Crossing the Digital Divide

Internet adoption rates among low-income urban populations have climbed in recent years. Joining the online world has changed their lives for the better, say members of this group in a new survey by RVA LLC.

By Masha Zager / *Broadband Communities*

The life impact of crossing the digital divide can be profound, according to new research conducted by RVA LLC and sponsored in part by Broadband Communities. Using a national online panel, RVA surveyed 1,015 low-income respondents in dense ZIP codes with 5,000-plus households per square mile.

Because internet adoption among this group increased recently, the study included a large proportion – 20 percent – of internet users who had been online for less than four years. Compared with the rest of the low-income, inner-city sample, these new internet users were more likely to be poor and members of minority groups. They also were more likely to access the internet only through smartphones, though a majority had both smartphones and home internet access.

The study found that smartphones appear to be a gateway to internet use; 45 percent of respondents said they had smartphone service before getting home internet service. Once people begin using the internet, they quickly understand that home internet service has advantages over smartphone-only service; the longer they use the internet, the more likely they are to have both home internet and smartphone service. Respondents cited internet speeds, increased memory for storage, fewer data caps, larger screens, increased privacy, larger keyboards and access to printers as advantages of home broadband service.

IMPACTS ON LIVES

In open-ended responses, internet users spoke, often passionately, about the positive impact internet access has on their lives. The single most important impact, cited by nearly half the respondents, is access to information. People said they valued being able to learn new things, satisfy their curiosity, and research subjects of interest to them.
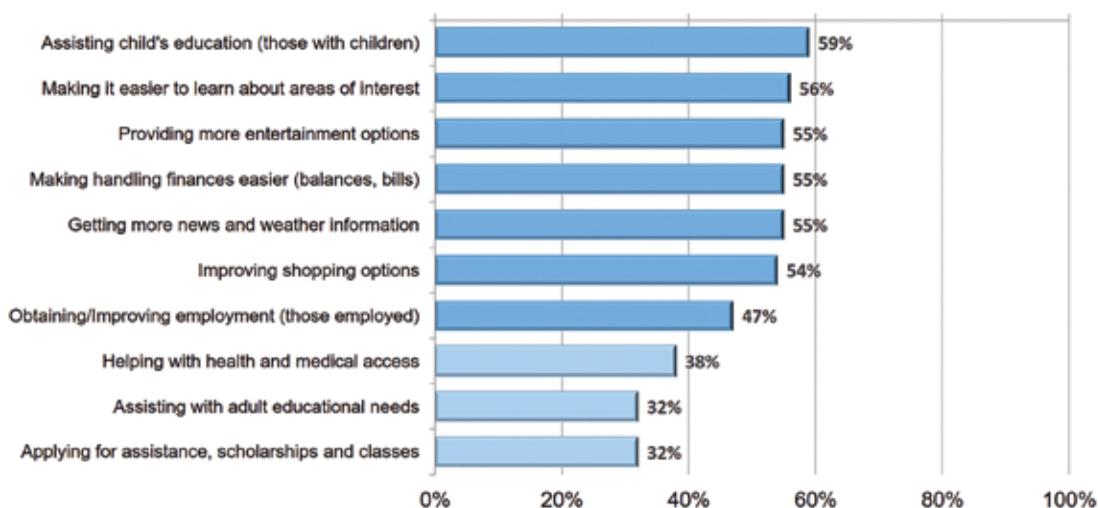
Other frequent responses included the ability to stay in touch with family and friends; the convenience and time savings of being able to do things online, including shop; and the ability to work from home or run home-based businesses. Only 9 percent of respondents spontaneously mentioned entertainment (online movies, music or games) as an important benefit.

A few typical responses:

- "We can connect to so many people and things. We can learn [in] so many different ways from different cultures."
- "It has helped me get a job and has also given me access to services I would not have had."
- "Helps get things done faster. I live in a shelter."
- "I am able to do more things for myself."

When questioned about specific subjects, a large percentage of respondents said internet access helped greatly with many important aspects of their lives, including assisting their children's – and their own – education, handling their finances, obtaining employment and taking care of their health.

Impacts From Being Online — "Helped Greatly"

Category	Percentage
Assisting child's education (those with children)	59%
Making it easier to learn about areas of interest	56%
Providing more entertainment options	55%
Making handling finances easier (balances, bills)	55%
Getting more news and weather information	55%
Improving shopping options	54%
Obtaining/Improving employment (those employed)	47%
Helping with health and medical access	38%
Assisting with adult educational needs	32%
Applying for assistance, scholarships and classes	32%

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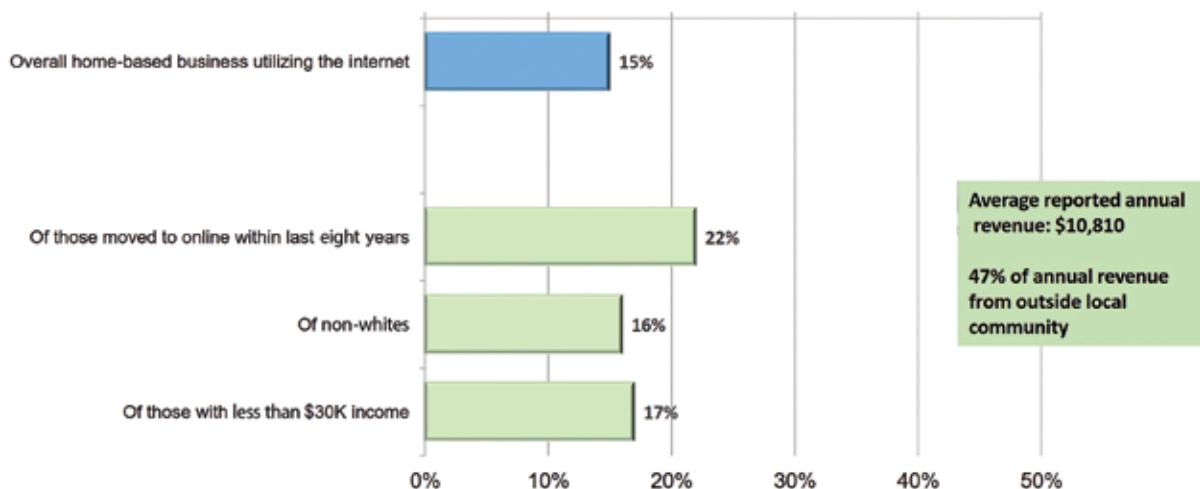
About one-fifth of respondents also noted negative impacts of internet use. Among other problems, people cited issues of privacy and security, online bullying, fake news, toxic social media environments, and the tendency to become dependent on virtual experiences at the expense of real-world interactions.

Despite these disadvantages, most internet users engaged in common online activities, such as emailing, shopping online, watching YouTube videos, looking up information, and participating in social media.

Home-Based Business Operation Using Internet
Percentage of Low-Income Citizens With Home-Based Online Business

Category	Percentage
Overall home-based business utilizing the internet	15%
Of those moved to online within last eight years	22%
Of non-whites	16%
Of those with less than $30K income	17%

Average reported annual revenue: $10,810

47% of annual revenue from outside local community

Fifteen percent of survey respondents operated home-based businesses that used the internet.

Friends and family are critical to getting new adopters online.

HOME-BASED BUSINESSES

One surprise from the study is that 15 percent of the respondents operated home-based businesses that used the internet, and nearly half of that group relied on their businesses in place of formal employment. (The other half also worked at one or more jobs or were seeking work.) Entrepreneurship is typically difficult for low-income urban residents because of high rental costs and taxes, limited space availability and complicated permitting rules. Michael Render, CEO of RVA LLC, comments, "It is encouraging to see that, with online access to world markets, the 'American dream' seems be alive and well in this respondent segment."

Even more surprising, those who joined the online world in the last eight years were more likely to operate home-based online businesses than those who had been on the internet longer. Twenty-two percent of recent users said they had home-based businesses.

An average of 47 percent of business revenue came from outside the owners' local communities. This suggests that the internet allows inner-city entrepreneurs to tap into larger, wealthier markets than they could reach with traditional, offline businesses. Business revenue often made up a significant portion of household income.

Internet-enabled businesses varied in type. Most commonly, business owners said they were redistributing physical goods (for example, through eBay-type businesses), but substantial numbers used the internet to sell goods they made, sell online services, or sell offline services.

Of the respondents who were employed, nearly one-third used their internet access to work from home, on average about one day per week.

BARRIERS TO ADOPTION

Barriers to urban broadband adoption differ from those that affect rural users. In rural areas, broadband tends to be unreliable, slow and expensive – if it isn't completely unavailable. In the urban areas surveyed in this study, however, most respondents reported that adequate broadband was available. Tested speeds for home broadband were relatively high, averaging 53 Mbps downstream and 15 Mbps upstream. About 20 percent of home broadband users had fiber-to-the-home service. The median monthly cost was about $60 and may actually have been lower, as some respondents seemed to have reported prices for bundled services.

Nearly three-quarters of survey respondents lived in multiple-dwelling-unit (MDU) buildings, in which residents often have fewer internet choices than residents of single-family homes. However, most MDU dwellers in the survey reported having a choice of internet providers, and only 4 percent said no internet provider served their buildings.

The primary obstacles that keep low-income urban dwellers offline are lack of skills and lack of funds. Respondents who had crossed the digital divide in the last four years reported that, before joining the online world, they feared they would not be able to keep their personal information secure, use the internet effectively, protect their children from inappropriate content, or even set up the necessary equipment and services. Nor did they know how to get help learning these skills. On the cost side, they cited the high prices of internet service and computer equipment. In addition, nearly a fifth of respondents were unaware of the benefits of internet use until they actually began using it.

TAKING THE LEAP

What finally induced them to "take the leap" was usually a pressing need of some kind. Respondents mentioned dozens of reasons to begin using the internet; the most frequent were to obtain information about a specific topic, to stay in touch with friends or family through email or social media, and to complete schoolwork or paid work.

Nearly half of recent adopters began using the internet at school, work, libraries, or the homes of friends or family members, or they used free Wi-Fi signals. This experience gave them the confidence to sign up for a home broadband or smartphone data plan. The other half took the risk of signing up for internet access without prior experience.

Friends and family are critical to getting new adopters online. More than five of six recent adopters asked for help from a child (including adult children), another family member, or a friend when first using the internet. Nonprofit organizations and government training programs helped another 12 percent learn the ropes. Only 1 percent said they were able to learn their way around the internet without help.

MITIGATING COSTS

Though most new internet adopters quickly learn skills and gain confidence, the cost of equipment and internet service remains a challenge. Few low-income people are aware of existing subsidies: In the survey, only 28 percent of respondents were aware of the federal Lifeline program, 27 percent were aware of low-cost basic service plans from internet providers and 11 percent were aware of low-cost refurbished computers from local agencies. One strategy to encourage internet adoption and enable people to reap the benefits of internet use would be to better publicize the financial assistance available to them.

In addition, internet providers could encourage usage by providing creative payment options. A majority of respondents said they would be interested in options that would reduce their monthly costs, such as taking surveys and watching advertisements, turning off or dialing down internet when they didn't need it, or paying an up-front installation fee. A significant minority of respondents said they would be interested in prepaid internet service (similar to prepaid cellphone service) or month-by-month contracts. ❖

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