



A Web that Empowers All People

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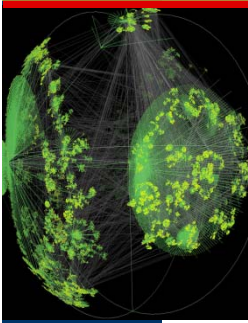
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Maputo, Mozambique





Outline

- **History**
- **Vision**
- **Challenge**
- **World Wide Web Foundation**
 - **Web for Development**
 - **Web Science**
 - **Web Standards**
- **The Future**



**WORLD WIDE WEB
FOUNDATION**

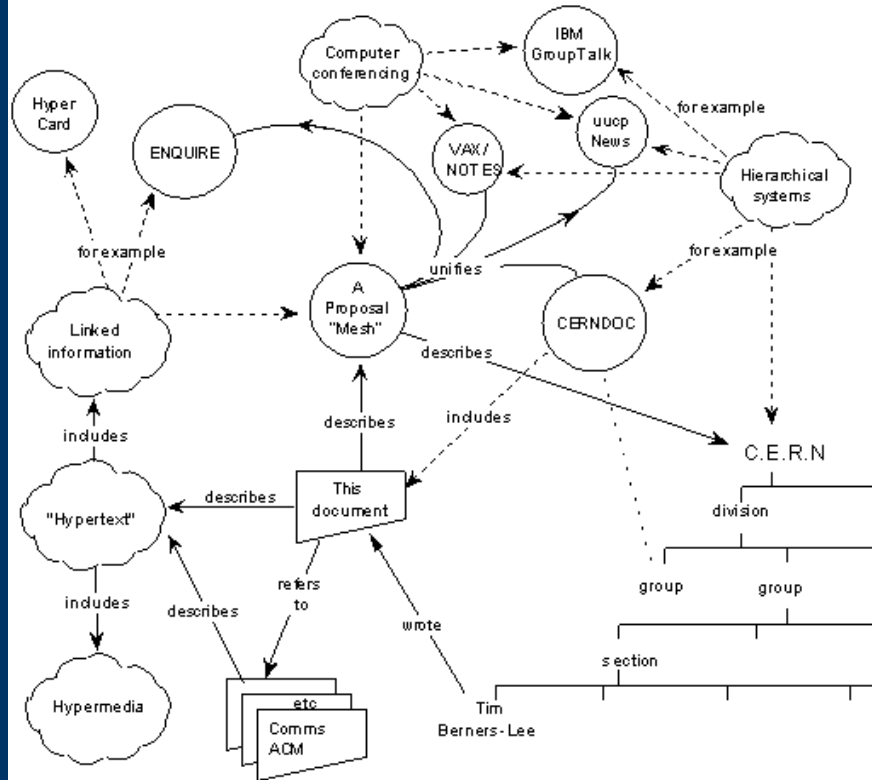
History: The Web is Changing the World



1989: The Web is Born – Killer App for the Internet

“Information Management: A Proposal”

By Tim Berners-Lee, March 1989



**HTML, URI
HTTP**

<http://www.w3.org/History/1989/proposal.html>



1.5 Billion Served (by language)

Top Ten Languages Used in the Web
(Number of Internet Users by Language)

TOP TEN LANGUAGES IN THE INTERNET	% of all Internet Users	Internet Users by Language	Internet Penetration by Language	Language Growth in Internet (2000 - 2008)	2008 Estimated World Population for the Language
<u>English</u>	29.4 %	430,802,172	21.1 %	203.5 %	2,039,114,892
<u>Chinese</u>	18.9 %	276,216,713	20.2 %	755.1 %	1,365,053,177
<u>Spanish</u>	8.5 %	124,714,378	27.6 %	405.3 %	451,910,690
<u>Japanese</u>	6.4 %	94,000,000	73.8 %	99.7 %	127,288,419
<u>French</u>	4.7 %	68,152,447	16.6 %	458.7 %	410,498,144
<u>German</u>	4.2 %	61,213,160	63.5 %	121.0 %	96,402,649
<u>Arabic</u>	4.1 %	59,853,630	16.8 %	2,063.7 %	357,271,398
<u>Portuguese</u>	4.0 %	58,180,960	24.3 %	668.0 %	239,646,701
<u>Korean</u>	2.4 %	34,820,000	47.9 %	82.9 %	72,711,933
<u>Italian</u>	2.4 %	34,708,144	59.7 %	162.9 %	58,175,843
TOP 10 LANGUAGES	84.9 %	1,242,661,604	23.8 %	278.3 %	5,218,073,846
Rest of the Languages	15.1 %	220,970,757	15.2 %	580.4 %	1,458,046,442
WORLD TOTAL	100.0 %	1,463,632,361	21.9 %	305.5 %	6,676,120,288

(*) NOTES: (1) Internet Top Ten Languages Usage Stats were updated for June 30, 2008. (2) Internet Penetration is the ratio between the sum of Internet users speaking a language and the total population estimate that speaks that specific language. (3) The most recent Internet usage information comes from data published by [Nielsen//NetRatings](#), [International Telecommunications Union](#), [Computer Industry Almanac](#), and other reliable sources. (4) World population information comes from the [U.S. Census Bureau](#). (5) For definitions and navigation help in several languages, see the [Site Surfing Guide](#). (6) Stats may be cited, stating the source and establishing an active link back to [Internet World Stats](#). Copyright © 2008, Miniwatts Marketing Group. All rights reserved worldwide.



Number of Public Web Pages

1990: 1

1998: 26 million (~26,000,000)

2008: >1 trillion (~1,000,000,000,000)

*... more than the number of
neurons in the human brain*

public pages, <http://googleblog.blogspot.com/2008/07/we-knew-web-was-big.html>



The Web Has Changed the [Developed] World

The Web has changed ...

- ... the way we connect to people, to information, to services
- ... the way we communicate, buy, sell, learn, meet, work, govern, prevent, cure, move, create, consume, understand
- ... the balance of power from centralized to decentralized, by fostering individual creation and consumption of information and services.



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Vision



*“The social **value of the Web** is that it enables human communication, commerce, and opportunities to share knowledge [and] to make these **benefits available to all people**, whatever their hardware, software, network infrastructure, native language, culture, geographical location, or physical or mental ability.”*



Sir Tim Berners-Lee, inventor of the World Wide Web
Worldwide Participation in the World Wide Web Consortium



Challenge



State of the Web for the Developing World?

- Similar to the Web in the developed world ...
 - ... but in the mid 1990s
 - Base of billions of under-served people
 - Huge potential for value
 - Huge base of potential content providers, including entrepreneurs, NGO, governments, individuals
- But many challenges exist ...



Challenge: Limited Usability and Usefulness

- Reach of the Internet is increasing
 - Mobile phones: 4 billion and growing
- Less than 25% of world's people are accessing the Web
 - Smaller percentage are creating content
- Life-critical services on the Web are rare, especially for those who need them most



Challenge: Limited Usability and Usefulness

- Barriers to creating and consuming content:
 - Low computer literacy
 - Low language literacy
 - Literacy in languages not well supported on the Web
 - Physical and cognitive disabilities
 - Cost



Challenge: Technology and Policy Threats

- Creative, robust evolution of the Web is impeded
 - Incomplete knowledge of this humanity-tech system
 - Knowledge is important to improving the Web
- The Web as a single, universal medium for the sharing of information, is threatened
 - Censorship
 - Insecurity
 - Trustworthiness
 - Uninformed policies
 - Incompatible and proprietary technologies



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The World Wide Web Foundation



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Announcing the creation of the **World Wide Web Foundation**

- **\$5 million seed grant from John S. and James L. Knight Foundation**

Awarded on 14 Sep 2008 by Knight President Alberto Iburgüen to Web Foundation founder Tim Berners-Lee (right) ([press release](#))

- **5 yrs funding for operations, raising program funds and creating an endowment**
- **Operational launch of the Web Foundation planned for 2009**





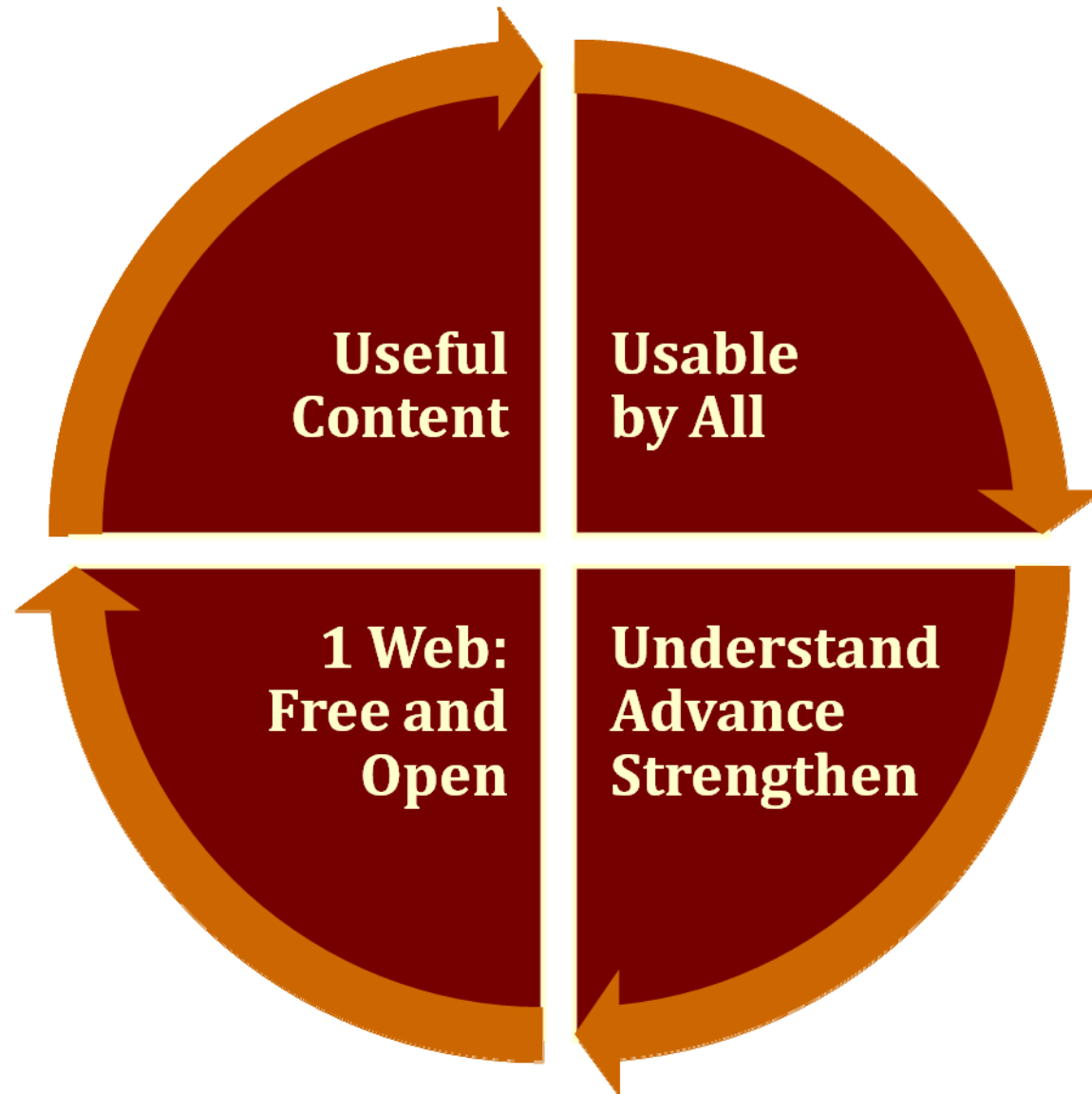
The Mission of the World Wide Web Foundation:

- ***Advance the Web.***
- ***Connect Humanity.***
- ***Empower People.***



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4 Objectives to Engage Challenges





2 Types of Programs

- Until now, there has been no **coordinated effort** to address the full range of challenges and opportunities for the Web.
- The Foundation will fill this gap with programs that enable **local action and impact** that scale to affect change on a **global level**.



**Web in
Society**

- **Focused**
- **Bottom-up**



**Web
Leadership**

- **Big picture**
- **Top-down**



Web Leadership Programs



Web Leadership Programs

Top-down / Big picture

- Web Science, to understand the Web and explore new concepts
- Web Standards, toward One Web that works for all people
- Consider challenges such as censorship, uninformed policies, incompatible and proprietary technologies, etc.
- Plan future Web in Society programs
- “Web Index”





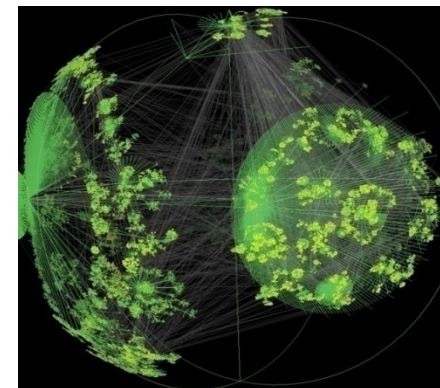
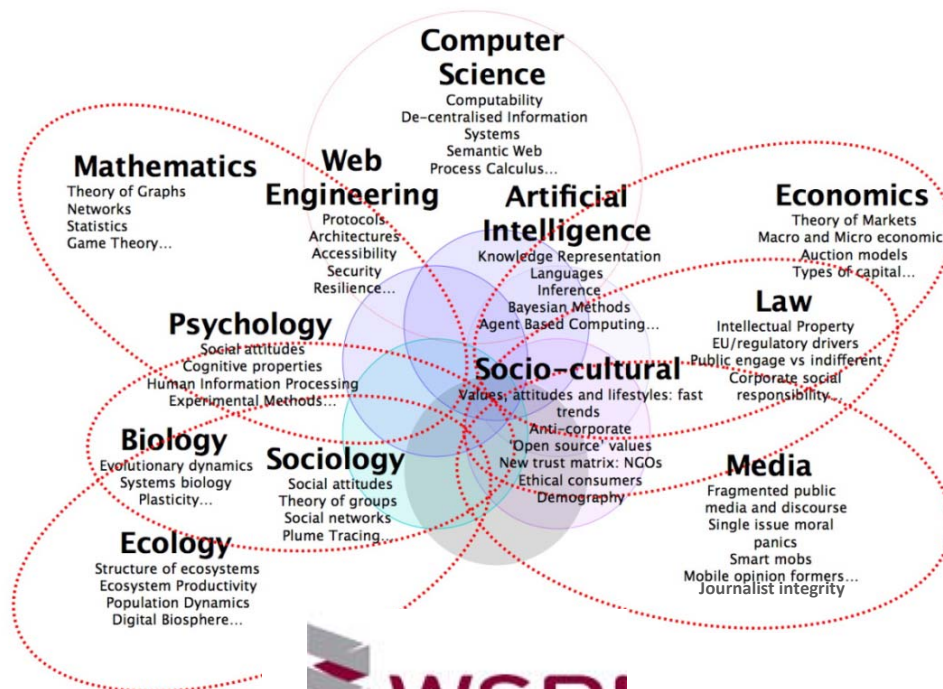
Web Leadership Programs: Support of Web Science

Goals

- Understand how the Web works
- Technical and non-technical issues
- Take the Web to new levels

Activities. Fund:

- Overall coordination
- Advocacy
- Global expansion
- Web science curricula
- Conferences
- Connection to Standards
- Research to support Web in Society programs



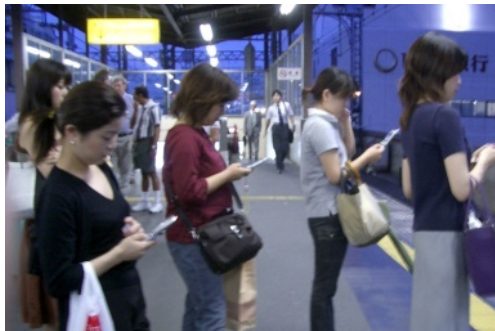


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Web Leadership Programs: Support of Web Standards

Goals

- There is One Web ... and it works
- Web expands in a robust manner
- Web remains free and open for all



Idioma de la interfaz

- العربي
- English
- Sueco
- Français
- Italiano
- 日本語
- Русский
- Español
- Svenska



Activities. Fund:

- Conferences and workshops
- Education and outreach
- Increased global participation
- Connection to Web Science
- Deployment to support Web in Society
- Uncovered gaps



- Founded in 1994 by Tim Berners-Lee
 - inventor of the Web (current W3C Director)
 - Fair and effective process
- Royalty-free patent policy
- Global focus
- 400 Member organizations
- Tens of thousand participating





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Delivering Web Content to Mobile Phones

10 ways to mobilize

- Design for One Web
- Rely on Web standards
- Stay away from known hazards
- Be cautious of device limitations
- Optimize navigation
- Check graphics & colors
- Keep it small
- Use the network sparingly
- Help & guide user input
- Think of users on the go

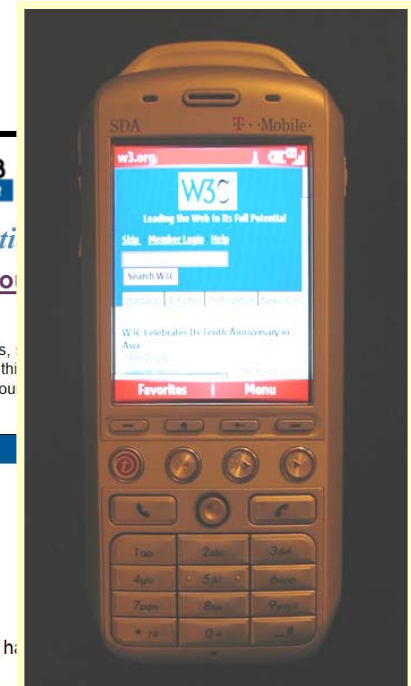


W3C WORLD WIDE WEB consortium
Leading the Web to Its Full Potential

[Activities](#) | [Technical Reports](#) | [Site Index](#) | [New Visitors](#) | [About W3C](#)

The World Wide Web Consortium (W3C) develops interoperable technologies (specifications, guidelines, potential. W3C is a forum for information, commerce, communication, and collective understanding. On this page, you can find information about W3C and ways to get involved. New visitors can find help in [Finding Your Way at W3C](#). We encourage you to become a W3C Member.

Validator Donation Program	News
<p>VALIDATOR Make a donation or become a sponsor of the W3C Validator.</p>	<p>Improving Access to Government through Better Use of the Web: First Public Draft</p> <p>2009-03-10: The eGovernment Interest Group has published the First Public Working Draft of Improving Access to Government through Better Use of the Web. The term "eGovernment" refers to the use of the Web or other information technologies by governing bodies (local, state, federal, multi-national) to interact with their citizenry, between departments and divisions, and between governments themselves. Recognizing that governments throughout the World need</p>
<p>W3C Supporters</p> <p>Help W3C by making a donation through the W3C Supporters Program.</p>	
<p>Employment</p> <p>W3C is seeking a Managing Director.</p> <p>Current W3C Fellows Program openings are Business and Technology Communications Specialist; Software Engineer.</p>	
<p>W3C A to Z</p>	



Standards and Technology (NIST)

NIST
 National Institute of Standards and Technology
 Technology Administration
 U.S. Department of Commerce

NIST, a world-class research and technology laboratory within the U.S.



Web In Society Programs



First Web in Society Program: Web for Development

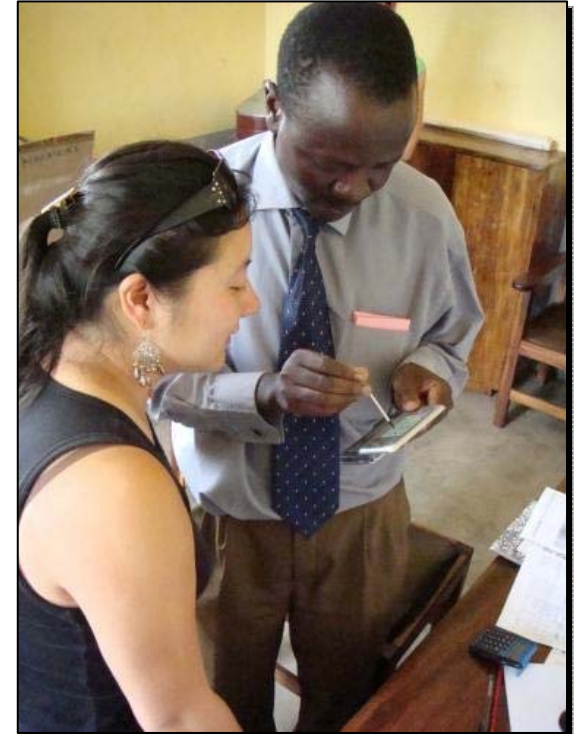
- Focus on under-served populations at the tipping point
- Achieve measurable impact





First Web in Society Program: Web for Development

- **Accelerate the number of:**
 - People who can create content
 - Web sites and applications providing useful content
 - Health care/nutrition
 - Education
 - Government services
 - Commerce
 - Web sites that are accessible and usable by people on mobile phones and other devices
 - Web-connected and -empowered people

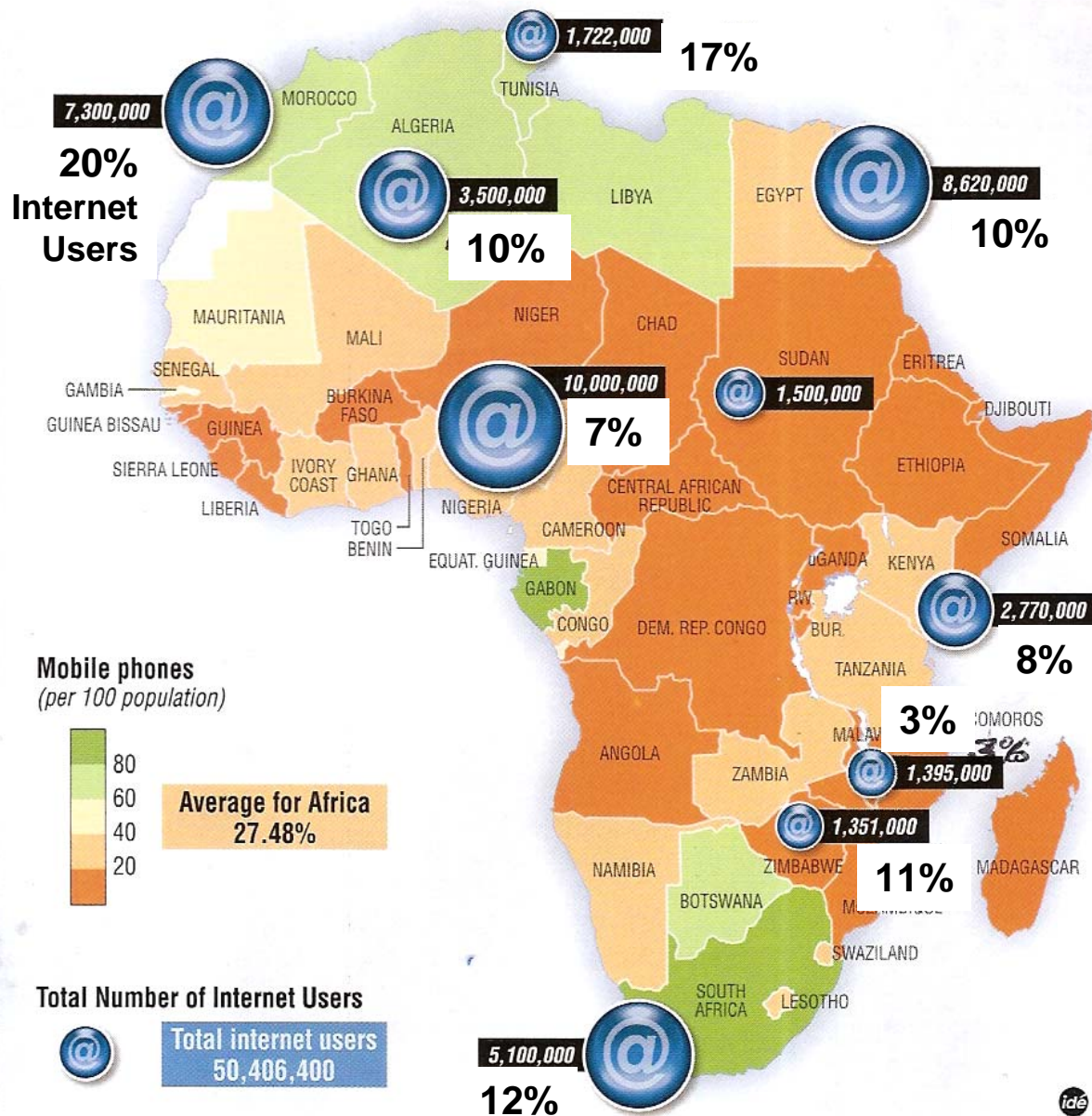




Internet Users and Mobile Phone Owners in Africa

(2008 Sep/Oct)
Africa Report

Mobile phone density and top ten countries in internet use





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Web for Development Projects

Break Barriers, Accelerate Opportunities

**Community
Building**

- *Convening groups of thought leaders, developers, users ...*
- *Social networking (wikis, blogs, twitter, fora...)*
- *Annual event and prize for the Innovative mobile Web applications*
- *Travel and study fellowships*

Science

- *Field research on mobile Web usage*

Standards

- *Web for people with low reading skills*
- *Web for people with little experience*
- *Web serving under-served languages*

Tools

- *Software and tools to develop, deploy and access Mobile Web content*
- *Open-source community software development projects*

Training

- *Training on mobile Web technologies for IT sector, NGOs, entrepreneurs...*
- *Curriculum and Degree at Universities*

Deployment

- *Pilot projects*
- *Full-scale projects*



Detailed plans and budgets available on request



Conclusion



- **The Web Foundation - about ready to launch**
- **Mission = globally unique, critically important**
- **Resources = experienced and world-class**
- **Impact = significant, scalable, multiplicative**
- **There is now a unique opportunity to become a founding partner, and work with the Web Foundation to advance the Web, connect humanity and empower people**



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Thank You

**For more information:
steve@webfoundation.org
<http://webfoundation.org/>**



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Extra Slides



1980s+: Internet Service Providers Offered Controlled Information Access



- Valuable attempt to make the Internet useful to people, but...
- Proprietary solutions
- Lack of Interoperability
- Users stuck in the “walled garden”



**Prodigy
Communications, L.P.**



Numbers (2008)

Web pages: ~1,000,000,000,000

World population: ~6,700,000,000

Internet/Web users: ~1,500,000,000

Mobile subscribers: ~4,000,000,000

Living on \$1.25/day or less: ~1,400,000,000

Under-nurished: ~920,000,000

Illiterate: ~900,000,000

Etc., Etc., Etc.



Imagine a World in Which All People Can ...

- communicate with each other on the Web
- author and access the Web's resources
- regardless of:
 - language
 - ability
 - location
 - gender
 - income ...





Imagine a World in Which All People Are ...

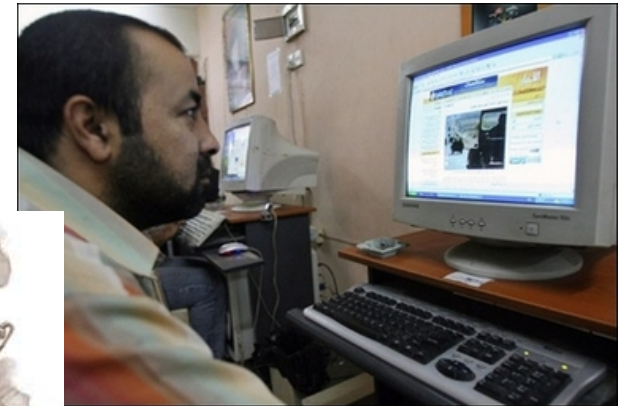
- empowered by the Web ...
- through new opportunities for
 - creativity
 - collaboration
 - commerce





Imagine a World in Which the Web ...

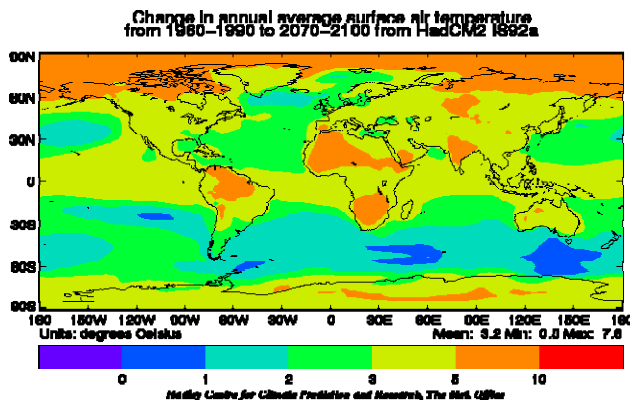
- is of increasing value by offering
 - all human knowledge
 - all languages
- poses fewer risks
 - security
 - privacy
 - trust





Imagine a World in Which the Web ...

- plays an increasingly vital role in:
 - reducing poverty and conflict
 - providing healthcare and education
 - reversing global warming
 - spreading good governance
 - addressing other grand challenges





Leadership and Structure

Leadership

- Tim Berners-Lee, Founder
- Steve Bratt, CEO

Governance

- Main Operating Board
- Development Board
- Visionary Board



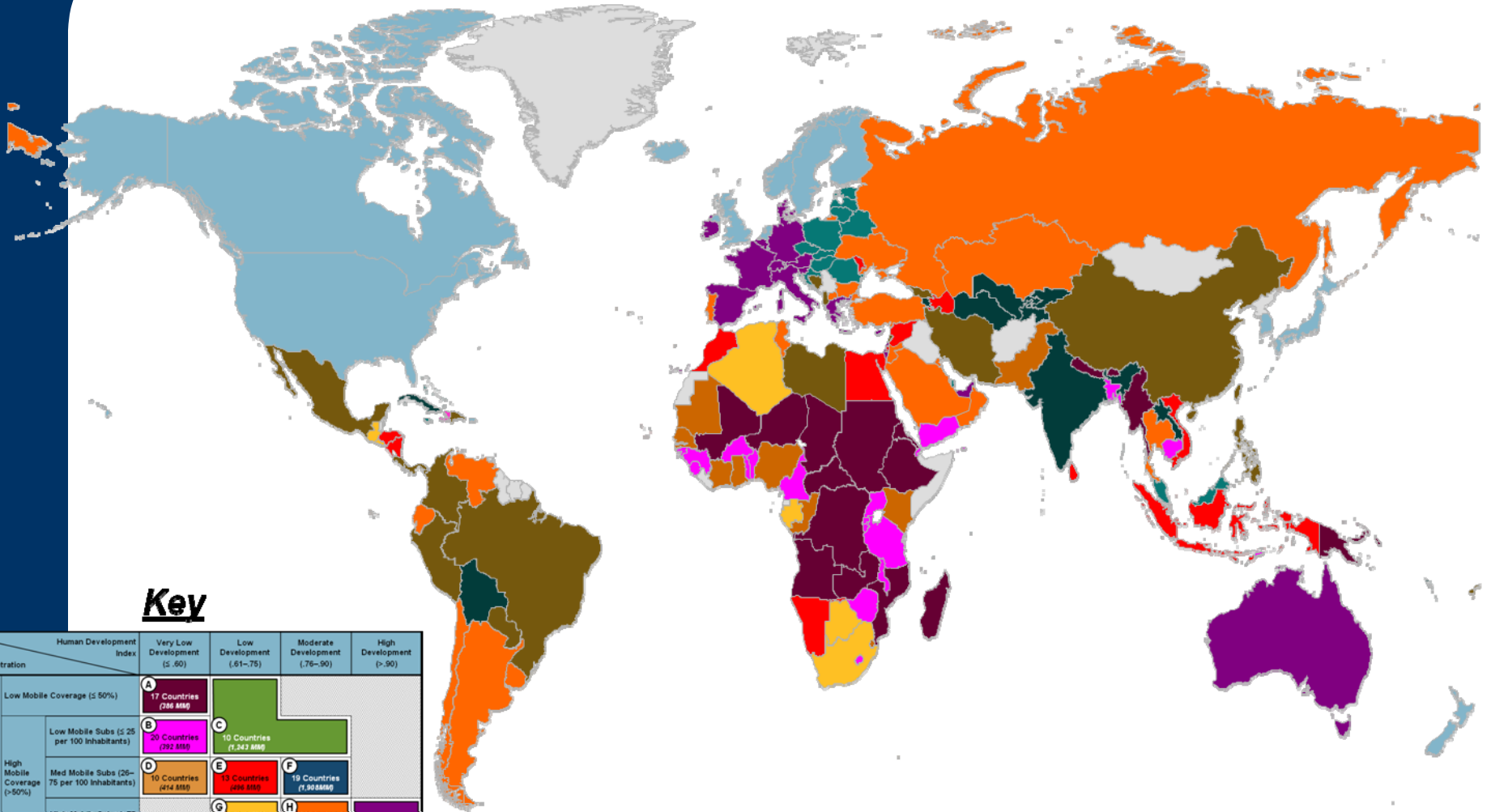
Organizational Structure

- Geneva, Switzerland - HQ
- “Friend’s of” Foundations initially in US and UK



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Plotting the Segments Around the Globe



Key

		Human Development Index			
		Very Low Development (≤ .60)	Low Development (.61–.75)	Moderate Development (.76–.90)	High Development (>.90)
Internet Penetration	Low Internet Penetration (≤ 35%)	Low Mobile Coverage (≤ 50%)	A 17 Countries (284 MM)	C 10 Countries (1,243 MM)	
		High Mobile Coverage (>50%)	B 20 Countries (292 MM)	D 10 Countries (414 MM)	E 13 Countries (286 MM)
	Moderate Internet Penetration (36%–65%)	Low Mobile Subs (≤ 25 per 100 inhabitants)			F 19 Countries (1,908 MM)
		Med Mobile Subs (26–75 per 100 inhabitants)			G 7 Countries (106 MM)
High Internet Penetration (>65%)	High Mobile Subs (>75 per 100 inhabitants)		H 20 Countries (212 MM)	I 17 Countries (174 MM)	
				J 18 Countries (177 MM)	
				K 14 Countries (821 MM)	

Analysis by Monitor Group, based on data from UNDP; World Bank; ITU



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~ 4 Billion Mobile Phones Many in Developing Countries

The Foundation's Web for Development Program will, in part, put into action concepts and plans developed by the:

[W3C Mobile Web for Social Development Interest Group](#)

Workshops:

- [Bangalore December 2006](#)
- [Sao Paulo June 2008](#)
- [Mozambique April 2009](#)

Stories that give hope

- [How mobile phones helped a fishing community in India](#)
- [Impact of mobile phones on grain markets in Niger](#)
- [Text messages empowering poor farmers](#)
- More stories and resources:
-<http://www.w3.org/2008/MW4D/wiki/>





The Web Index

Measure Foundation's Effectiveness

- Composite “Web Index”
 - Development of and continual reporting on a composite measure which reflects the Web Foundation’s impact on connecting and empowering people
- Measures which could contribute to the Web Index:
 - Number of people providing content to and consuming content over the Web
 - Number Web sites and applications
 - Volume of data; orgs providing data; types of things you can do on the Web
 - Number of people leveraging Foundation resources (tool, guidelines, studies)
 - How much of human knowledge is represented on the Web
 - Expansion of global freedom to create and consume content
 - Expansion of free, open, robust and safe Web technologies
 - Number of Web science programs and experts, and volume of research
 - Amount of commerce vs. amount of crime
- Indirect effects from connecting and empowering people
 - Increase access and better use of critical information and services
 - Increased communication, creativity, commerce => empowerment



The Web Foundation Is Uniquely Capable of Achieving its Mission

- **Credibility:** The Foundation is being created by
 - Sir Tim Berners-Lee: the inventor of the Web
 - Knight Foundation: providing a \$5 million / 5 year seed grant
 - World Wide Web Consortium (W3C)
 - Web Science Research Institute (WSRI)
 - *Will convene global leaders and innovators*
- **Global Network of Technical Expertise**
 - W3C's members include the world's leading tech organizations, with a large public community
 - WSRI and the Web Science community is a growing rapidly
 - *Will expand this community to address challenges*



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4 Objectives to Engage Challenges

- Accelerate number of Web content creators
- Increase availability of life-critical services

- Enable everyone to access and benefit from the Web – regardless of culture, language, literacy, disability, economic status or devices

**Useful
Content**

**Usable
by All**

**1 Web:
Free and
Open**

**Understand
Advance
Strengthen**

- Same content , available to all
- Core technologies are developed openly, and available at no cost
- Communication, creativity, commerce expand on top of free / open Web

- Understand the human-system dynamics of the Web
- R&D new technologies – advance the Web
- Support stable evolution



Future of Web Technologies



Expanding from a
Web of linked
documents,

to **One Web:**

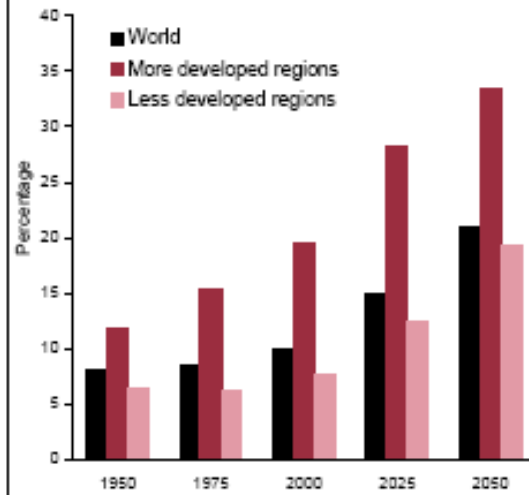
- of creators and consumers
- of Linked Data
- on Everything
- for Everyone
- Improving w/ time



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Figure 10. Proportion of population aged 60 or over: world and development regions, 1950-2050



More developed regions have relatively high proportions of older persons

Accessibility for People with Disabilities and Our Aging Population

- Barriers for millions with disabilities
- Aging population = more disabilities
- Often mandated
- Huge carry-over benefits

Developing a Web Accessibility Business Case

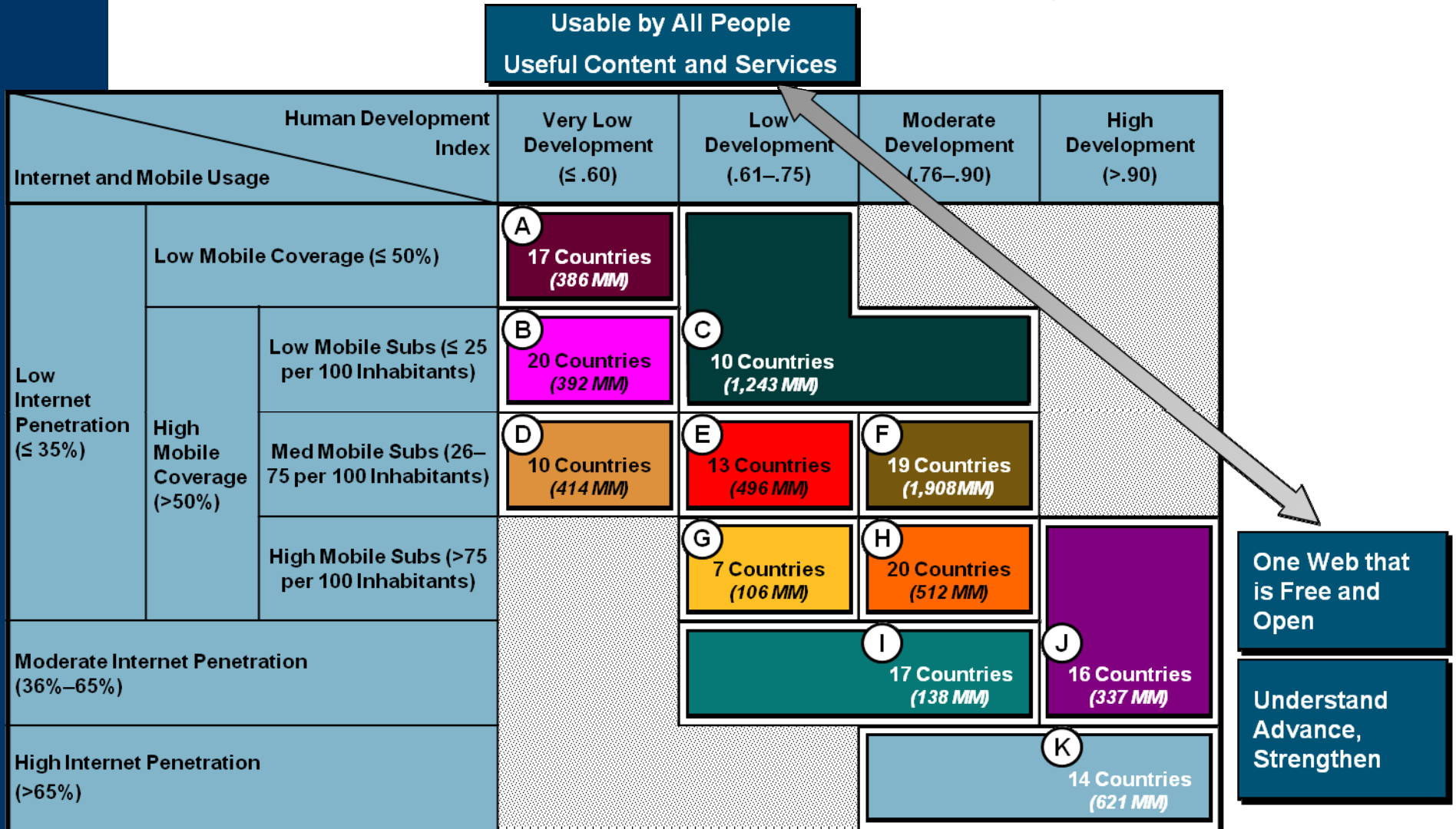
- Web Accessibility Initiative @ W3C
 - New Web Content Accessibility Guidelines 2.0



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Prioritizing Challenges and Foundation's Response

By looking at people around the globe based on their level of human and ICT development, we are able to identify and prioritize the types of interventions with the greatest potential impact



Analysis by Monitor Group, based on data from UNDP; World Bank; ITU