

INTRODUCTION

Access to computers and the ability to use this technology effectively are now critical for full participation in society. A growing percentage of the population is using the Internet to gather information, work from home, start businesses, acquire new skills using distance learning and access a host of on-line services such as retail and banking. The ability to use technology also remains important in the workplace, where jobs in the growing information technology sector pay almost 85 percent more than jobs in other sectors.¹ Although the Internet and information technology are playing an increasingly important role in the country's economic, political and social life, the reality remains that not everyone is "connected" and thus able to participate in this new economy. This article discusses some of the consequences of the disparity that exists between those with access to technology and those without—more commonly known as the "digital divide"—and highlights initiatives in the 12th District that are attempting to overcome what may be the first significant challenge of the 21st century.

Creating Digital Connections From Digital Divide to Digital Opportunity

by Georgette Bhathena, Associate Examiner, Federal Reserve Bank of San Francisco

U nleashing the tremendous potential of both the Internet and digital information technology requires, as President Clinton asserts, that the "trade routes...run through every city, every town, every community." The unfortunate reality remains, though, that the digital trade routes run through some communities while leaving others unconnected.

A report released in August 2000 by the Federal Communications Commission (FCC) points to the gap in deployment of advanced telecommunications capability across the nation.² Despite the FCC's conclusion that deployment has been "reasonable and timely" overall, their data also support the conclusion that market forces alone cannot insure that certain segments of the American population will receive timely access to advanced telecommunications capability. The populations most at risk of being left out are low-income consumers, those living in sparsely popu-

lated areas, minority consumers, persons with disabilities and those living in U.S. territories.

While Americans are more connected than ever and access to computers and the Internet has grown across all demographic groups and geographic locations,³ significant disparities still exist among certain segments of the population. Households that have experienced the most rapid growth in access are those with higher incomes, more education, computers at work, white or Asian backgrounds, and households headed by persons ages 35 to 50.⁴ Those lagging behind are younger individuals, those with lower income and educational levels, certain minorities and those located in rural areas and inner cities.

According to the U.S. Department of Commerce's report entitled *Falling Through the Net: Defining the Digital Divide*:

1 *Meeting Workforce Demands in the Digital Economy*, Digital Beat, July 2000, p. 1. www.digitaldividenetwork.org/workdemands.adp

2 *Deployment of Advanced Telecommunications Capability: Second Report*; Federal Communications Commission, August 2000, p. 6. www.fcc.gov/Bureaus/Common_Carrier/News_Releases/2000/nrcc0040.html

3 *Falling Through the Net: Defining the Digital Divide*; National Telecommunications and Information Administration, U.S. Department of Commerce, July 1999, p. 1

4 *Falling Through the Net*, p. 1

- Black and Hispanic households are approximately two-fifths as likely to have home Internet access as White households, and one-third as likely as households of Asian/Pacific Islander descent.
- Regardless of income level, Americans living in rural areas are lagging behind in Internet access. At the lowest income levels, those in urban areas are more than twice as likely to have Internet access than those earning the same income in rural areas.
- A child in a dual-parent White household is nearly twice as likely to have Internet access as a child in a White single-parent household. A child in a dual-parent Black family is almost four times as likely to have access as a child in a single-parent Black household.

THE DIGITAL DIVIDE IN THE FINANCIAL SERVICES INDUSTRY

While the issue of the digital divide may seem far removed from the day-to-day operations of the financial services industry, in truth, the digital divide has a direct impact on the industry. This impact is felt primarily in the areas of customer service and market share.

With increased concerns about profitability and competition from a host of financial service providers, large banks in particular are facing considerable pressure to streamline operations and seek out alternative, less costly methods for delivering banking products and services. From a cost savings perspective, it is apparent why many banks have become more reliant on electronic delivery systems such as automated teller machines, bank-by-phone services and on-line banking. According to 1997 data reported by the Office of the Comptroller of the Currency,⁵ the cost of an average transac-

5 Goldberg, Deborah B.; *The Community Reinvestment Act and the Modernized Financial Services World*, ABA Bank Compliance, January/February 2000: p. 16.

“We’re in a different time of fundamental economic transformation, but we can do it very differently because, unlike the railroads of the Industrial Age, the trade routes of the Information Age can run through every city, every town, every community. And, in fact, the more communities they run through, the better it works.”

Remarks of President Clinton during a Digital Divide discussion with the East Palo Alto Community (April 17, 2000).

tion conducted at a teller window was four times higher than the cost of the same transaction conducted at an ATM, and a teller transaction cost 100 times more than the same transaction conducted over the Internet. However, to the extent that electronic delivery systems replace traditional brick-and-mortar branch facilities as the central delivery point for banking services, low- to moderate-income (LMI) consumers face even greater limited access to both traditional and alternative delivery systems.

Though electronic services were developed to expand choices and options for consumers, the opposite is occurring for those who lack the economic means or technical skills to access these services. In addition to not having access to personal savings, checking and loan account information, these individuals also do not have the ability to research other bank products and services. Such lack of access may negatively impact a bank’s market share. As banks pursue electronic delivery systems as the primary point of interaction with customers, they may be limiting adjunct business opportunities.

In failing to reach unconnected individuals, banks forego precious “cross-sell” opportunities by losing the chance to offer home mortgage loans, business loans or other products like insurance.

Finally, another way the digital divide affects all industries, including banking, is through the labor market. As banks increasingly rely on technology to support business operations, the shortage of high-technology workers in the labor force presents a significant concern. In 1998, the Information Technology (IT) workforce, including workers in IT-producing industries and workers in IT occupations in other industries, totaled roughly 7.4 million workers or 6.1 percent of all workers.⁶ While demand for these high-tech workers grows exponentially, the supply has not kept up. In fact, last year alone nearly 346,000 technology jobs went unfilled because of a shortage of domestic workers with the appropriate skills.⁷

6 *Meeting Workforce Demands*; p. 1

7 *Meeting Workforce Demands*; p. 2.

One way to alleviate the tremendous demand for workers is to invest in a relatively untapped labor market, LMI individuals. Investments to increase access to technology and provide comprehensive technical training will yield both long-term advantages and significant returns that benefit all sectors of the economy. Through such investments, companies will gain access to an expanded high-tech work-force while individuals will obtain highly marketable skills that will allow them to secure high-paying jobs.

HOW BANKS CAN HELP BRIDGE THE DIGITAL DIVIDE—12TH DISTRICT INITIATIVES

Throughout the Fed's 12th District, banks are working with concerned partners to address the technology needs of their communities. To the extent that these efforts meet the needs of low- and moderate-income communities, banks can earn CRA credit under the investment and service tests. The six initiatives that follow represent unique and innovative approaches tailored to meet the particular needs of their communities. They are seeking bank involvement in three forms: financial grants, donations of time and expertise, and donations of computer equipment and software. While the list is by no means exhaustive, the initiatives selected represent programs as diverse as the communities they serve and geographically spread across the nine-state district.

A+ Computer Certification Training Program, Samoan Service Providers Association (Honolulu, Hawaii)

Established in 1984, Samoan Service Providers Association's (SSPA) mission was to provide support services exclusively to the Samoan community in Hawaii. Since then, SSPA has expanded its services to include the Native American, low-income, immigrant and refugee communities. The SSPA A+ Computer Certification Training Program was developed in 1999 because of the scarcity of qualified computer service

and repair technicians in Hawaii. The training program is designed to have students become versed in MS-DOS, Windows and identifying all the components of a computer system. Upon completion of a 12-week training course, the students then enter eight weeks of intensive certification training. The 20 weeks of training culminates with successful completion of the A+ Certification test. Last year students in the program refurbished 60 used computers provided by Bank of Hawaii, which were then donated to a computer center for grade school and high school students of Samoan ancestry. Each student to graduate from the A+ program also received one of the remaining computers. The program is now in its second year.

Contact: David Parish, Incubator Manager, (808) 842-0218

sspa@hawaii.rr.com

Website: www.samoanserviceproviders.com

Affordable Housing and Business Information Resource Desks, The Indian Walk-In Center (Salt Lake City, Utah)

The Indian Walk-In Center serves approximately 25,000 Native American Indians representing 50 different tribes with services and activities designed to be culturally sensitive and relevant for the urban American Indian peoples and all low-income populations. A relatively new resource under development at the Center is the Affordable Housing and Business Information Resource Desks, a project co-sponsored by the Federal Reserve's Utah Sovereign Lending Task Force. Using computers linked by an intranet, individuals will be able to access information on first-time home-buyer programs, Section 8 and small business development.

In the future, the Center plans to include information about the job search process (resume building and employment applications) as well as more comprehensive information on starting a small business (developing a business plan, securing a loan). The Center also plans to hold informational workshops

on various technology topics that will be video-conferenced to overcome geographic dispersion and maximize the number of people able to access the information. The Indian Walk-In Center is in need of computer donations and financial grants to be used to hire a full-time staff person to provide technical assistance at the Resource Desks and to purchase additional computers and internet access.

Contact: Thomas Burke, Development Director, (801) 486-4877
tburke@xmission.com

JobLink: Bay Area Video Coalition (San Francisco, California)

JobLink is a workforce development program for low-income adults and youth pioneered in 1997 by the Bay Area Video Coalition (BAVC). Heralded nationally as a model for technology training, JobLink offers intensive technology training and job placement services to narrow the digital divide and provide access to new economy skills for disadvantaged San Francisco Bay area residents. Since its inception, JobLink has trained over 235 low-income individuals and boasts a 75 percent placement rate at a number of Bay Area companies.

Contact Paige Ramey, Director of New Media Initiatives, (415) 558-2172

paige@bavc.org

The CyberVillage, Dunbar Economic Development Corporation (Los Angeles, California)

The CyberVillage project is a partnership between Dunbar Economic Development Corporation (Dunbar EDC) and several agencies and organizations to bring technology to the Somerville Place I and II, a housing community of mostly single heads of households in one of Los Angeles' poorest communities. In addition to the computers installed in each of the 41 family units ranging from two to four bedrooms, the project also consists of the following components:

CyberVillage Lab is housed in the Dunbar Hotel, a historically significant



ABOUT THE AUTHOR

GEORGETTE BHATHENA recently joined the consumer compliance unit as an associate examiner at the Federal Reserve Bank of San Francisco. In this capacity, she performs compliance and CRA examinations of state member banks. Prior to joining the compliance unit in September 2000, she served as a summer intern in the Bank's community affairs unit. She received bachelors' degrees in economics and business administration from the University of Washington in June 2000. Ms. Bhathena is also a Ford Foundation public policy and international affairs fellow.

building renovated to house an onsite community facility. The Lab's goal is to be a technology access point for residents. The computer lab will provide digital Internet access, tutorial training on computer use and academic enrichment through educational software. To address language and cultural barriers, training will be offered in both Spanish and English.

The *Community Asset Mapping Program (CAMP)* is a youth enrichment program that charges youth with the responsibility of identifying and cataloguing community assets. In partnership with UCLA/API, CAMP is a unique concept that teaches youth how to become empowered about assets in their community as they learn important technology skills. Each asset is incorporated into a website that creates a community map.

Contact: *Reginald Chapple, Executive Director, (323) 234-7882*

Website: www.dunbaredc.org

The Inner-City Cyber Café, Operation Hope (Los Angeles, California)

The Inner-City Cyber Café was developed by Operation Hope through a unique partnership with leading high-tech hardware and software companies. Situated in south central Los Angeles, the Inner-City Cyber Café provides the local community with a comfortable, relaxed atmosphere to meet, conduct e-commerce related business and research, hold one-on-one business meetings, and access the Internet. The Café offers 18 cutting-edge technology stations and access to a variety of software, including financial planning software provided by Intuit. Operation Hope will provide training on the software to encourage financial responsibility. Intuit also provided the TurboTax (software to allow LMI individuals to prepare and electronically file their federal and state tax forms free of charge. Taxpayers with an annual adjusted income of \$20,000 or less, as well as anyone filing Form 1040-EZ, are eligible for this program.

Valuable and needed market research on LMI individuals' opinions, perspectives and buying patterns will result from the 'regular' use of the technology stations in the Cyber Café. Operation Hope will implement an operating and information gathering system that tracks not only specific usage but provides a level of detailed feedback, with the information distributed to manufacturers, technology partners, the media and the community at large.

Contact: *Charles Toff, Cyber Café Manager, (323) 290-2410*

Website: www.operationhope.org

The Technical Teens Internship Program, Technology Access Fund (Seattle, Washington)

Established in 1996 by a former Microsoft employee and a former Seattle Mental Health Agency employee, the Technology Access Fund (TAF) is a nonprofit agency that provides communities of color access to technology.

TAF's flagship program is the Technical Teens Internship Program (TTIP) which provides both technical skills training and internship placement for 13 to 18 year-olds interested in careers in information technology. Each year in the fall, approximately 40 students enter the eight-month intensive computer "boot camp" where they meet twice a week for three hours to learn computer literacy, extensive Web page development and job readiness skills. Following their rigorous training, the students are placed with local Seattle-based technology companies to pursue eight-week summer internships. This year, students worked with companies like Microsoft, RealNetworks, ShopNow.com and others.

Other programs that TAF offers include *Tech Start*, a newly established program that works with children ages 2-12, their parents, their community agencies and their schools to increase technical awareness; and *The Virtual Institute* which provides curriculum, technical training and assistance to a consortium of approximately 31 community organizations that have technology components. Organizations include schools, boys and girls clubs, libraries, housing centers, and community centers.

Contact: *Ann Stjern, Development Officer, (206) 725-9095*

annst@techaccess.org

Website: www.techaccess.org

CONCLUSION

While it cannot be expected that the digital divide will be solved overnight, concrete steps to address the issue must be taken. With strategic investments, key partnerships and creative thinking, we can begin to open the "trade routes" President Clinton speaks of and move historically underserved communities to the economic mainstream. **CI**