

Digital Divide

Amogh Randhar, Andrés Martín Maqueda, Darron
Tang, Jack Drake, Tom Aley, Vaidotas Šimkus

Who We Are



Darron Tang



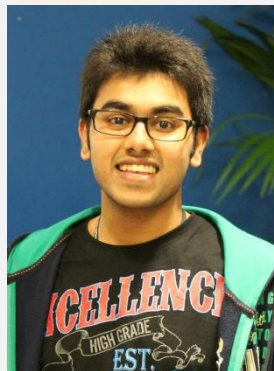
Vaidotas Šimkus



Tom Aley



Jack Drake



Amogh Randhar



Andrés Martín Maqueda

ABSTRACT

In this presentation we explore the modern phenomenon known as Digital Divide, a world spread social problem that regards how despite the constant advancement of technology as a whole, such technological development is not reflected on and does not reach all communities and individuals. We consider the technological divide separating countries from each other and also the divide present within a same nation or society, which is particularly significant in more developed countries. For these, we cite as examples the cases of the US and the UK, while we contrast their situations with those of developing countries such as those in BRICS and Africa. In our work we include the view on the problem along with measures taken against it and solutions.

Definition 1

- **Definition 1:** “gap between those who already have **access to Information and Communication Technology** and the **skills** to make use of those technology and those who do not have the access or skills to use the same technology within a **geographic area, society or community**. It is an **economic inequality** between groups of persons.”
- [http://en.wikipedia.org/wiki/Digital_divide]

Oxford Dictionary Definition

Definition of *digital divide* in English:

digital divide

Line breaks: digi|tal div|ide

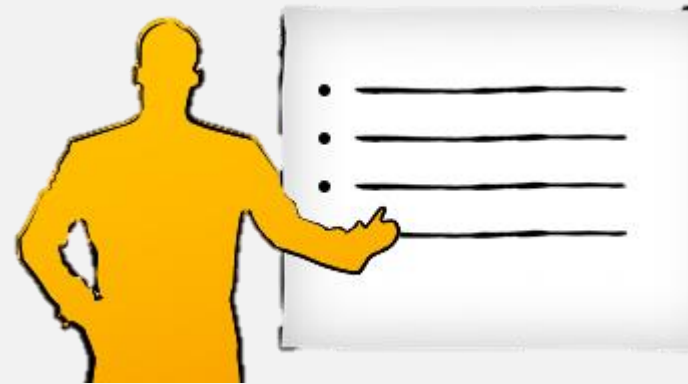
NOUN

The gulf between those who have ready access to computers and the Internet, and those who do not.

'there is a 'digital divide' between rich and poor, black and white, in terms of computer use'

Outline

- Introduction
 - What Is Digital Divide ?
- In Developed Countries
 - U.S.A
 - U.K
- In Developing Countries
 - Overall Across Globe
 - BRICS
 - Africa
- Reasons
- Generation Gap
- Solution Taken



Digital Divide – U.S.A



Overall internet usage in USA

- In 2009 a study was taken on internet usage in the US
- Of the people asked 82% of them used the internet
- 48% of people asked used the internet for at least an hour everyday

Usage by gender

- Of the people asked 85% of men used the internet and 80% of woman used the internet
- Gender is not a significant cause of the digital divide

Usage by Age

- Of the people asked 97% of people aged 18-29 used the internet
- Only 48% of people asked over 65 used the internet
- Age is a big cause of the digital divide
- This could be caused by young people growing up with new technology, while older people find it harder to adapt



Usage by Income

- 96% of people asked with over \$75,000 salary use the internet
- 48% of people asked earning under \$30,000 use the internet
- This is another significant cause of digital divide
- People earning less may choose not to get internet because they can't afford it
- People earning more may be more successful due to their presence online



Usage by Employment Status

- 94% of people asked who are employed used the internet.
- 68% of people asked who are unemployed used the internet.
- Almost everyone who is employed uses the internet. The internet has become a big part in running a business and usage of it in some kind is required in a lot of jobs.
- Being unemployed gives people less reason to use the internet, as it isn't required for a job. Someone who is unemployed also may not be able to afford paying for internet.



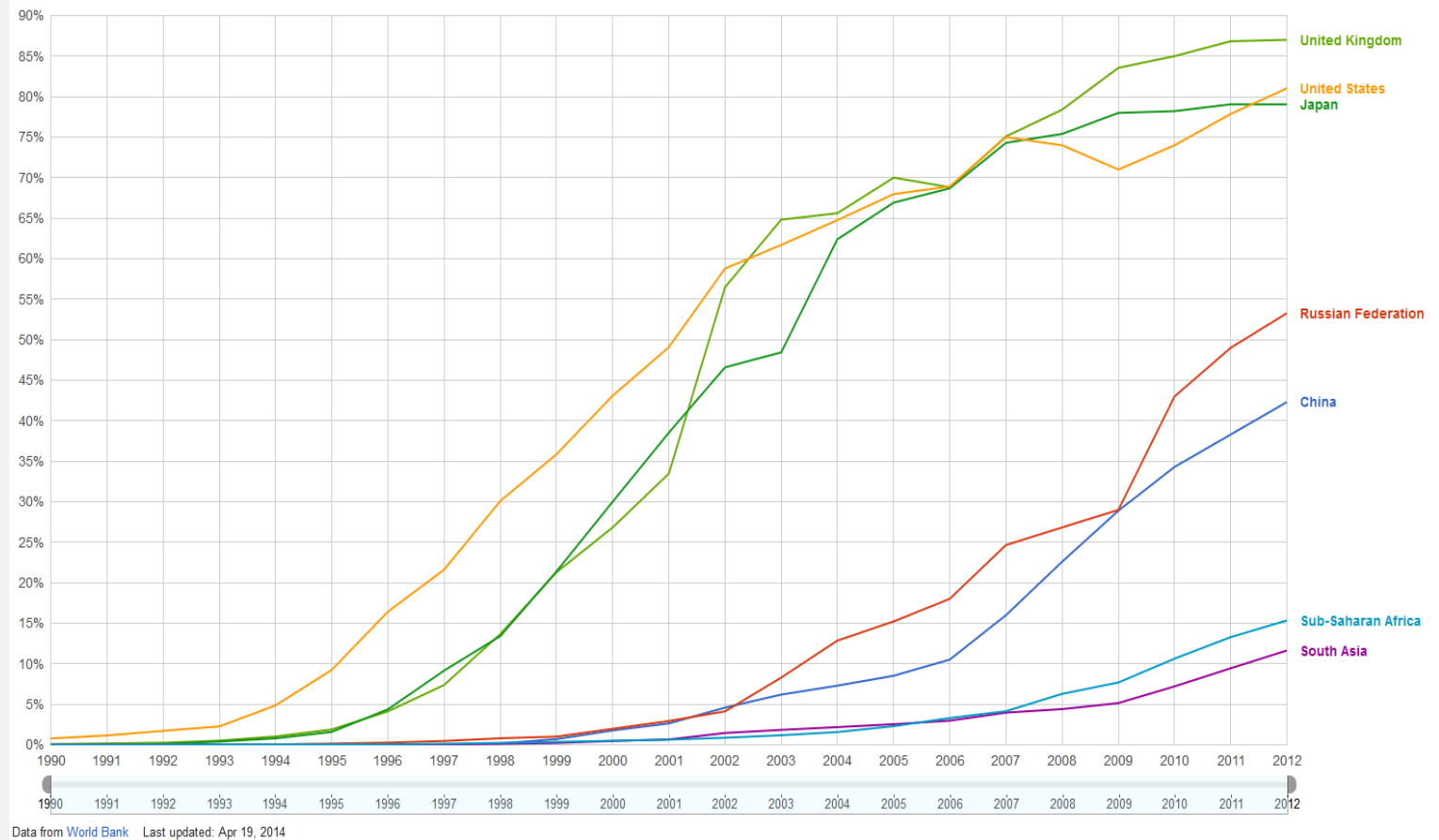
Usage by Education

- 96% of post-grads use the internet
- 68% of people asked who left education at high-school or lower use the internet
- Internet usage is very helpful for education
- Sometimes usage of it is even required by the education facility
- People who leave education early have less reason to use the internet, and are more likely to have less income

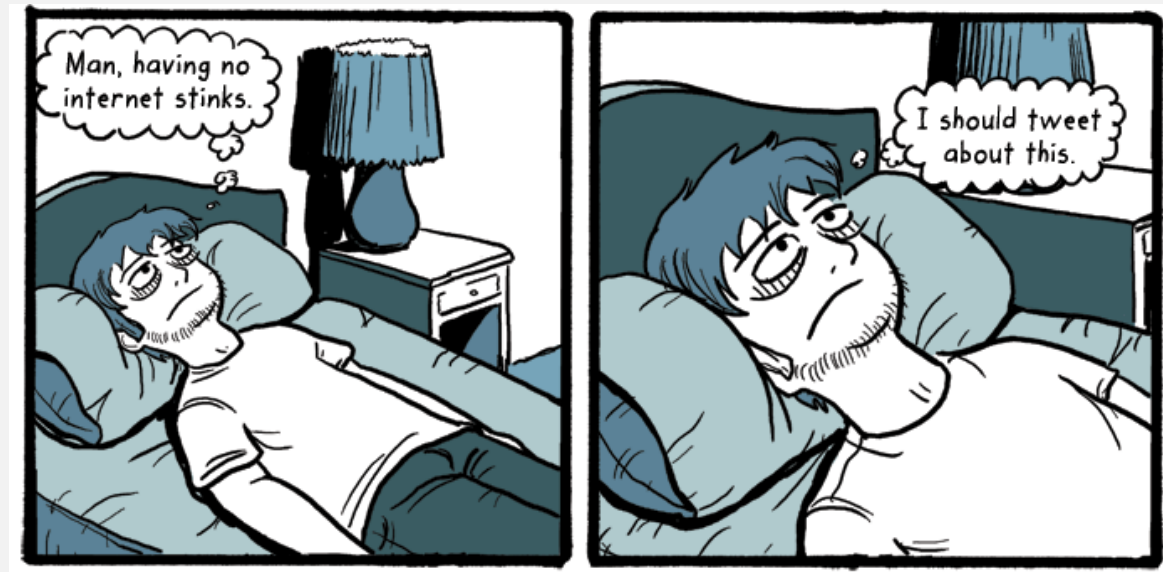


The US internet usage is very high

- You will notice that even in the groups that use less internet, the majority of people still use the internet
- The internet has become a huge part of the US, and many peoples lives



Digital Divide In The UK



An overview of the factors involved

Factors of the divide

- Age and Disability
- Provisions and Infrastructure
- Income and Education
- Social Inclusion/Exclusion

Provisions and infrastructure

- Availability of information and communications technology
- Rural vs Urban



Income & Education, the Socio-economic factors

- The social divide
- The democratic divide
- Confused and adverse vs Advanced Users

Confused And Adverse: *“High variability, but generally low usage of Internet. This user type shows confusion about Internet services. This category rarely uses the Internet for private purposes or for contacting authorities”*

Advanced Users: *“Frequent use of eGovernment services, not only for administrative tasks (e.g., to search for administrative information, to fill out forms, or to carry out administrative transactions) but also for other purposes. Advanced Users are the most frequent online shoppers.”*

Internet access by educational qualification and household income:

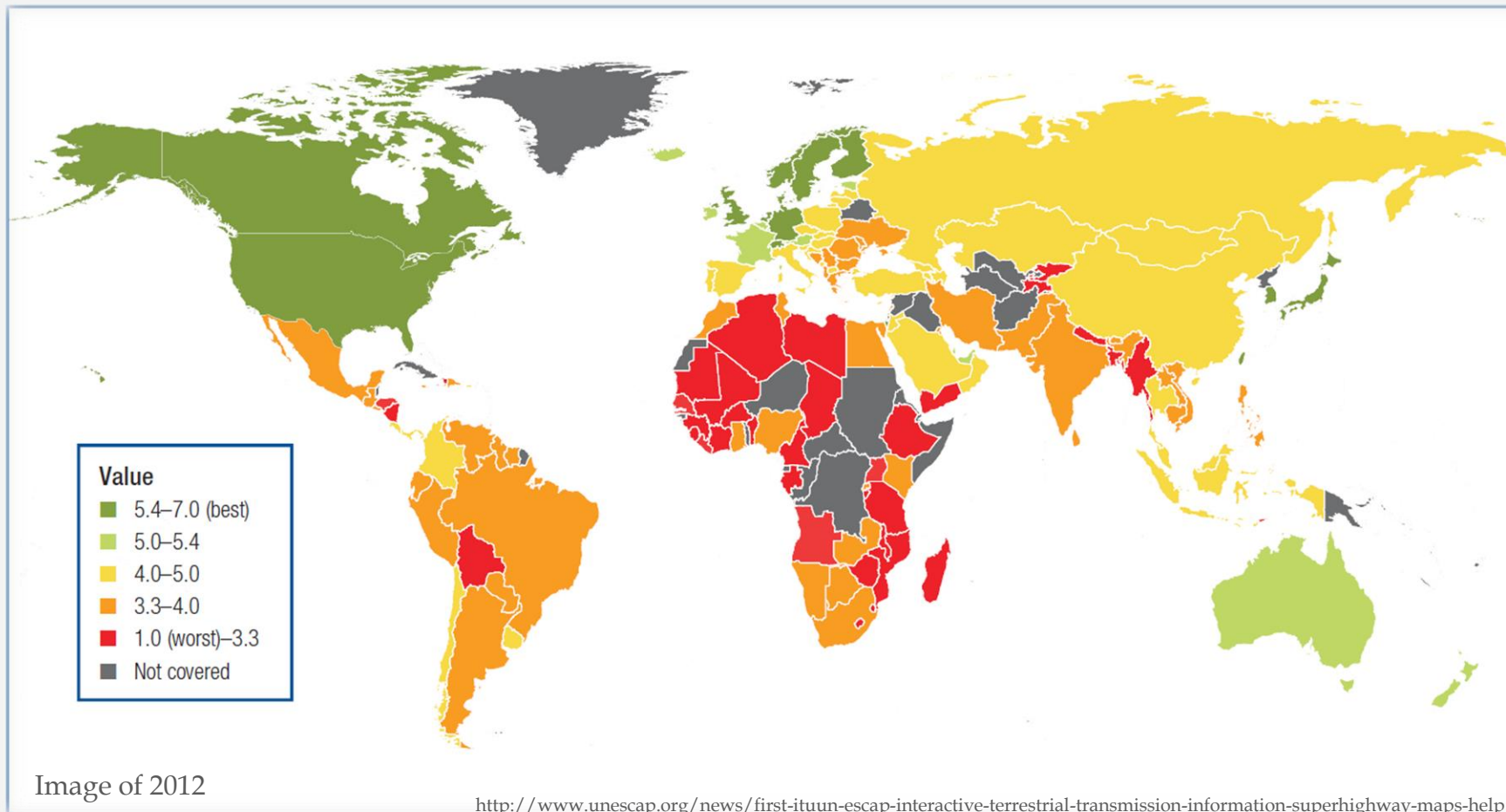
% who use the internet	Highest educational qualification		
	Degree/HE	Intermediate	No qualifications
Household income			
£14,999 or under	29	18	6
<i>Base</i>	104	366	475
£15,000 or more	65	41	19
<i>Base</i>	464	466	151

Digital Divide : Less Economic Developed Countries

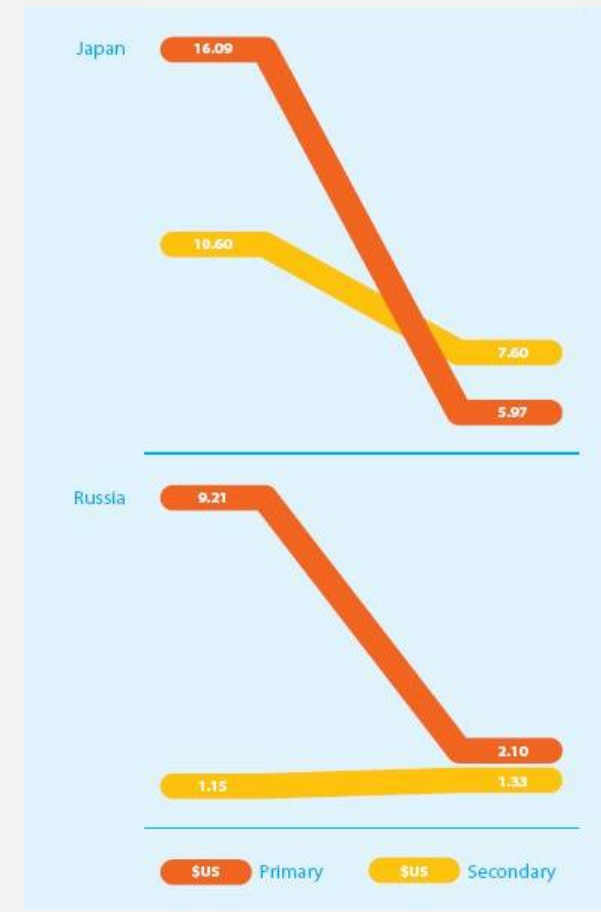
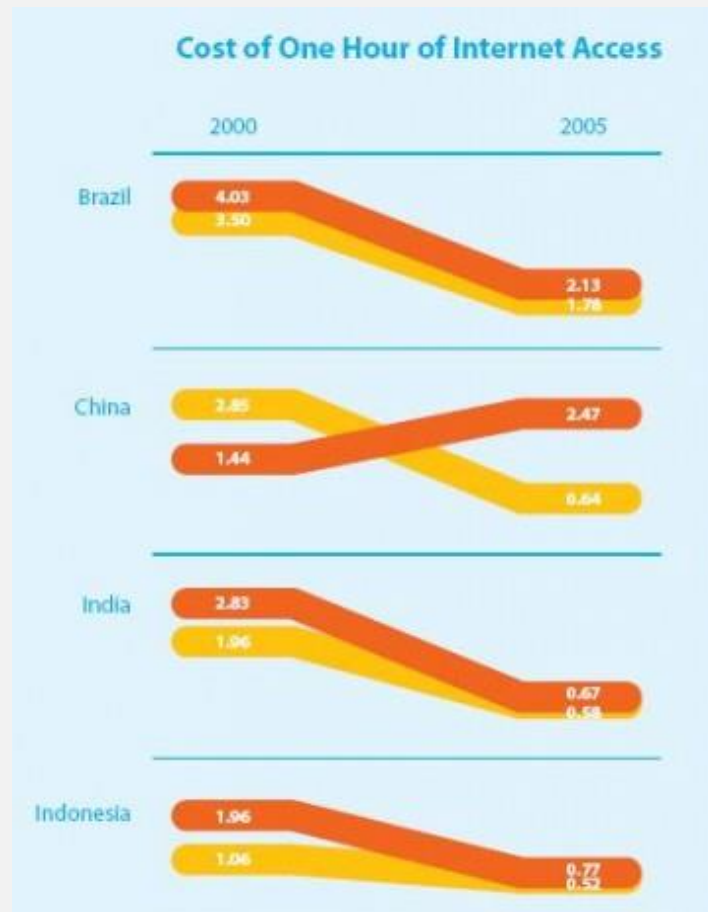


Developing And Less Developed Countries

Internet Penetration In World

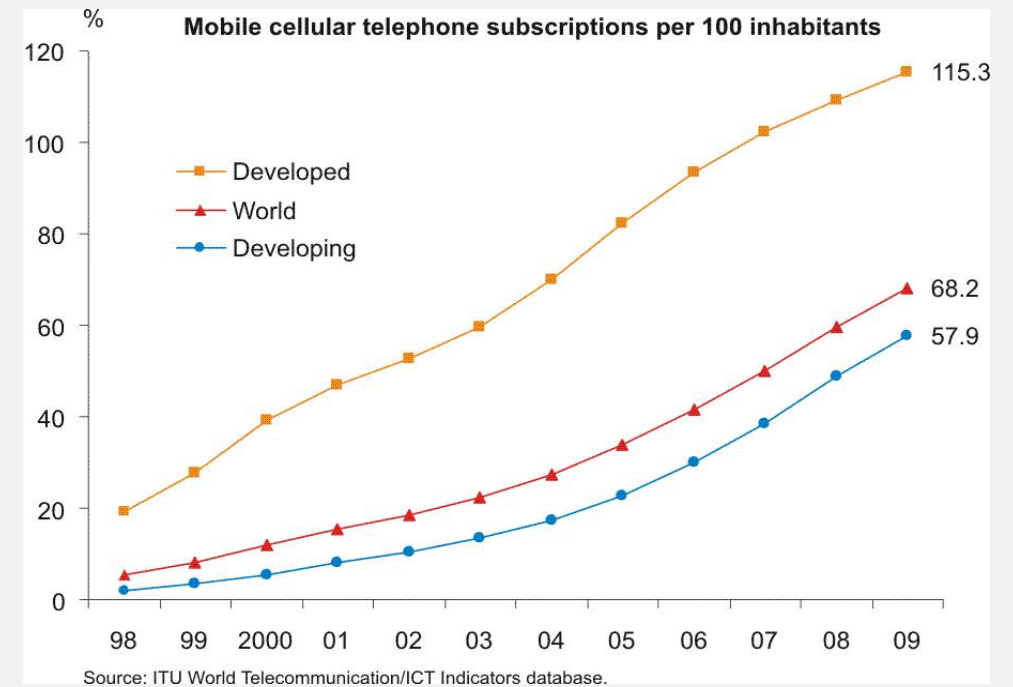
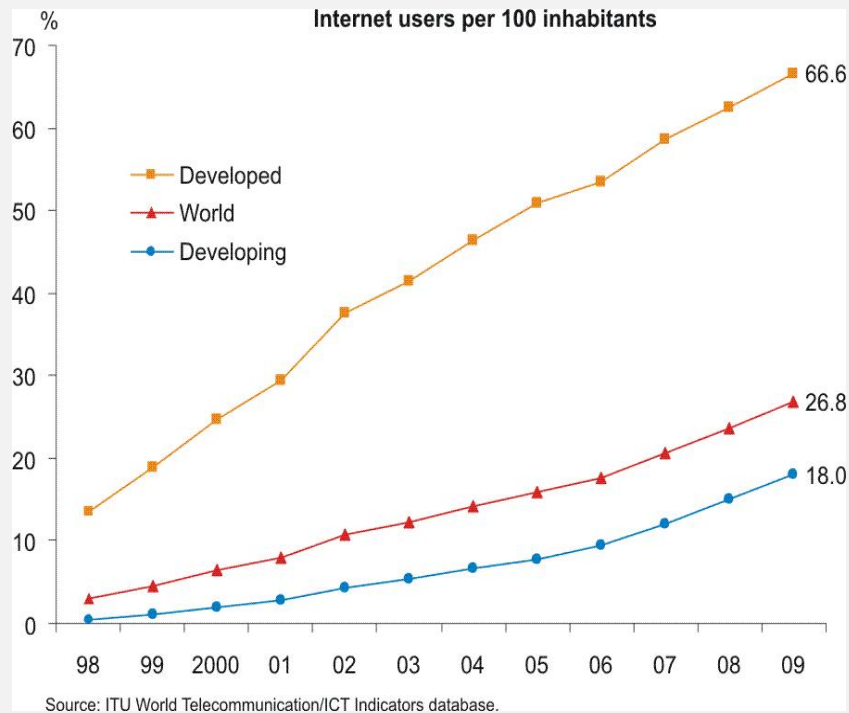


Cost of One Hour of Internet Access: Global Cities v. Regional Centres



Digital Divide - Comparison

Developed vs Non-Developed



From the following two charts, we can see that while the adoption of ICT has been on the rise, the number of users from the developing nations still falls below the world average.

Development Data Comparison BRICS

	BRAZIL				RUSSIAN FEDERATION				INDIA				CHINA				SOUTH AFRICA			
	2012		2014		2012		2014		2012		2014		2012		2014		2012		2014	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Networked Readiness Index	65	3.9	69	4.0	56	4.0	50	4.3	69	3.9	83	3.8	51	4.1	62	4.1	72	3.9	70	4.0
Environment subindex	101	3.5	116	3.4	100	3.5	87	3.8	78	3.7	91	3.8	64	3.9	77	3.9	34	4.6	31	4.8
1. Political and regulatory environment	77	3.6	78	3.6	102	3.2	100	3.4	71	3.7	73	3.6	46	4.1	56	4.0	23	4.9	20	5.0
2. Business and innovation environment	121	3.5	135	3.3	83	3.8	73	4.2	91	3.8	103	3.9	105	3.7	115	3.8	50	4.4	53	4.5
Readiness subindex	72	4.7	76	4.7	32	5.4	37	5.5	64	4.8	85	4.6	66	4.8	73	4.8	94	4.1	98	4.2
3. Infrastructure and digital content	68	4.0	56	4.5	40	4.8	47	4.8	100	3.2	119	2.7	87	3.5	86	3.5	82	3.6	68	4.2
4. Affordability	67	5.3	91	5.0	17	6.2	14	6.4	1	6.9	1	7.0	42	5.7	60	5.6	94	4.6	112	4.0
5. Skills	86	4.7	91	4.6	53	5.2	64	5.1	100	4.3	101	4.0	57	5.2	59	5.2	101	4.3	97	4.3
Usage subindex	54	3.8	47	4.1	60	3.7	53	4.1	78	3.4	91	3.4	51	3.8	61	3.9	76	3.4	70	3.7
6. Individual usage	66	3.3	59	4.2	52	3.9	46	4.6	117	2.0	121	2.1	82	2.9	80	3.3	96	2.6	78	3.4
7. Business usage	33	4.0	41	3.9	83	3.4	84	3.4	47	3.8	51	3.8	37	4.0	44	3.9	34	4.0	30	4.2
8. Government usage	59	4.0	54	4.3	71	3.7	61	4.1	46	4.3	41	4.5	33	4.6	38	4.6	89	3.6	103	3.6
Impact subindex	53	3.7	57	3.6	73	3.4	44	3.9	52	3.7	60	3.6	41	4.0	56	3.7	81	3.3	89	3.3
9. Economic impacts	52	3.5	64	3.3	53	3.4	41	3.6	41	3.6	50	3.5	79	3.2	81	3.1	59	3.4	49	3.5
10. Social impacts	54	3.9	58	3.9	89	3.4	41	4.3	65	3.8	73	3.7	30	4.8	44	4.2	98	3.3	113	3.0

**Poverty & Poor
Infrastructure**

Reasons

Rurality

**Corruption &
Bureaucracy**

**Educational Exposure
& Technical Support**

Illiteracy

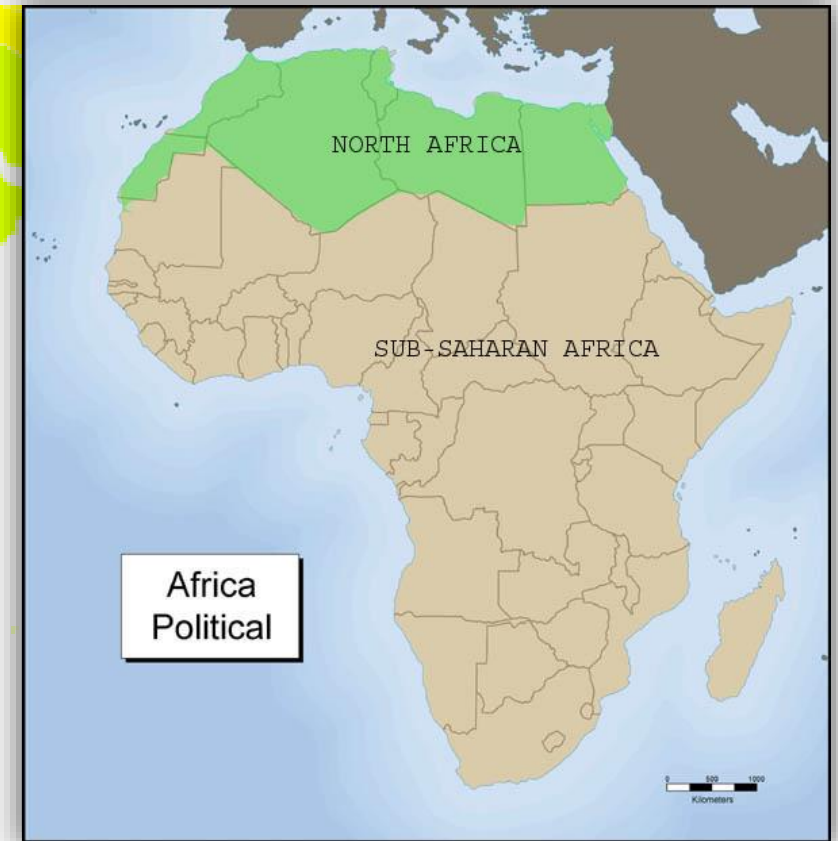
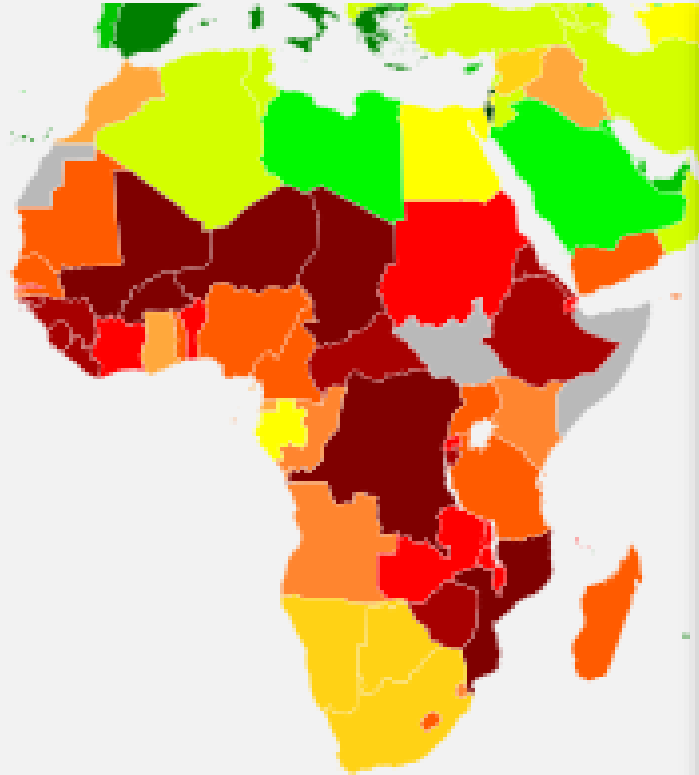
Least Developed Countries - Africa



An Overview of Africa

Least Developed Countries - Africa

- Human Development Index of Sub-Saharan Africa: **0.475**.
- HDI is based on life expectancy, education and income of average citizens.
- Note the inner divide within the continent.



Washington Consensus

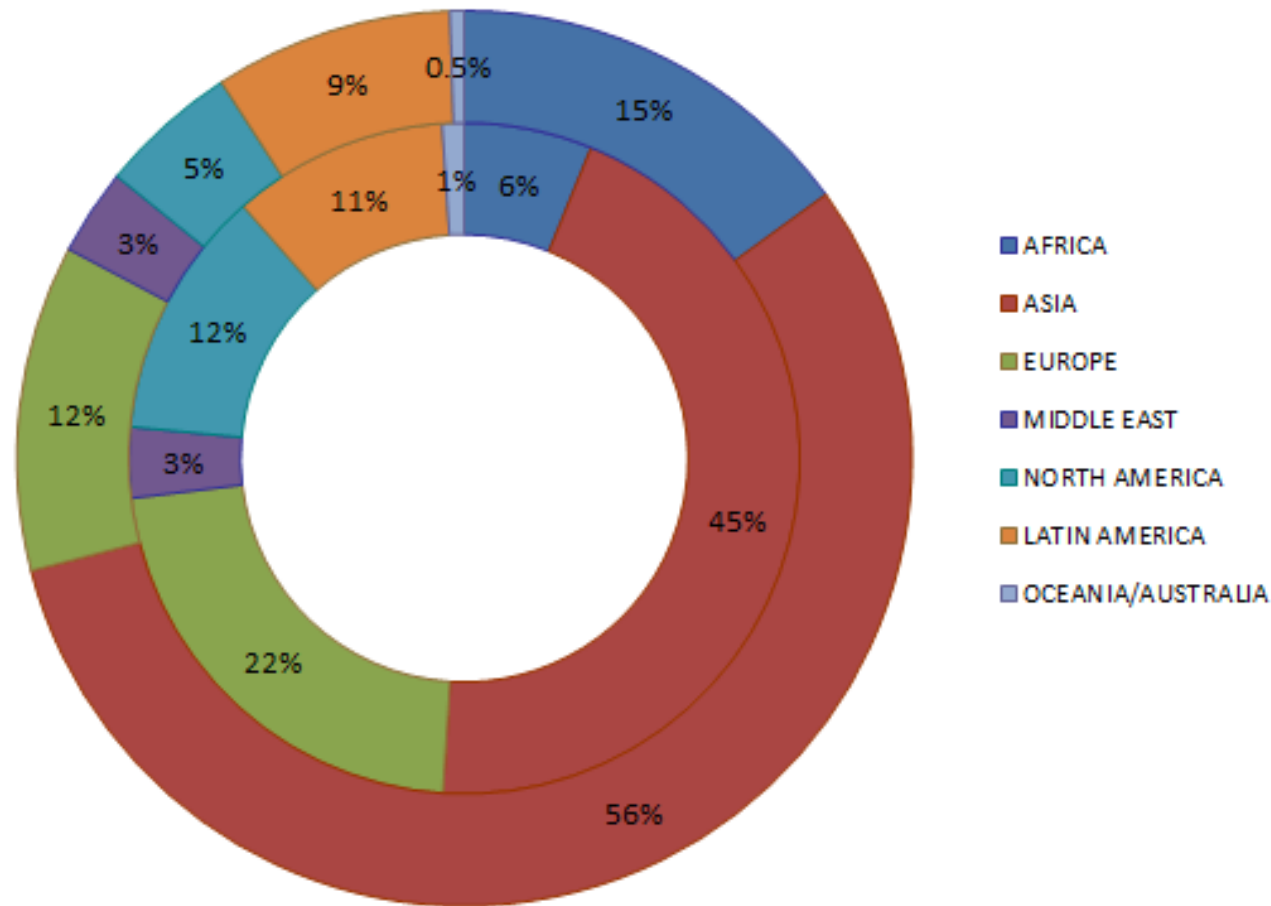
- “Washington Consensus” was a phrase coined by John Williamson in 1990 to refer to policy advice being offered by the Washington-based institutions to Latin American countries as of 1989”.



- Based on Neoliberalism
 - Free trade
 - Privatisation
 - De-regularization
 - Liberalisation of foreign investment
 - Investment in basic healthcare, education and infrastructure.

Regional Population Share (Outer) vs. Share of Internet Users (Inner) in 2011

Data Source: Internet World Stats



- “The implementation of privatization and deregulation **in Africa** has **produced very weak results** compared to Latin America and South East Asia in terms of growth of service provision of telecommunication services” (Stovring, 2004, p. 12).

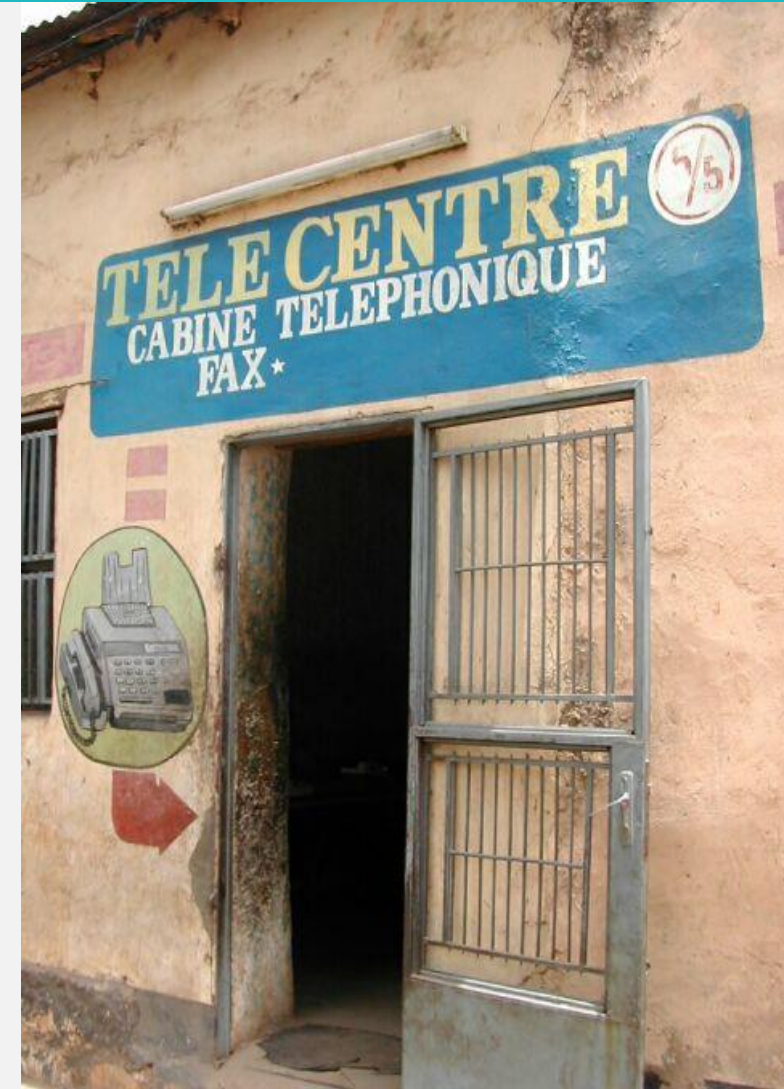


- Using Nigeria and Kenya as examples, the 2002 average cost of using a local dial-up Internet account for **20h per month is about \$60** (including usage fee and local call time but excluding telephone line rental).
- In Kenya 67% of the population lives on under \$2 per day.
- In Nigeria it's 84%.

Telecommunication And PerCapita



- Telecentres are one of the elements that reduce the digital divide in countries like this, where the widespread use of personal computers is yet a too ambitious goal.
- They evidence another divide, the capital city VS the rest of the country.



Digital Divide Between Generations



Digital Divide Between Generations

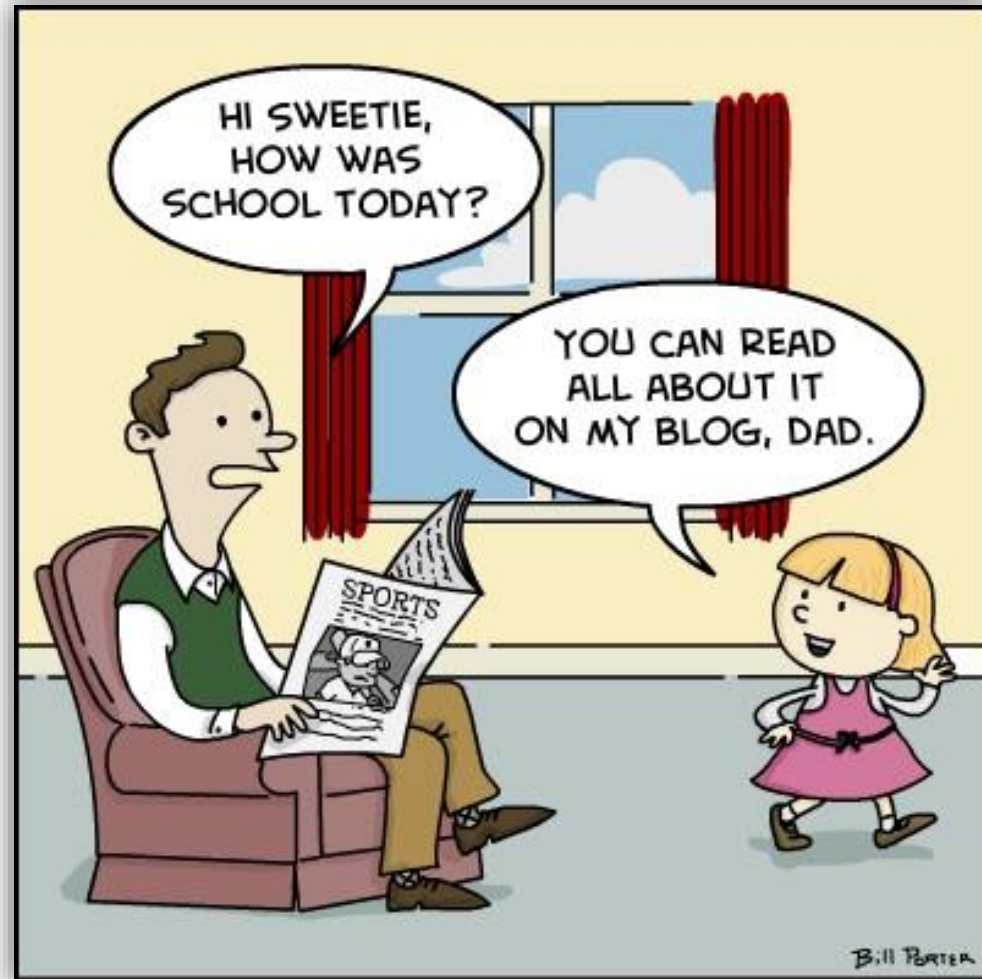
Facts about Net Generation

- 93% of those aged 12-17 go online.
- 63% of teen internet users go online every day.
- Almost 75% of teens have social networking profiles.
- 86% of social network-using teens comment on a friend's wall.
- 83% comment on friends' pictures.
- Over nine out of ten 18-29 year-olds own a cell phone.
- 95% of cell phone owners aged 18-29 send and receive text messages. 93% also take pictures with their cell phones.

Facts about baby boomers

- Only 32% of the baby boomers use the Internet.
- 8.2% of all social network and blog visitors are over 65.
- 10% of people aged 60-69 have access to the internet but don't use it.

Digital Divide between generations



Digital Divide Between Generations



WHAT IS BEING DONE TO REDUCE DIGITAL DIVIDE

LEDCS

Close the Gap

“An international non-profit organisation that aims to bridge the digital divide by offering high-quality, pre-owned computers donated by large and medium-sized corporations or public organisations to educational, medical, entrepreneurial and social projects in developing and emerging countries. All the projects are demand-driven and share the common denominator of being non-profit-oriented initiatives.”



One Laptop Per Child

“We aim to provide each child with a rugged, low-cost, low-power, connected laptop. To this end, we have designed hardware, content and software for collaborative, joyful, and self-empowered learning. With access to this type of tool, children are engaged in their own education, and learn, share, and create together. They become connected to each other, to the world and to a brighter future.”



Modern Britain

Governmental Policy

Investing £530 million to stimulate commercial investment and bring high speed broadband to rural communities reaching 90% of UK homes and businesses

Investing a further £250 million to extend the benefits of superfast broadband to 95% of the UK and exploring approaches to deliver superfast broadband to the remaining hardest to reach areas, initially through a new £10 million competitive fund

Investing £150 million in 'super-connected cities' across the UK

Removing red tape to make it easier to put in broadband infrastructure

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