

Sioux Falls City, South Dakota

Individual Digital Capital Survey: Key Findings

Prepared by:

Purdue Center for Regional Development

Survey captured information around three main digital inclusion areas: internet and devices access/ownership; internet use and resourcefulness (indirectly gauges digital skills); and internet benefits. Overall survey results are discussed as well as differences between community groups.

In addition, differences between four demographic groups were also analyzed: race/ethnicity (White, non-Hispanic versus minorities); educational attainment (high school or less, some college, and bachelor's or higher); age groups (ages 18-34, 35-64, and 65 or older); and individual earnings (less than or LT \$35,000, \$35,000-\$74,999, and \$75,000 or more).

Slides 3-18 provide overall results of the survey. Slides 19-45 provide more in-depth analysis comparing multiple indicators across all demographic groups.

Summary of findings

Home internet

- More than 90% of respondents had internet access at home. However, among those with home internet, main unsatisfaction reason was too slow followed by too expensive (see slides 4-5).
 - The share of minorities, less educated, and lower earning individuals without home internet access was roughly seven times higher compared to White, non-Hispanic, better educated, and high earning individuals (see slides 19-20).
- Three-quarters of respondents reported having cable technology in their homes followed by 8.5% with DSL (see slide 7). Interestingly, close to 6% of respondents were not sure of what broadband technology they had at home.
 - However, access to faster broadband technology at home varies by demographic group. For example, 17.6% of minority respondents reported having DSL at home compared to 7.3% of White, non-Hispanic. The share of those with a high school degree or less with cable at home was 20 percentage points lower compared to those with a bachelor's degree or higher. Interestingly, the share of those with fiber-optics was consistent under 5% regardless of demographic group. This may point to an availability issue (see slides 27-28).
- Among those without home internet access, 88.6% reported use of a smartphone plan being the main reason followed by too expensive (see slide 6). In other words, these homes can afford either a smartphone data plan or home internet, but not both.

Device ownership and performance

- More than 95% of respondents reported owning a smartphone while one-third of respondents owned a desktop compared to 67% owning a laptop (see slide 4). More than 97% of respondents reported using their smartphone at least once weekly to access the internet (see slide 8).
- Device ownership is unequal. Consider that almost half of respondents with a high school degree or less owned a laptop compared to 86.3% of those with a bachelor's degree or higher (see slide 23).
- A significantly higher share of respondents with a mobile device only, including a tablet or smartphone or both but no laptop or desktop were minority, less educated, younger, and low earning individuals (see slides 21-22).
- Device performance varies among community groups. Consider that 13.8% of minorities that did own a desktop said it worked poorly or very poorly compared to less than 6% of White, non-Hispanic respondents while 8.8% of respondents with some college reported their tablets working poorly or very poorly compared to 3.3% of those with a bachelor's degree or higher. In addition, 8.8% of individuals earning less than \$35,000 that owned a tablet reported it worked poorly or very poorly compared to 2.5% of those individuals making \$75,000 or more (see slides 25-26).

Internet use & resources

- More than three-quarters of respondents have been using the internet for 10 or more years (see slide 9). Roughly 71% said they were more productive because of device and internet use. However, a little more than one-fifth of respondents said they needed help to setup a new device and close to one-quarter said they had difficulty knowing if online information was trustworthy. Close to two-thirds, however, said they were able to find people and/or resources when it came to internet or device use (see slide 10).
- Consistent access to the internet is important. When asked how many days over the past 12 months were respondents without internet due to unpaid bills, broken devices, unreliable service, running out of minutes/data, or other problems, two-thirds of White, non-Hispanic respondents said never compared to less than half of minority respondents. Moreover, close to one-third of those making less than \$35,000 reported being without internet for 5 or more days over the past year compared to only 3.5% of those individuals making \$75,000 or more (see slides 29-30).
- Frequency and diversity of online interactions with community organizations is a proxy to measure digital skills. A more diverse and frequent interaction requires above average digital skills. Roughly 38% of respondents had daily digital interactions with local/state news outlets followed by 37% interacting with K-12 or high education institutions. A little more than one-fifth had daily digital interactions with local businesses (within 50 miles) compared to 15.5% with non-local businesses (see slide 12).

- When looking at online interactions between groups, minorities interacted with more community organizations daily compared to White, non-Hispanic respondents (see slide 37). On the other hand, more educated, older, and higher earning individuals interacted daily more with local/state news and local and non-local businesses compared to their younger, less educated, and lower earning counterparts (see slides 38-40).
- Frequency and diversity of internet use can be a proxy of digital skills as well. Survey listed 25 different internet uses at least once daily, once weekly, once monthly, and once or more per year. Close to 88% of respondents said they browsed the web at least once daily followed by using social media. More than half of respondents streamed TV or music at least once daily. While 30.2% of respondents did online banking at least once daily, the number increased to 38.8% doing online banking at least once weekly and drops to 15.7% doing online banking at least once monthly (see slides 13-15).
- Regarding internet use at least daily, some interesting differences between community groups emerge. Consider that a little less than one-third of White, non-Hispanic respondents used the internet to connect with family and friends compared to little more than one-half of minority respondents. On the other hand, almost one-quarter of White, non-Hispanic respondents used the internet at least once daily to remote work compared to 11.1% of minority respondents (see slide 41).
- A significantly higher share of lower earning, minority, younger, and less educated respondents used the internet at least once daily to look for health-related information compared to their higher, White, older, and more educated peers. The difference in the share of respondents running their home business between White, non-Hispanic and minorities was minor (6.5% versus 5.3%) while it was much higher between less and more educated (3.3% versus 8.9%), younger and older (5.9% versus 3.7%), and less and more educated individuals (4.7% versus 11.2%) (see slides 41-44).
- The internet uses listed in the survey can roughly be grouped into requiring basic, intermediate, and advanced digital skills. On average, 30.2% of respondents used the internet daily in ways that require basic digital skills (browsing, social media, etc.) compared to 20.6% using the internet in ways that require intermediate digital skills (videoconference, stream TV/music, buy/sell goods/services, etc.) and 12.7% in ways that require advanced digital skills (e-Learning, manage/create files, manage privacy/security settings, etc.) (see slide 45).
- The share of minority respondents using the internet in ways requiring basic, intermediate, or advanced skills was higher compared to White, non-Hispanic respondents. The largest differences across basic, intermediate, and advanced digital skills and internet use are visible between younger and older respondents (see slide 45).

Internet benefits

- About 84% of respondents felt that using the internet over the past 12 months resulted in timelier and more accurate local/regional information. A little more than 60% said it was easier to access/use government programs and resources while close to half (46.3%) said the internet expanded their personal and professional networks. However, close to 40% said they became more anxious due to online use and exposure and 17.6% felt their values/perceptions had changed in a negative way. In the end, 57% felt internet use had in overall terms improved their quality of life (see slide 11).
- Regarding earning and saving money online, respondents reported earning around \$653,000 dollars by selling, freelancing, rentals, moving products or people, and/or other activities. On the other hand, respondents saved \$1.68 million by using online coupons, price matching, less postage, less driving, health insurance, healthcare, and other. In total, about \$2.3 million were earned or saved online (see slide 18).
- When looking at average earnings and savings between community groups, differences emerge that shed light on existing non-digital inequalities. For example, respondents with a bachelor's degree or higher earned on average \$2,184 compared to \$1,496 on average for those with a high school degree or less. This is not surprising given that the share of respondents remote working daily with a bachelor's or higher was significantly higher compared to those with a high school degree or less (see slide 42). Likewise, individuals earning \$75,000 or more earned on average \$2,405 compared to \$1,130 of individuals earning less than \$35,000 (see slides 35-36).

Training interest and needs

- More than two-thirds of respondents said they were not interested in internet/device use trainings. Those that are, however, said they are interested in internet/device use for work followed by a beginner's training (see slide 16). When looking at community groups, close to one-fifth of minority respondents were interested in internet/device trainings compared to less than 6% of White, non-Hispanic respondents. The share of lower earning individuals interested in trainings was also higher compared to higher earning ones (12.2% versus 3.9%) (see slides 31-32).
- Regarding having someone they can rely on for help with internet/devices, more than 80% of respondents said they definitely or probably had someone they could rely on. Of these, close to half said this person is a relative followed by 17.8% saying it is a friend (see slide 17). The share of respondents saying definitely or probably having someone to help was higher among respondents with a bachelor's degree or higher compared to those with a high school degree or less. Similar trend is seen among those individuals making \$75,000 or more compared to those making less than \$35,000. Differences were not as high between White, non-Hispanic and minority respondents (see slides 33-34).

Key takeaways

- 1) An awareness campaign is needed to educate residents on the different types of home broadband technologies available as well as their advantages and disadvantages. Efforts, either through expansion of availability and/or subsidies, to ensure minority, less educated, younger, and lower earning individuals subscribe to faster, more reliable home broadband technologies is warranted.
- 2) Minority, less educated, and lower earning individuals are more likely to rely solely on mobile devices and/or have unreliable non-mobile devices. Efforts need to be made to ensure these groups have access or own reliable non-mobile devices.
- 3) Regarding digital skills measured indirectly through frequency and diversity of online interactions and internet uses, a higher share of respondents that were younger, more educated, and higher earning individuals used the internet in ways that required advanced skills compared with their older, less educated, and lower earning counterparts. This was not the case between White, non-Hispanic and minorities. In fact, minorities had a greater breadth of daily internet uses (and thus, digital skills), but on average have less economic benefit from earnings and savings.
- 4) While the perception that internet use improved the quality of life for most survey respondents, more educated and higher earning individuals benefited more from internet use—earning and saving more online—compared to their less educated and lower earning counterparts. Many internet benefits accrued from savings, leaving ample room to expand the share accrued from earnings. Efforts need to be made to ensure less advantaged groups benefit more from internet use by earning or saving online.
- 5) Majority of respondents have been using the internet for ten years or more. However, one-fifth needed help setting up a new device. Regarding having someone to rely on, the share of less educated and lower earning individuals was lower compared to their more educated and higher earning counterparts. Difference was not as high between White, non-Hispanic and minorities. In addition, with about a quarter of respondents struggling with knowing if information online is trustworthy, the community is vulnerable to the spread of misinformation. In addition, it raises questions about potential trust issues between community members and organizations/institutions.