



COMPACT *Research*

The Digital Divide

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The Internet



The Digital Divide

The Internet



San Diego, CA

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What Is the Digital Divide?

“That is the cruel irony of the digital divide. With the Internet, we have this transformative technology that has the potential to level the playing field. But instead of equalizing opportunity, the Internet is actually increasing disparities because of the broadband adoption gap.”

—David L. Cohen, executive vice president of Comcast Corporation.

“As our jobs, entertainment, politics and even health care move online, millions are at risk of being left behind.”

—Susan P. Crawford, professor at the Benjamin N. Cardozo School of Law and former White House special assistant for science, technology, and innovation policy.

The vast global network of networks that is now the Internet began as just two computers: one at the University of California–Los Angeles and the other 400 miles (644km) away at the Stanford Research Institute in Menlo Park, California. During an experiment in October 1969, the computers “talked” to each other across the miles, which marked the birth of what was then called ARPANET (Advanced Research Projects Agency Network). Word of the successful trial run began to spread, and as more computers were connected, the budding Internet grew rapidly. Over the next two decades, it was used primarily by scientists and technology gurus, as it was mysterious, complex, and difficult to navigate. Then British technology expert Tim Berners-Lee created the World Wide Web,

which changed everything. Launched during the summer of 1991, the web opened the Internet to most anyone with a computer and modem—and sparked growth that was nothing short of phenomenal.

Small and large businesses developed websites and began using them to market their products and services, and government agencies started conducting business online using the web to interact with the public. Newspapers and magazines appeared online one by one, and virtual stores enticed people to do their shopping without ever having to leave their homes. As online communication and commerce continued to expand, technology experts began referring to the Internet as the “great equalizer,” a medium that offered a wealth of opportunities that had never before been available. Yet while this progress was taking place, a small number of researchers began to notice a disturbing trend. Rather than serving as an equalizer, the Internet was slowly creating a chasm between segments of society that could access its information and those that could not. In the mid-1990s this gap was given a name: the digital divide.

Digital Divide Then and Now

Two researchers who had become concerned about the digital divide were James Katz, a social scientist at the technology company formerly known as Bellcore, and Philip Aspden, who was with the Center for Research on the Information Society. To evaluate whether the gap actually existed, they conducted one of the first demographic surveys on Internet use, and then published the results in a professional technology journal in 1997. In the article, Katz and Aspden shared their observation that cultural and racial inequalities existed online as they did in real life. Through the survey, they found that Internet users were generally wealthier and more educated than non-users, and that black and Hispanic people were “disproportionately unaware of the Internet.” Having confirmed that the digital divide indeed existed, Katz and Aspden offered

“Rather than serving as an equalizer, the Internet was slowly creating a chasm between segments of society that could access its information and those that could not.”



Facts and Illustrations

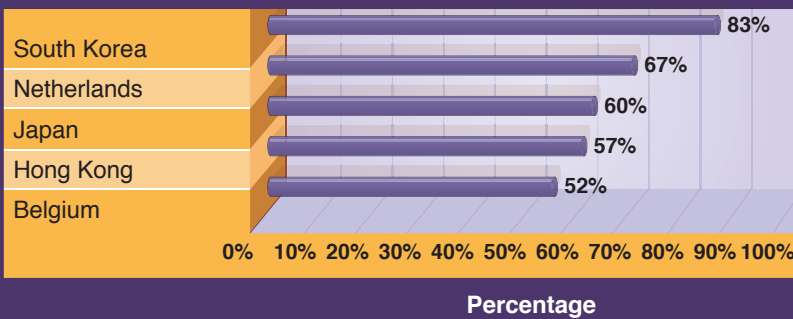
What Is the Digital Divide?

- According to the Freedom Rings Partnership, Philadelphia has one of the widest digital divides in the United States, with **41 percent** of residents having no access to a computer or the Internet.
- A February 2011 report by the NTIA states that **68 percent** of US households have broadband, which is an increase over 2007, when this was the case with **51 percent** of households.
- A 2012 study by the global technology firm Akamai found that the number one city in the world for broadband connection speed is **Taegu, South Korea**.
- According to the Information Policy & Access Center, the number of US libraries that offer Internet access has jumped from under **13 percent** in 1994 to **99 percent** in 2012.
- According to a February 2011 report by Euromonitor International, the number of Internet users worldwide totaled **2 billion** in 2010, which is double the 1 billion reported in 2005.
- A January 2011 survey by the Pew Internet & American Life Project found **41 percent** of adults living with a disability have broadband Internet at home, compared with **69 percent** of nondisabled adults.

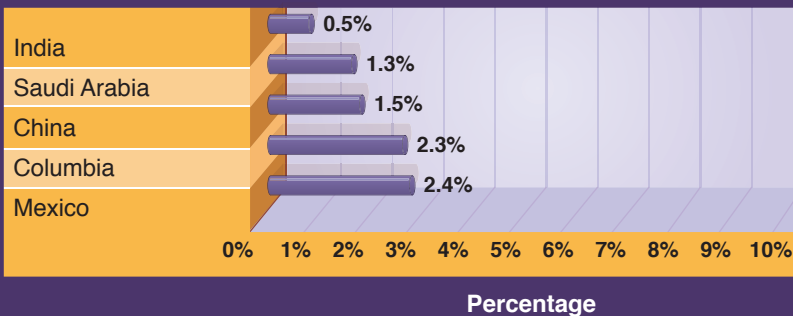
Countries at Opposite Ends of Digital Divide

To get the most out of the Internet's information-rich content, merely being connected is not enough. Without a fast connection speed, Internet users cannot make use of online class lectures, streaming video, movies, or music. Countries with high-speed Internet connections are seen to be on the winning side of the digital divide while countries that lack these connections are at risk of being left behind.

Countries with Highest Percent of Internet User Connections Above 5 Mbps*



Countries with Lowest Percent of Internet User Connections Above 5 Mbps*



Note: *Internet speeds are measured in kilobits (kbps) or megabits (Mbps), which refer to the amount of data transferred per second; 1 Mbps is equivalent to 1 million bits per second or 1,000 kbps.

Source: Akamai, *The State of the Internet: 4th Quarter, 2011 Report*, 2012. www.akamai.com.

Related Organizations

Center for Digital Inclusion (CDI)

Rio de Janeiro, Brazil

e-mail: contact@cdiglobal.org • website: <http://cdiglobal.org>

The CDI supports educational programs that are designed to expose low-income communities to new technologies. Its website offers facts about the digital divide, news releases, and information about its digital inclusion programs.

Connected Nation

PO Box 43586

Washington, DC 20010

e-mail: info@connectednation.org • website: www.connectednation.org

phone: (877) 846-7710

Connected Nation facilitates public and private partnerships to increase access to and use of broadband and related technology. Its website offers research about the digital divide, broadband maps, videos, news releases, and a link to the organization's blog and Facebook page.

Federal Communications Commission (FCC)

445 Twelfth St. SW

Washington, DC 20554

phone: (888) 225-5322 • fax: (866) 418-0232

e-mail: fccinfo@fcc.gov • website: www.fcc.gov

The FCC is an independent US government agency that is charged with regulating interstate and international communications by radio, television, wire, satellite, and cable. Its website offers a wealth of information, including national studies, the national broadband map, statistics, and a search engine that produces numerous articles about the digital divide.

For Further Research

Books

Mark Bauerlein, *The Digital Divide: Arguments for and Against Facebook, Google, Texting, and the Age of Social Networking*. New York: Jeremy P. Tarcher/Penguin, 2011.

Shelly Palmer and Mike Raffensperger, *Overcoming the Digital Divide*. Rye Brook, NY: York House, 2011.

Peter B. Seel, *Digital Universe: The Global Telecommunication Revolution*. Malden, MA: Wiley-Blackwell, 2012.

Joseph Straubhaar, Jeremiah Spence, Zeynep Tufekci, and Roberta G. Lentz, eds., *Inequity in the Technopolis: Race, Class, Gender, and the Digital Divide in Austin*. Austin: University of Texas Press, 2012.

Jessamyn C. West, *Without a Net: Librarians Bridging the Digital Divide*. Santa Barbara, CA: Libraries Unlimited, 2011.

Periodicals

Susan P. Crawford, "The New Digital Divide," *New York Times*, December 3, 2011.

Noleen Heyzer, "Digital Asia-Pacific in the Twenty-First Century: Promises and Perils in the Creation of an Inclusive Knowledge Society," *UN Chronicle*, September 2011.

Lucy Hood, "Smartphones Are Bridging the Digital Divide," *Wall Street Journal*, August 29, 2011.

Cecilia Kang, "Survey of Online Access Finds Digital Divide," *Washington Post*, February 17, 2011.

Barbara Kiviat, "The End of the Racial Digital Divide?," *Time*, July 8, 2010.

Kym McNicholas, "The Fastest Internet Speeds in the World," *Forbes*, January 24, 2011.

Bobby Oerzen, "Battle of the Bands: Why Is the United States Losing the Internet Race?," *Current Science*, a Weekly Reader publication, January 13, 2012.

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