

Is there a digital divide?

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Outline

- What is the digital divide?
- Domestic divide
- International divide
- Conclusion

What is the digital divide?

The Oxford English Dictionary defines the “digital divide” as:

“The gulf between those who have ready access to current digital technology and those who do not; the perceived social or educational inequality resulting from this.”

Overview of Technology in the US

- Telephones
- Computers
- Internet Access (1998)
 - 59.1% of population is online
 - There are 166 million internet users in the US – this represents 27% of the world's internet users

Notes on Technology in the US

- It is clear that the US has made great advances in technology
- The US has some of the highest internet penetration rates in the world
- How is the distribution of internet access within the US?

- Factors determining computer ownership and internet access:
 - Income
 - Race/Origin
 - Education
 - Household Type

Income

- Households with an income $> \$75,000$ are more 7 times more likely to have internet access than households earning $< \$10,000$
- Low income rural households have a 2.9% internet access rate compared to high income urban households 62%

Income (cont'd)

- Disparity exists even when race and family structure are the same :

A two-parent hispanic family earning more than \$35,000 is 6 times more likely

to have internet access than a similar family earning <35,000

Race/Origin

- Computer ownership & Internet Access
 - Asian/Pacific islander – 55% , 36.6%
 - White Households -46.6%, 29.8%
 - Black Households - 23.2%, 11.2 %
 - Hispanic households – 25.5%, 12.6 %

Education

- Households with a college degree or higher are 16 times more likely to have internet access than those with elementary education
- Disparity greater in rural areas
 - College degree holders are 26 times more likely to have internet access than those with elementary school education

Household Type

- Single parent households lag in computer ownership
 - 61.8% ownership in two parent households
 - 31.7% computer ownership in female headed households

Important Notes

- The digital divide is expanding
 - The rate of internet access growth among leading groups is faster than those with lower access
- Education and Income are the main elements driving the digital divide

International Digital Divide

- Technology Disparities (1998)
- Internet Users and Personal Computers (2000)
- Africa vs. United States (2004)
- Factors Affecting the International Digital Divide

Technology Disparities

- Telephones
 - In 1998, there were 146 telephones (per 1000 people) in the world
 - 19 (per 1000) in South Asia
 - 3 (per 1000) in Uganda
- Mobile Phones (1998)
 - 55 (per 1000 people) had mobile phones worldwide
 - 1 (per 1000) in either South Asia or Uganda

Technology Disparities

- Computers (1998)
 - 70.6 PCs (per 1000 people) worldwide
 - 311.2 (per 1000) in developed countries
 - 2.9 (per 1000) in South Asia
 - 0.75 (per 1000) in Sub-Saharan Africa
 - 0.7 (per 1000) in Mali

World Network Map (1999)

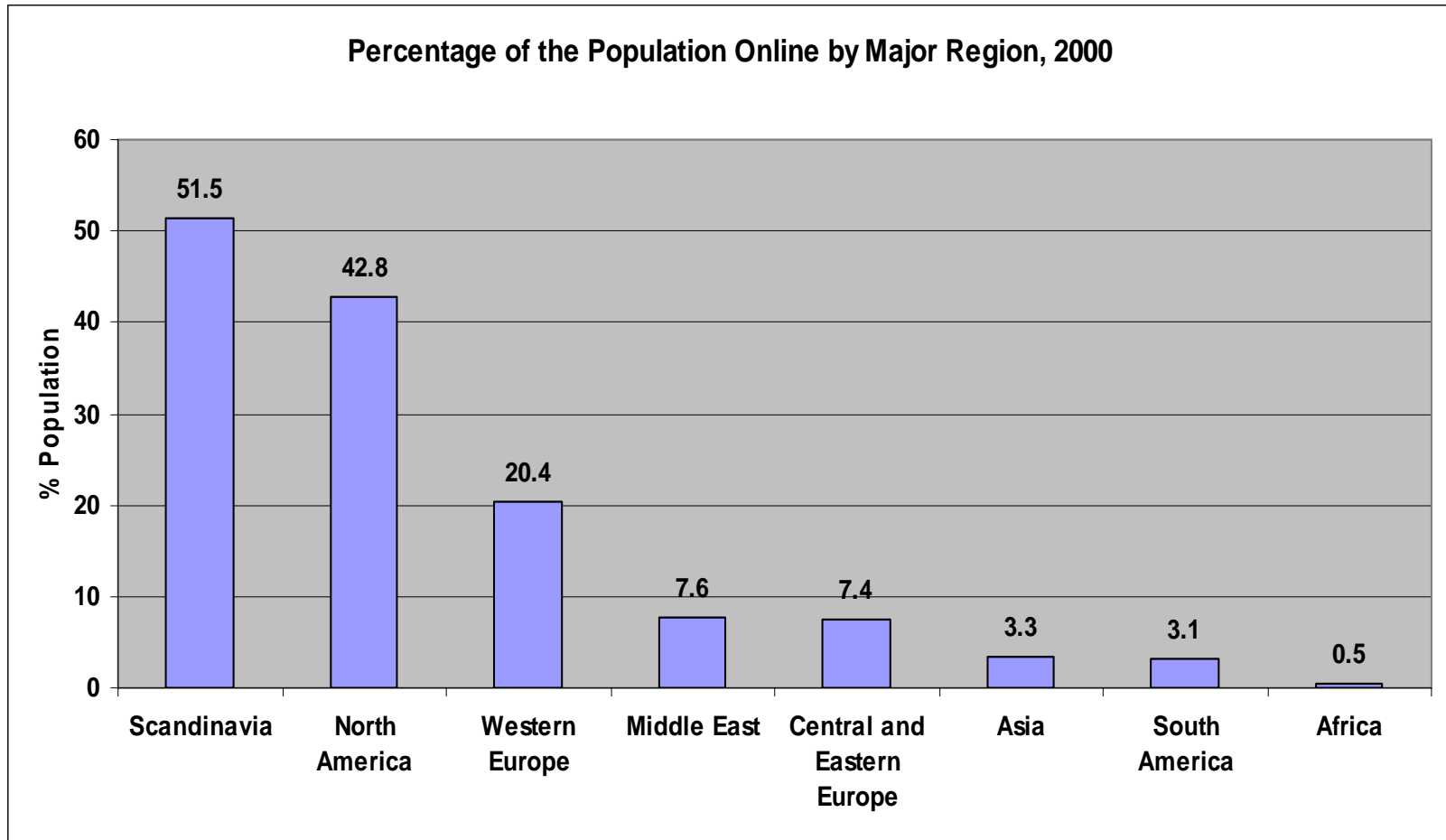
Image removed due to
copyright reasons.

Source: <http://www.cybergeography.org>

Technology Disparities (2000)

- Bandwidth
 - U.S. linked with Europe by 56 Gbps and with Asia-Pacific region by 18 Gbps
 - Africa linked with Europe with 0.2 Gbps and with U.S. by 0.5 Gbps
- Speed
 - 256Kbps internet connection in South Africa is speedy
 - DSL or T-1 (1.5Mbps) is a minimum small business connection in the U.S.

Percentage of Population Online by Major Region (2000)



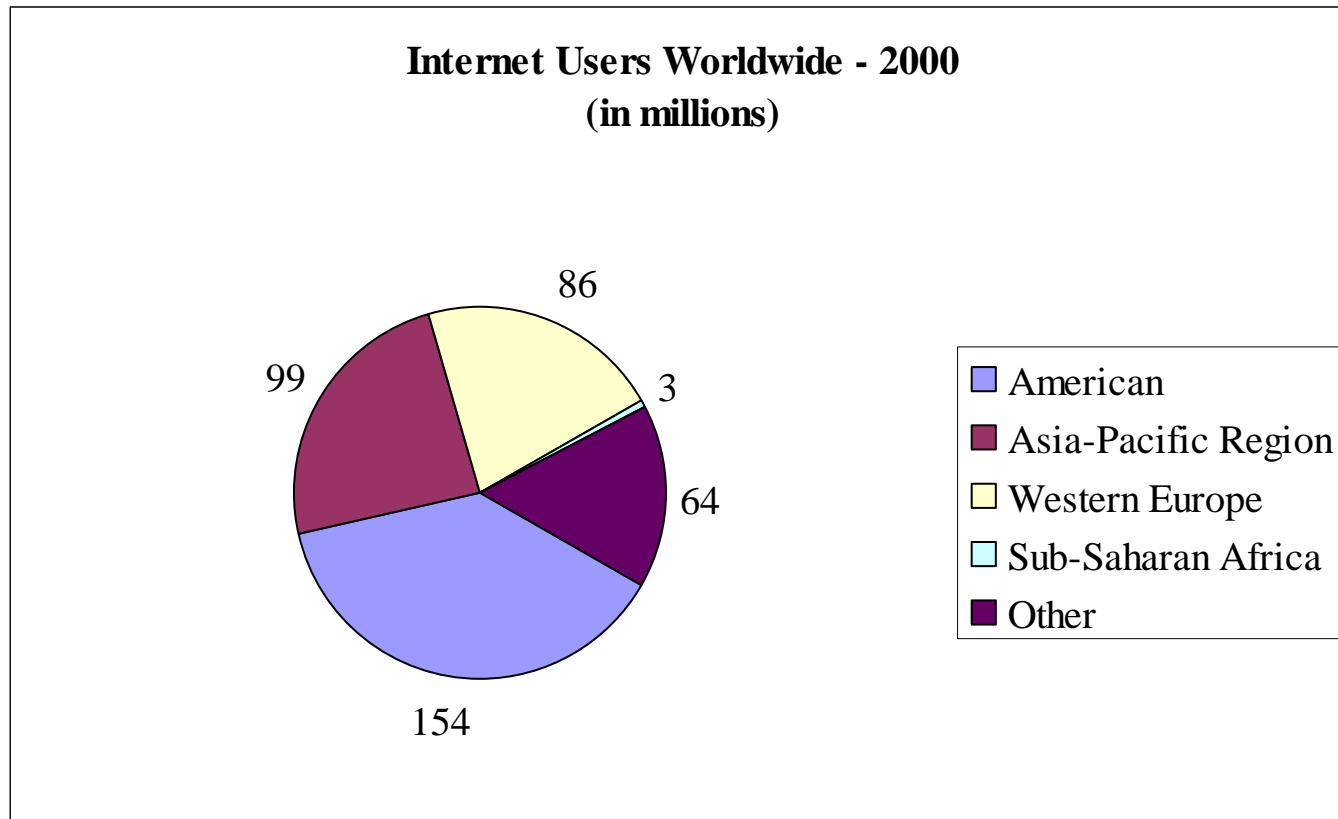
Source: Pippa Norris, Digital Divide

Internet Users and PCs (2000)

	Computers (per 100 people)	Internet Users (per 100 people)
Sub-Saharan Africa	9.6	8.5
United States	572.1	440.6

Source: <http://devdata.worldbank.org>

Internet Users Worldwide (2000)



Percentage of Population Using New and Old Media (2000)

Percentage of Population Using New and Old Media

Region	New Media			Old Media				
	Population Weighted			Radios	TV sets	Daily Newspaper	Mainline Phones	Mobile Phones
	Online	Hosts	PCs					
2000	2000	1998	1997	1998	1996	1998	1998	
Scandinavia	35	11	36	112	58	45	64	47
North America	27	10	28	118	61	16	47	15
West Europe	12	3	27	79	53	21	53	24
Central and Eastern Europe	3	0.3	6	45	32	13	21	4
Asia-Pacific	5	1	8	35	19	11	13	8
Middle East	3	0.2	6	39	25	11	19	8
South America	1	0.1	5	38	22	8	15	3
Africa	0.3	0.1	1	17	5	1	3	0.5

Source: Pippa Norris, *Digital Divide*

Comparison Between Africa and the United States (2004)

Image removed due to copyright reasons.

(per 100 people)

Source: <http://www.itu.int>

Factors Affecting International Digital Divide

- Prices
 - Access costs are almost four times as expensive in the Czech Republic and Hungary as in the U.S.
- Access Speed and Cost
 - Phone calls are charged by the minute (i.e. slower internet connections → higher cost)
- Technical Training and Human Capital
- Relevance of Content
 - 78% of all sites and 96% of e-commerce sites are currently in English

References

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