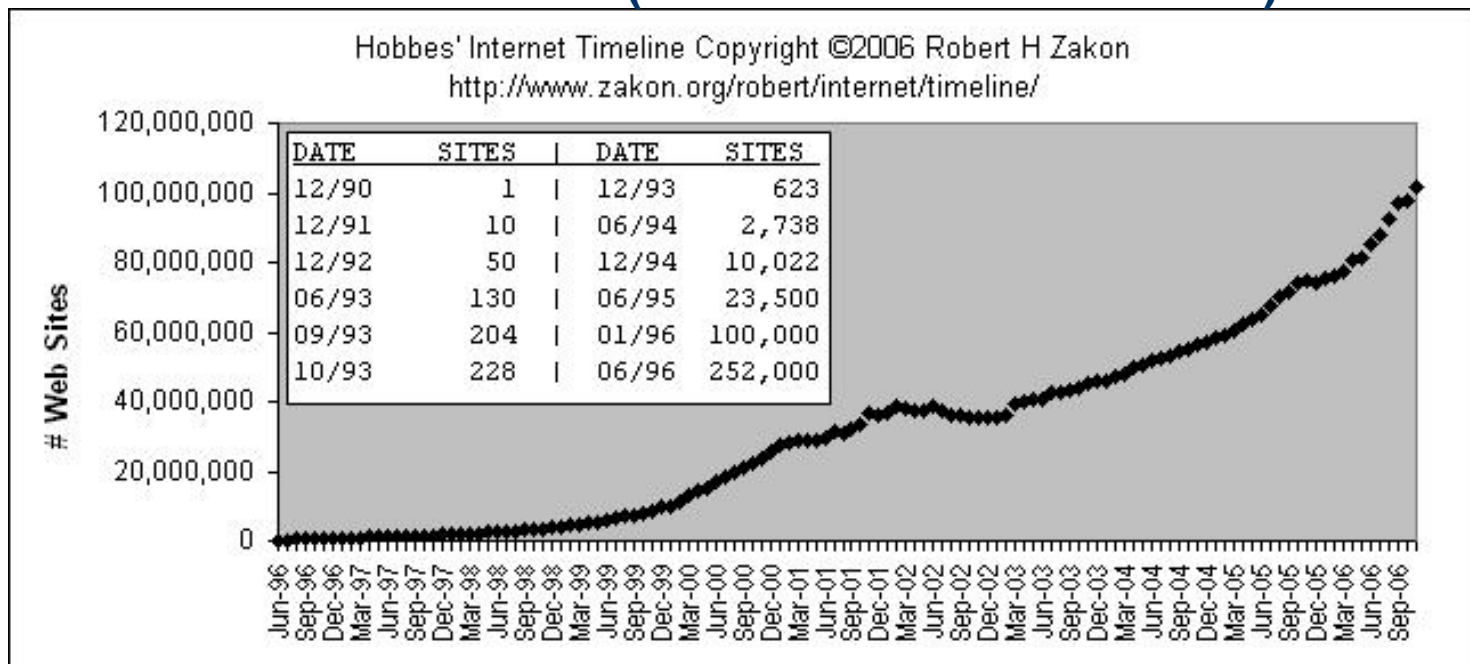
# The Mobile Web Takes Off

**Mobile Internet World**  
**Boston, Massachusetts, USA**  
**November 2007**

**Steve Bratt ([steve@w3.org](mailto:steve@w3.org))**  
**Chief Executive Officer**  
**World Wide Web Consortium**  
**<http://www.w3.org/>**

# Internet Growth Driven by Open Web

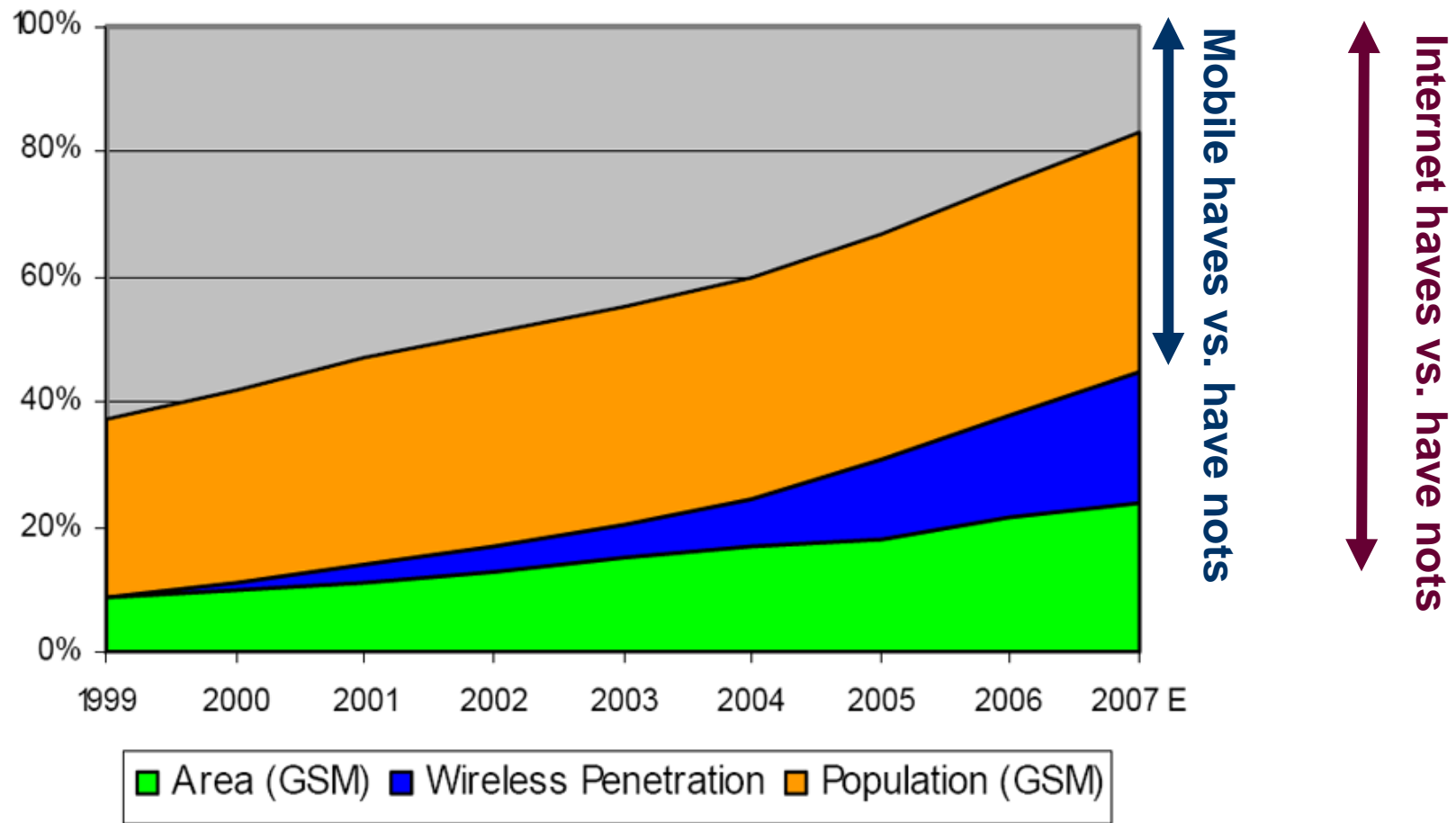
## Number of Web Sites (domain names and content)



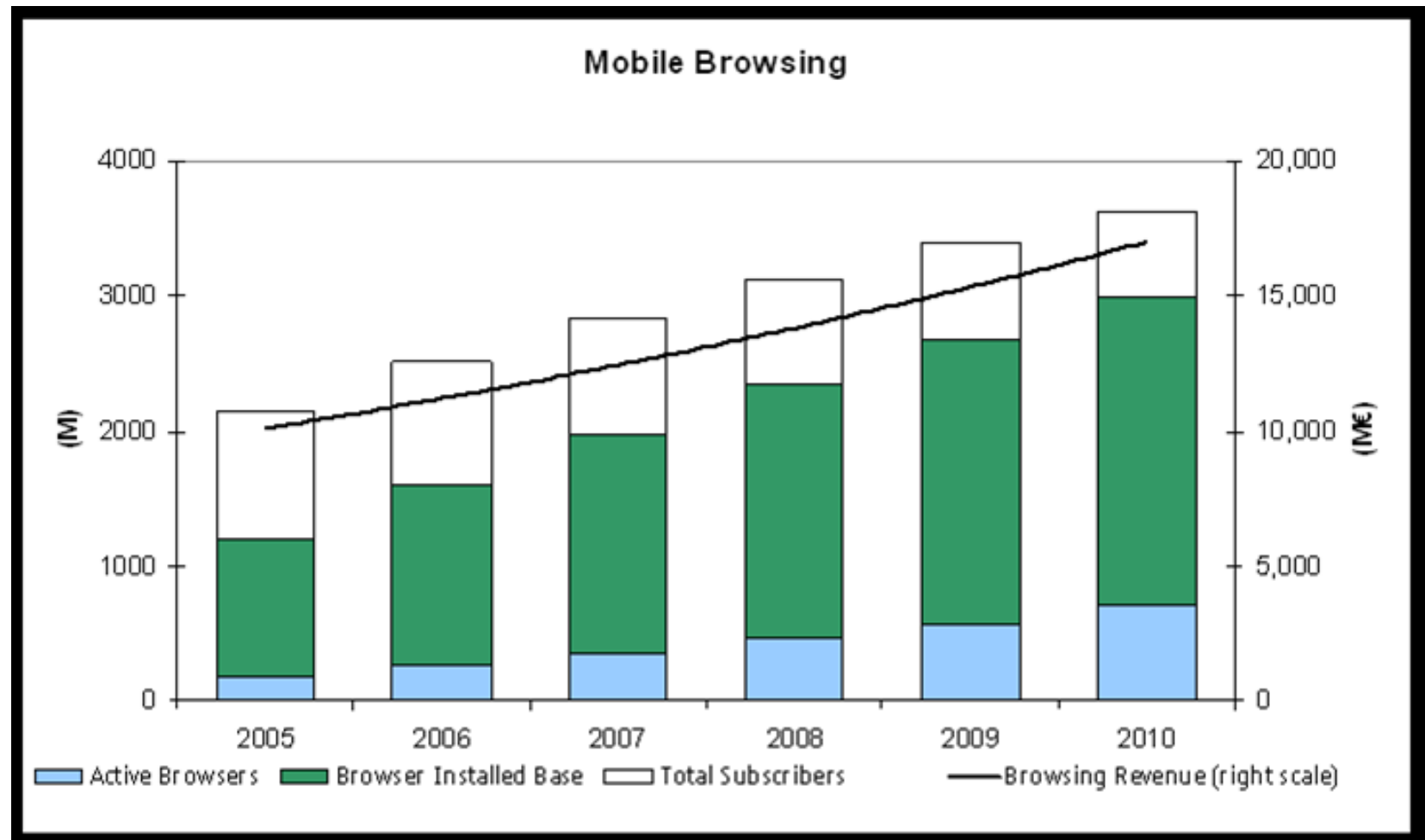
Internet Users in early 2007 ~ 1,100 mil

Sources: <http://www.zakon.org/robert/internet/timeline/>  
<http://www.internetworldstats.com/stats.htm>

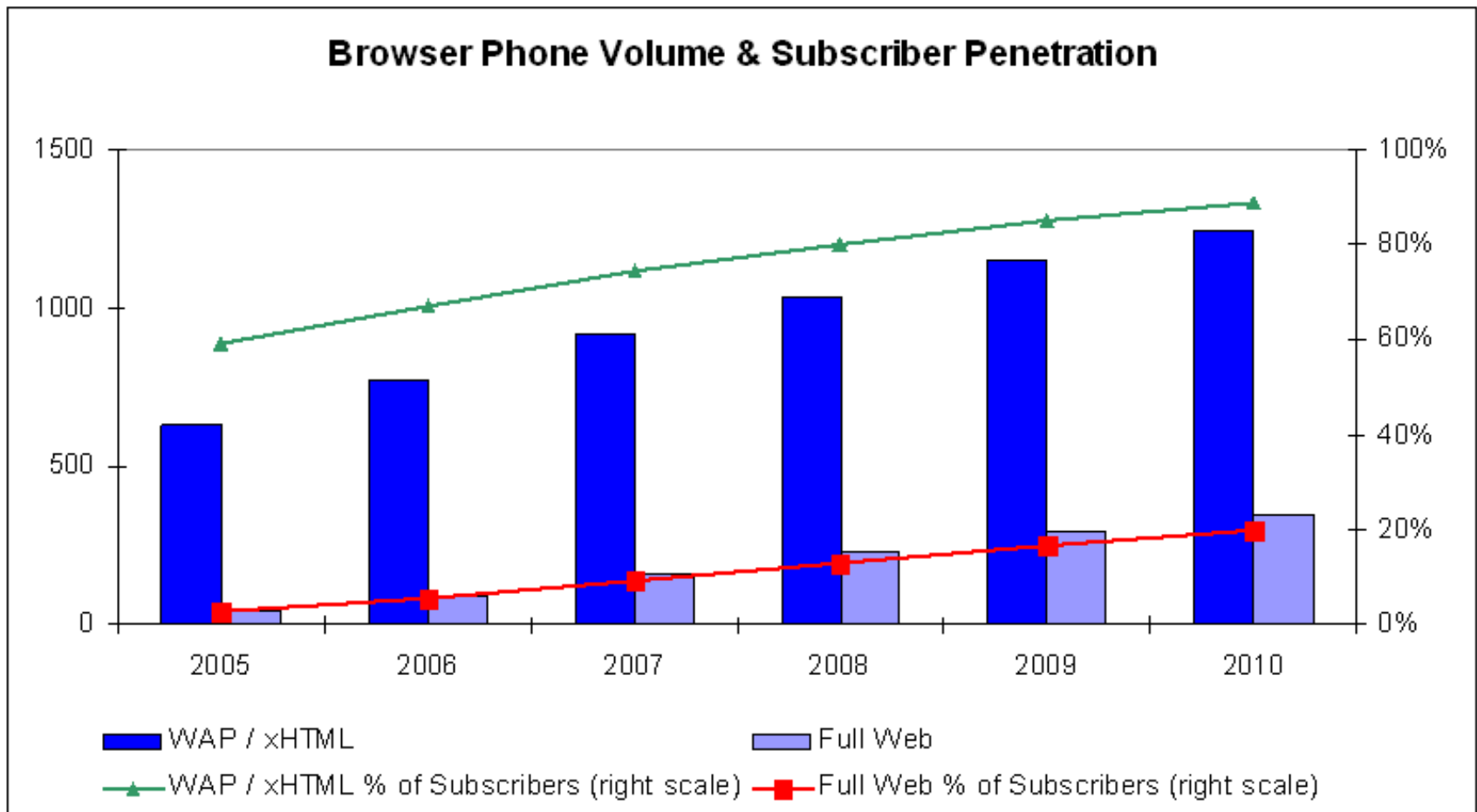
# Mobile Growth and Potential



# Mobile Usage Gap



# Mobile Web Closes the Gap



Source: Nokia

## The Challenge ...

- People want – **expect** – no-hassle, Web access across all of their devices ... including their phones
- This requires:
  - Seamless interoperability
  - Ease of use
  - Safety



# W3C Standards Address Challenges

User Requirements	W3C Solutions
<i>User-friendly content</i>	<b>Mobile Web Best Practices*</b>
<i>“One Web”</i>	<b>Device Description*</b>
<i>Effective adaptation</i>	<b>Ubiquitous Web*</b>
<i>Labeling, protection</i>	<b>Protocol for Web Description*</b>
<i>Ease of discovery, trust</i>	<b>mobileOK*</b>
<i>Voice, stylus, keys</i>	VoiceXML, Multimodal
<i>Universality</i>	WAI, I18N, <b>Developing World*</b>
<i>Security</i>	Browser Security Context
<i>Interoperability</i>	Web standards: XHTML, CSS, Graphics, Forms, AJAX, Widgets, <b>Ubiquitous Web*</b> , etc.

# Mobile Web Initiative



- Mobile Web Best Practices 1.0

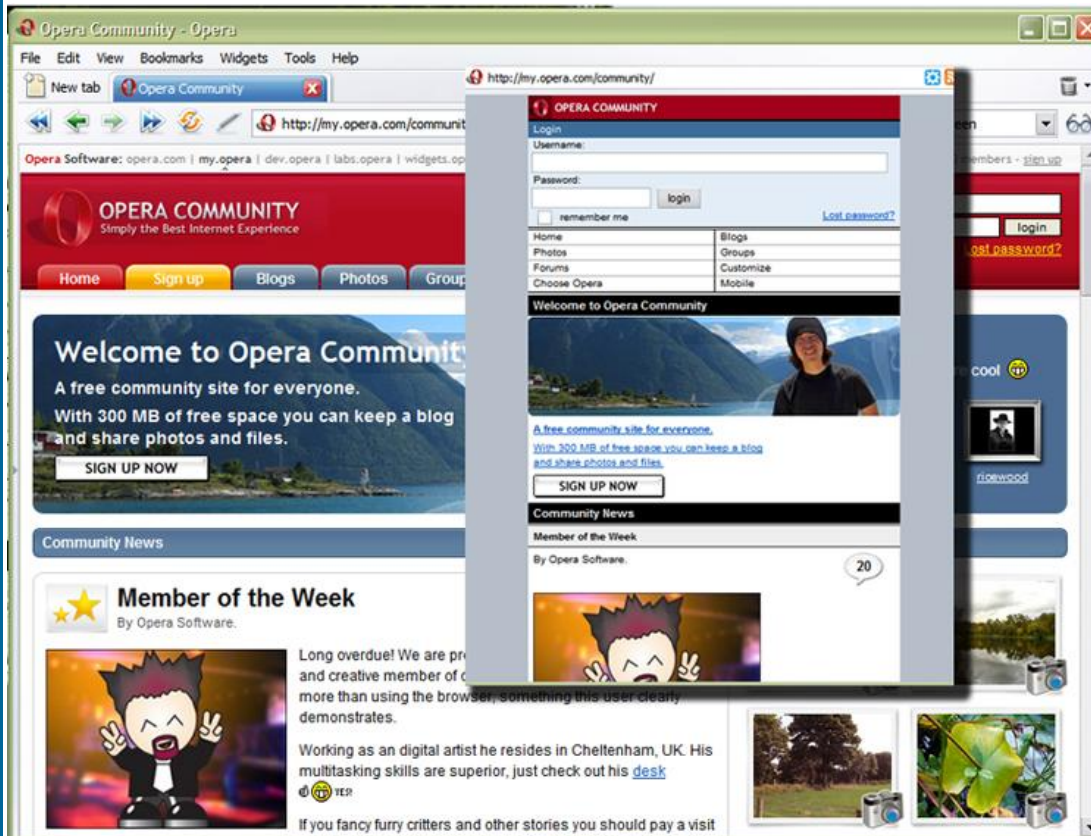
- Authoring content for **good user experience**
- Effective delivery to and display on mobile devices
- Leveraging existing Web standards

- New

- Browser Test Suites Working Group
- Mobile Web Applications Best Practices (incl., AJAX)



# 60 Mobile Web Best Practices



- Thematic consistency:
  - One Web (URIs)
- Layout
  - use CSS; no tables or frames
  - Small (text, pics) is beautiful
- Navigation:
  - important info at top
  - access keys
- Users on the go
- Summary

# MWI Best Practices in Practice

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- Recommended in developer material
  - [Google mobile Webmaster FAQ](#)
  - [Orange Partner Program](#)
  - [.mobi "switch on" guide](#)
- Integrated into development tools
  - [Wordpress plugin for BP-ok blogs](#)
  - [Mobisitegalore](#)
- [Industry testimonials](#)

# mobileOK Trustmark & Discovery

- mobileOK Basic
  - Defines tests for Web content
  - Machine-testable subset of BP
  - Alpha version: mobileOK Checker



**mobileOK**

- Third-party or self-certification
- POWDER-based metadata for consumption by search engines, filters, etc.

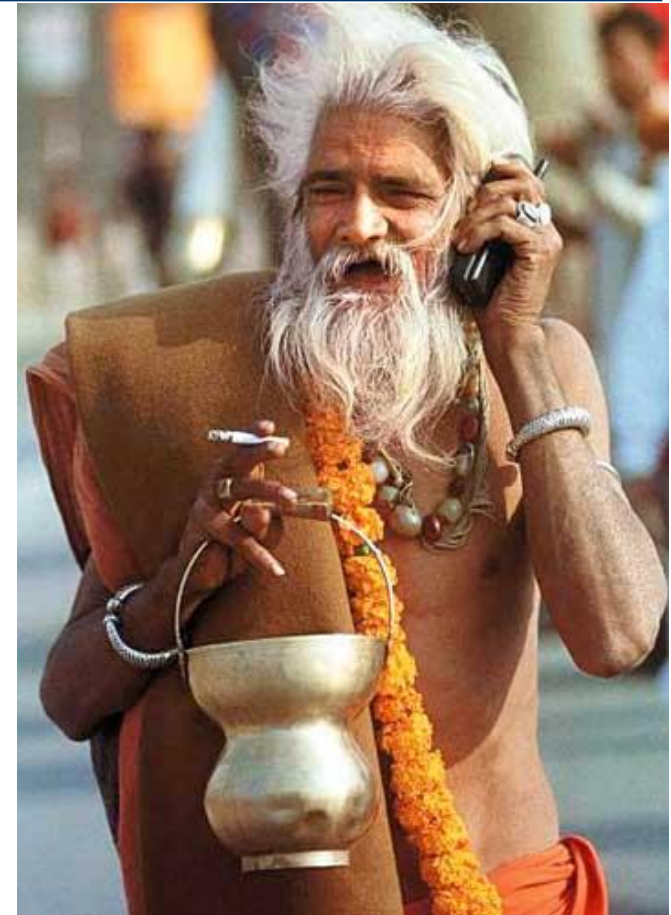
# Mobile Web Device Description

- Content adaptation requires knowledge about device, environment, preferences
- Completed:
  - [Landscape](#) and [Ecosystem](#)
  - [Requirements](#) for open Device Description Repositories
- Started in Dec 2006:
  - Core and API for Repository
  - Key device properties, [vocabulary](#), method for extensions



# Web Mobility = Web for Emerging Economies

- The Mobile Web accelerates global Internet access
- Commerce, healthcare, education, eGov, communication ... [ex: [der Spiegel](#)]
- [W3C Workshop on the Mobile Web in Developing Countries](#), Dec 2006, Bangalore



Source: [Der Spiegel](#)



# Ubiquitous Web Applications

- Enabling Web applications to interact across wide diversity of devices:
  - Computers, equipment, media, appliances, mobile devices, physical sensors, effectors, consumer electronics
- Deliverables ... standards for:
  - Device independent authoring
  - Delivery contexts
  - Remote eventing, device coordination
  - Location service support



# Supporters of Mobility and Ubiquity Standardization @ W3C



Additional, Key Participants: Alcatel-Lucent, AOL, AT&T, BT, Citigroup, El Mundo, FOSI, Google, Hutchinson 3, IBM, Intel, Microsoft, OMA, Openwave, Samsung, Siemens, SK Telecom, Sun, T-Online, Telefonica, many others.

## For more information

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<http://www.w3.org/>

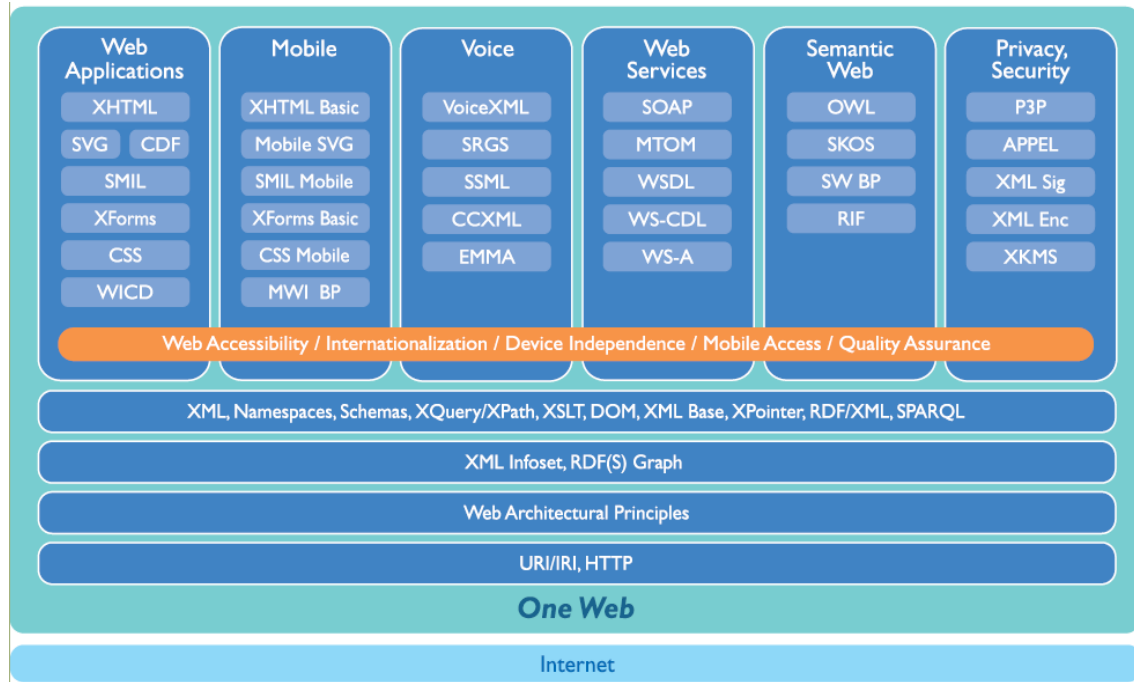
• W3C Membership:

<http://www.w3.org/Consortium/membership>



# The Leading Web Standards Organization

- Engineering the Web's foundation
  - (x)HTML, XML, CSS, VoiceXML, Web Services, Semantic Web, Security, Accessibility, Internationalization, Privacy, Architecture
- 430 Members
- 40+ Liaisons
- 21 Offices
  - Newest: India, China, S. Africa, Brazil



<http://www.w3.org/>

# Selected References

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- W3C: <http://www.w3.org/>
- HTML: <http://www.w3.org/html/>
- CSS: <http://www.w3.org/Style/CSS/>
- XML: <http://www.w3.org/XML/>
- Mobile Web: <http://www.w3.org/Mobile/>
- Ubiquitous Web: <http://www.w3.org/2006/10/uwa-activity-proposal.html>
- Labeling: <http://www.w3.org/2007/powder/>
- Voice: <http://www.w3.org/Voice/>
- Multimodal: <http://www.w3.org/2002/mmi/>
- Accessibility: <http://www.w3.org/WAI/>
- Internationalization: <http://www.w3.org/International/>
- Developing Countries: [http://www.w3.org/2006/12/digital\\_divide/public.html](http://www.w3.org/2006/12/digital_divide/public.html)
- Security: <http://www.w3.org/Security/>
- Web Services: <http://www.w3.org/2002/ws/>
- Semantic Web: <http://www.w3.org/2001/sw/>