# Q: Should Americans be concerned about the digital divide?

## Yes: Gaps between computer haves and have-nots will put the underclass further behind.

BY ANTHONY G. WILHELM



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tion and commerce. Don't the detrimental effects of "e-exclusion" merit some sort of public response?

Excluding a disproportionate number of poor, rural, minority and older Americans from the online world is a major policy challenge. It is a threat to our democracy when

certain groups cannot participate in online

excluding millions of Americans from the

major artery of information, communica-

voting or express their preferences—thumbs up or thumbs down—on the growing list of political and civic Websites. This hypothesis was put to the test in Arizona last March when those registered voters who had remote Internet access were given the opportunity to vote online in the Democratic Party primary during the 96-hour period leading up to the opening of the polls, whereas those without access to the Internet were able to exercise their franchise for just one day at the polling place. How fair is this? No doubt this example of digital democracy is only the tip of the iceberg.

Uneven participation in online voting is only one example of how the digital divide has an adverse impact on our society in unacceptable ways. Students without access to the Internet at home and in school do not develop the skills to compete for the 1.3 million high-skill, information-technology, or IT, jobs that will open up during the next six years, not to mention the litany of occupations that require some familiarity with information technology. Thus, communities suffer from having unfilled jobs and an underskilled pool of potential employees. Households that are not online, moreover — particularly those in poverty — cannot benefit from job opportunities, social-service information and lifelong learning opportunities that build the capacity of all Americans. In short, lag time experienced by those not online can be lethal.

While computers and Internet service are becoming as ubiquitous as televisions in high-income households, this is a far cry from acknowledging that diffusion patterns now resemble a random cross section of America's population. As with other technologies, there is a saturation of upper- and middle-class adopters and a protracted time (continued on page 42)

The digital divide is one of those policy issues — global warming is another — that is fobbed off by a coterie of decisionmakers with the pretense that the problem is more illusory than real. The argument regarding Internet diffusion usually goes: If we are at the beginning or middle along the adoption curve, then the question really is not whether households will come online, but how long it will take until the market serves everybody. Those who believe that the digital divide is just a shibboleth suggest that the issue is more about "have-nows" vs. "have-laters" than about an enduring information underclass. With price points coming down and Internet service being given away, the public is taking to the Internet like children to Pokémon. So what's the problem?

Let's step back for a minute and define terms before we give shape to the problem. The digital divide usually is described as the unequal access to computers and the Internet that breaks along familiar socioeconomic fault lines, such as income, education, race and age. Those groups on the wrong side of the divide often are called the technology have-nots and include a disproportionate share of people living in poverty, functional illiterates, American Indians, blacks living in the South, people in small rural towns and people older than 60.

Detractors who claim that the issue is about have-nows vs. have-laters make a leap of faith: that the market will serve every-body in short order. They ignore penetration lags that will shut out whole communities and groups from the benefits of Internet exchange, possibly through the better part of this decade and beyond. The problem, then, is less about how long it will take before the gaps close but rather what the likely impact is of

## No: Don't create a new entitlement to close a gap that the marketplace already is filling.

### BY ADAM D. THIERER



Thierer is a fellow at the Heritage Foundation in Washington, where he specializes in regulatory economics, focusing on communications and computerindustry policies. to Youth, Families, and Communities."

Regrettably, these claims and actions assume that a genuine digital-divide crisis exists today in America that demands a national solution and expensive federal entitlement programs to solve. Before policy-makers make such a rash judgment, however, they should consider the following evidence, which illustrates how the so-called digital divide is just high-tech hype and hysteria:

- As the public-policy debate over America's so-called "digital divide" intensifies, federal, state and local policymakers are considering steps to solve an apparent gap between the technological "haves" and "have-nots." Using heated and even some apocalyptic rhetoric, many policymakers in the Clinton administration and in Congress are calling for the creation of new federal entitlements to address what some perceive as a national civil-rights crisis. As Eric Cohen, managing editor of the *Public Interest*, noted in a recent edition of the *Weekly Standard*, "The digital divide is now the hottest social-policy issue in Washington. It's the 'new new thing' in civil-rights politics." Dozens of national solutions to this supposed crisis have been proposed in recent months.
- For example, the Clinton administration has proposed a wide variety of new federal programs and more than \$2 billion in new spending initiatives in its fiscal 2001 budget. Vice President Al Gore has floated a package of proposals, while members of Congress debate a variety of proposals ranging from tax credits for the voluntary donation of computers to needy schools or individuals to the creation of new federal programs. One proposal would provide direct tax credits of up to \$500 to subsidize the purchase of a new personal-computer, or PC, system by low-income families. Another would create a New Deal-type program resembling the Rural Electrification Administration, providing \$3 billion in low-interest loans to companies to deploy high-speed broadband networks to rural or remote sections of the United States.

Before policymakers make any rash decisions on these proposals or create expensive new government programs to address America's supposed digital divide, they would be wise to take a closer look at the current market for personal computers and Internet access. Americans live in an age of technological abundance, with a virtual digital deluge of opportunity. Free computers and free Internet access are helping to fill the digital gap. Clearly, the vibrant PC market is doing more than an adequate job of speeding computing technology to every American.

Still, proponents of new programs and spending initiatives to address America's supposed digital divide have articulated their concerns in divisive and quite extreme terms. NAACP President Kweisi Mfume has claimed "technological segregation" exists in America, and the Rev. Jesse Jackson has said the digital divide represents "classic apartheid." Not surprisingly, politically charged claims such as these led President Clinton to organize a digital-divide summit earlier this year, where the president called for more than 400 companies and nonprofit organizations to sign a "National Call to Action to Bring Digital Opportunity

rapidly during the last 15 years. According to computer-research firms PC Data Inc. and Forrester Research, the average price of a new PC system has fallen from \$1,747 in 1996 to \$916 in 1999 and will fall to an estimated \$577 by 2002. More importantly, much less expensive "entry-level" or "budget PCs" are available from major retailers, catalog companies and online vendors for less than \$400 and, in some cases, free with mail-in rebates and other special discounts.

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- PC systems are being given away. Many companies virtually are giving away PCs in exchange for nominal monthly fees and/or long-term service agreements. Today, these systems, which typically include a monitor, keyboard, speakers, a modem and Internet access, only cost consumers between \$21 and \$29 a month less than your monthly cable bill.
- Some PCs are cheaper to buy than TVs. Prices in the PC market have fallen so rapidly, in fact, that it is not uncommon to find new computer systems that are cheaper than new television sets. This begs an obvious question: If Americans can purchase an Internet-ready PC for less than the cost of a new TV set, just how real is the digital divide? After all, according to the U.S. Department of Energy, 98.7 percent of all Americans including 97.3 percent of all poor households own a television set. If virtually every American household can own a TV, which usually will be more expensive than an entry-level PC system, then the need to create an expensive new entitlement program to solve a problem the marketplace is handling so effectively on its own is dubious.
- Internet access is cheap, and often free. Free Internet access regularly is offered by advertising-supported Internet service providers, or ISPs, which means consumers who already own a PC can sign up for Internet service for no additional monthly fee. More-sophisticated Web portals are reasonably priced at flat, all-you-can-eat rates of roughly \$9.95 to \$19.95 per month.
- Many companies offer free computing services. Other free computing and Internet services are becoming available as well. For example, free e-mail services are quite ubiquitous on the World Wide Web. Additionally, consumers have access to free storage sites on the Internet to save large amounts of information or files on independent company servers and hard drives. This means consumers do not necessarily need to purchase a hard drive of their own to store their files. Also, consumers can access many free software and technical support sites.
- Emerging hybrid computing systems may soon make PCs irrelevant. Thanks to the existence of so many free Internet services, consumers increasingly are using (continued on page 43)

### WILHELM: continued from page 40

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period ensues in which adoption rates for poor households increase incrementally. With the telephone, for example, it took 83 years after its invention in order for penetration to approach universal adoption, and significant gaps remain along income, ethnic and geographic lines.

Even the most optimistic market research suggests that lowincome Americans continue to be hard to reach and are coming onto the Internet at rates much lower than middle-class Americans. The gaps between bottom and top economic quartiles in Internet access are yawning, and they persist over time.

One study from the marketing firm Jupiter Communications showed that by 2005 at least one-half of all households earning less than \$15,000 still will be unconnected. A study of Internet users by the U.S. Department of Commerce, Falling Through the Net, found that households with incomes of \$75,000 and higher are more than 20 times more likely to have access to the Internet than those at the lowest income level.

Poverty not only affects the Internet use habits of adults and householders, but children as well. According to a report from the Kaiser Family Foundation, only 23 percent of low-income kids have access

to the Internet at home, compared to 58 percent of kids in high-income neighborhoods. In high-poverty neighborhood schools, moreover, students are much less likely to have instructional rooms connected to the Internet than are kids in more affluent, suburban communities, according to the U.S. Department of Education. Can we expect the market alone to serve the technology needs of schools with run-down facilities and sporadic access to 21st-century learning tools? Probably not — which is why the "e-rate" at the federal level has been critical, plowing close to \$6 billion into poorer schools and libraries to discount the cost of telecommunications services.

If we do not believe the research and data — that income explains in large measure the makeup of the Internet population — then let's listen to the attitudes of people as revealed in market surveys. Particularly for the poorest households, one-third say that the Internet is too expensive and, for those who experience Internet churn, the primary reason given for dropping off the network is the cost of service. In short, the poorest American adults, excluding students, remain the hardest to serve and the most immune to government and market solutions.

Of course, there are alternative delivery mechanisms coming online, such as interactive television and many computer and Internet giveaways. If computers and Internet service are falling off the back of trucks, then why should we assume that the problem will remain? First, the new delivery platforms, such as interactive television, are convenient, but they still cost money. A monthly charge usually is added to the Internet-service bill, and when this is added on top of cable fees and the like, these

bills become too steep for many low-income customers. The free giveaways are vital, but the majority of these offers involve rebates (and consumers still need to come up with the up-front cash) and limited-time offers for free Internet service.

If we thought that poverty was a difficult enough problem to tackle, it is not the only hurdle in the way of universal access to the Internet. Those people who have not completed high school make up only a tiny fraction of Internet users. Between 1997 and 1998 the divide between those at the highest and lowest education levels increased 25 percent, according to Falling

Through the Net. An even thornier problem is the 44 million Americans who will not be able to navigate a text-based medium. Thus the digital divide is about more than plugging people into the Net. Antecedent resource gaps must be addressed that prevent millions of residents from going online.

The Rand Corp., a nonpartisan think tank, has shown that race and ethnicity also are barriers that show up as independent variables in research even when income and education are held constant. That study by Jupiter Communications, done in June 2000, showed that 60 percent more white households are online than

African-American and Hispanic households, and a sizable gap will remain through 2005. American Indians are among the least likely groups to have Internet access — with a dismal 8 percent of rural Indian households having online access from home.

Another group unlikely to be online is those people who are older than age 60. According to one study, only 24 percent of Americans older than 60 have used the Internet or sent e-mail at home. In California, 67 percent of adults age 18 to 64 use the Internet compared to 27 percent of those age 65 and older, according to a study from the nonpartisan Public Policy Institute of California.

Rural communities also experience debilitating lag times. We know that the most important determinant of infrastructure deployment in rural areas is economic, with the cost of service increasing the more scattered the distribution of customers is. Only 5 percent of towns with a population of 10,000 or less have cable-modem service, compared to 65 percent of all cities with populations of more than 250,000. The issue of high-speed broadband delivery is a critical policy issue today and one that decisionmakers must address head-on to avoid broadband becoming the next-generation digital divide.

Ultimately our collective response to the digital divide hinges on our answer to two questions: Is there an enduring divide, one that market forces alone will not combat? And, if so, is it such a high-salience policy issue that it warrants sustained public and private support until the problem is resolved?

If there is equivocation on the first question, then clearly policymakers will take a wait-and-see approach, marginalizing the

42 · Insight

digital divide to a matter of diffusion curves and the laws of microprocessor speed. If there is acceptance of the first question but hedging on the second, then the issue is eclipsed by more immediate and fundamental concerns, such as fixing America's schools, ensuring health coverage for all or enacting campaign-finance reform.

Leadership remains fundamental and should be framed as a

matter of leveraging existing public and private-sector investments, as well as tying the discourse of the digital divide to every-day issues of common concern. The digital divide is not an abstract idea but a matter of economic viability, political equality and educational opportunity. Policymakers need to continue to step up and use their bully pulpit to advance the public-interest goals of equity and inclusion in the digital age.

### THIERER: continued from page 41

new hybrid systems known as "Internet appliances" or "dumb terminals" that offer them instantaneous Internet access without requiring them to purchase a hard drive. For as little as \$99, consumers can purchase a keyboard and monitor with built-in Internet software to directly access the Web. Finally, handheld PC devices are becoming increasingly popular, offering another inexpensive technology that could one day be as ubiquitous as cellular phones.

- Companies are rushing to deploy state-of-the-art broadband networks to the home. Telecommunications network providers are rushing to provide consumers a variety of technological options for accessing the Internet and online networks in general. For example, high-speed digital subscriber line, or DSL, systems are being rolled out by telephone companies, and cable firms are deploying modems to offer fast Internet access through cable systems. More important, wireless Internet technologies are emerging that offer Internet access without requir-
- ing a physical wire running into the home, making Internet access available to many more rural Americans in the very near future.
- Employers increasingly are offering free or subsidized PCs to employees. Many large private-sector employers are offering their employees subsidized PCs and free Internet access. For example, Ford Motor Co., Delta Air Lines, American Airlines and Intel Corp. recently announced plans to offer these services to their combined 604,000 employees. This new workplace benefit is likely to become more prevalent as employers compete for quality workers.
- Free markets are spreading new technologies more quickly than subsidies. PCs and Internet services already have spread quite rapidly throughout society without government planning or subsidies. As Helen Chaney of the Pacific Research Institute notes, "Internet access has spread to 50 million people in only four years. That's about nine times faster than radio, four times faster than the personal computer and three times faster than television. At this rate, it won't be long until all of those who desire Internet access will have it." By contrast, subsidized technologies such as electricity and basic phone service took much longer to spread throughout society.

The facts presented above illustrate that policymakers need not fear that some Americans may be left behind in this profoundly dynamic Information Age. If Americans really want a personal computer and access to the Internet, they can obtain them at very low cost. Moreover, this trend toward lower-cost PCs and more access is only likely to increase. Expensive federal entitlement programs will not facilitate this process; in fact, they might actually make things worse by putting pressure on computer prices to hold steady or increase.

Proposals to offer consumers \$500 vouchers for computer systems are particularly unwise when consumers can obtain them for hundreds of dollars less. It would be tantamount to giving every American a \$20,000 subsidy for a new automobile when models are available for less than half that price. Furthermore, if indications are right that the world is entering a post-PC era in which various types of technologies will be used to communicate and access the Internet without requiring a hard drive, then current efforts to subsidize the diffusion of personal computers will limit many people to technology that quickly becomes outdated.

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To the extent any government involvement is needed, it is to remove any tax and regulatory roadblocks that discourage companies in the free market from offering consumers the new products and services they demand. More importantly, government officials need to address the real divide problem in this country first the educational divide. Children, and even many adults, lack the basic educational skills necessary to compete in a digital world and use digital technologies competently. Just throwing a computer in front of a child or an illiterate adult isn't going to magically solve any of our societal problems.

The peddlers of all the recent digital-divide, high-tech hype should be ashamed of themselves for shifting the nation's attention away from important issues such as these and toward less significant matters such as access to computer technologies and the Internet. But if that's all they're concerned about then they can rest easy because each and every American today has access to an amazing array of digital opportunities. As a recent Computer Shopper magazine article on the rise of the free-PC market fittingly concluded: "[I]t's becoming increasingly clear that the free-PC movement has come a long way in a relatively short time, and it obviously benefits consumers who wouldn't otherwise be able to afford a Net-connected computer. And that's a very good thing indeed."