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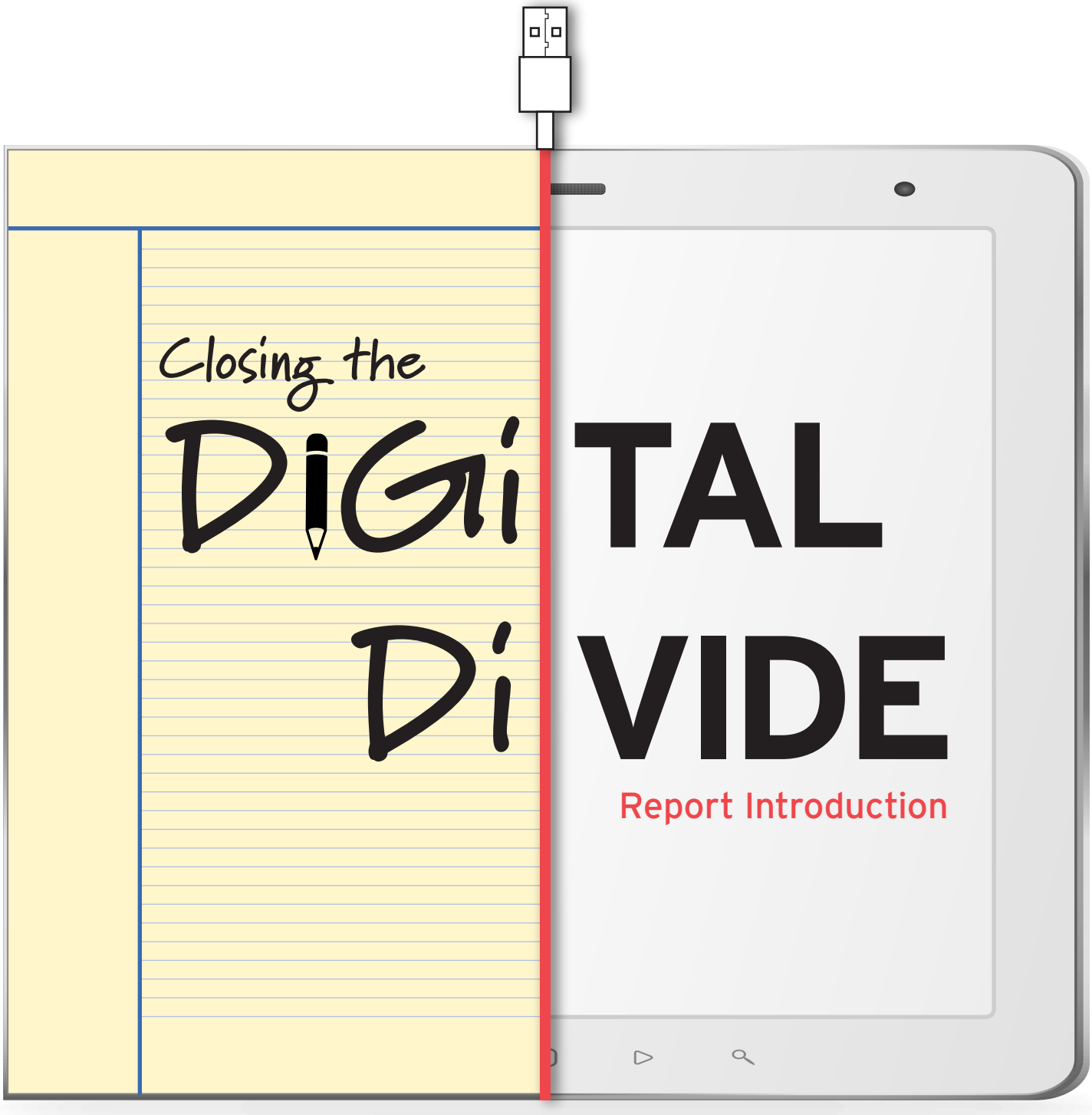


Report Introduction

CLOSING THE DIGITAL DIVIDE

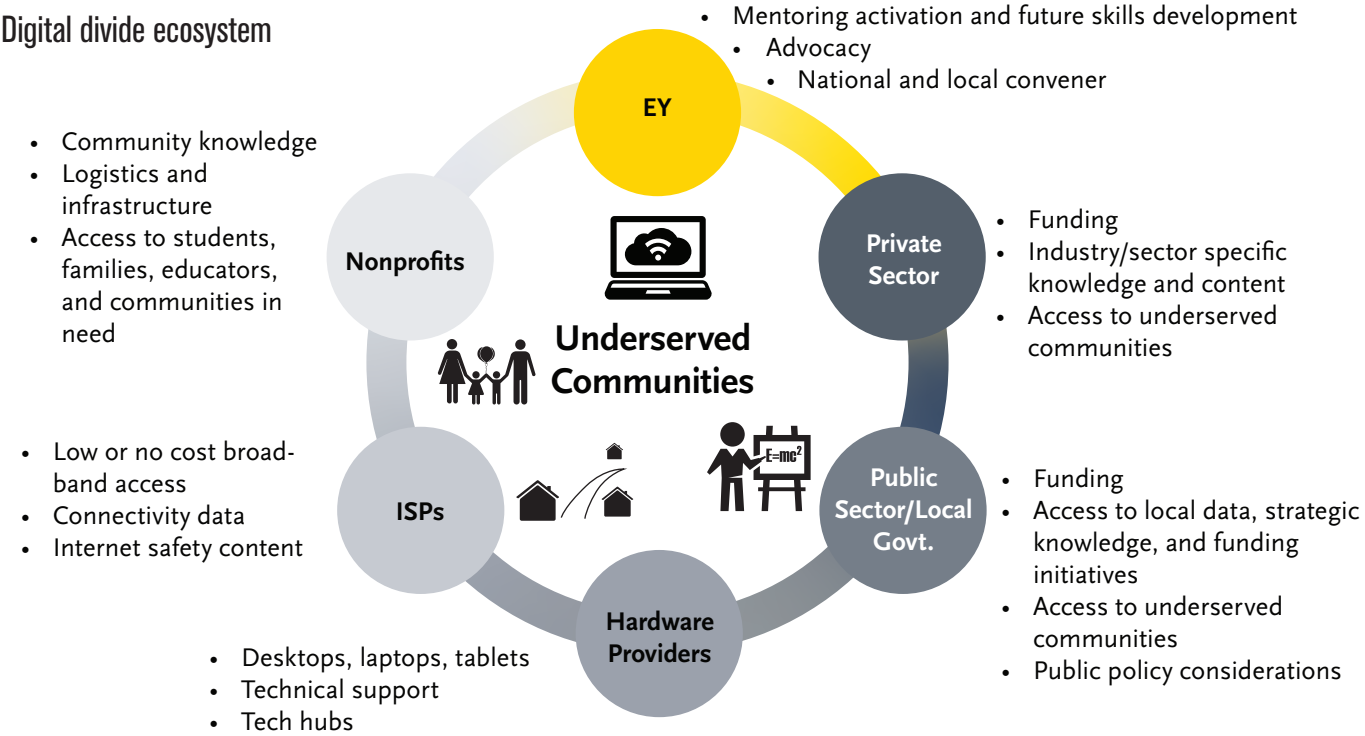
WHAT IS THE DIGITAL DIVIDE?

The digital divide refers to the gap between those who can access and take full advantage of computers and the internet and those who cannot. For those who cannot, the reasons range from lack of access to devices or internet to lack of access to digital training.

It's a form of inequality that can limit opportunities for those on the wrong side of the chasm. The digital divide can exist for a variety of reasons and can occur in different contexts.

The digital divide reflects and can exacerbate existing social and economic inequalities, including those based on race and ethnicity. In many countries, including the United States, people of color and people experiencing poverty are often less likely to have access to high-speed internet, digital devices, and digital literacy education.

FIGURE 1
Digital divide ecosystem



Source: EY, *Bridging the Digital Divide: The Path Forward.*

"We couldn't do what we're doing here without our offices activated in unison. We're seeing multiple small teams across the country who are using their local contacts to really understand the local needs, who the players are, how big is the gap, and what funding can they get access to and then beginning to create customized solutions by city with local clients and local companies."

Kevin Brown
Principal, Consulting Services and Life Sciences Technology Lead
EY US

The EY commitment to addressing the digital divide

Even before the COVID-19 pandemic, EY citizenship leaders including Kevin Brown identified concerning trends, including that one-third of young people (disproportionately Black, Latinx, and/or low-income) lacked access to broadband and devices at home. This disparity was intensified during the pandemic. To address this issue, the firm created several anti-racism interventions, including the Ernst & Young LLP (EY US) Bridging the Digital Divide initiative. EY people were inspired to use their time and connections to close the divide in their local communities. EY US noticed that there was a need for private sector leadership on the issue, so the organization used its network and influence to activate multiple stakeholder groups across the country and raise millions of dollars in support of the cause. The foundation of EY US's commitment to this issue is through its mentoring programs, where EY people volunteer to help upskill beneficiaries on how to succeed in a digital age.

In the three years since the Bridging the Digital Divide initiative was launched, the program has:

- Impacted more than 600,000 lives via programs that provide mentoring, hardware, and/or connectivity.
- Established targeted local programs involving more than 4,300 EY professionals and including dozens of mentoring and learning programs.
- Raised $4.3 million through public-private coalitions and an additional $4.8 million in charitable contributions from EY professionals through the company's annual United Way giving campaign.
- Engaged the support of and established collaborations with other corporate leaders, including clients whose mission and purpose align to the firm's.
- Convened more than 200 collaborations with other organizations, including coalitions of education departments and public sector agencies, nonprofits, community service organizations, and the private sector.

Who is most likely to experience the digital divide?

The digital divide can be addressed, and business has a role to play. First, let's unpack how the divide is created and who is affected. The digital divide creates a chasm of opportunity within the U.S. and across regions around the globe. The divide exists across several dimensions, including but not limited to socioeconomic status, race, ethnicity, and physical location. Addressing racial, ethnic, geographic, age, and gender digital divides is crucial for achieving equality, as digital technology plays an increasingly important role in education, employment, and social participation.

Because the digital divide is a multifaceted issue that intersects with various aspects of society, factors contributing to digital inequality often interact in complex ways. For example, low-income urban households may find the cost of high-speed home internet and digital devices prohibitive. Low-income, rural households may also experience these issues and face difficulties accessing connectivity due to infrastructure limitations. To effectively bridge the digital divide, it's necessary to take a comprehensive approach that addresses all these factors.

The following provides some examples of how digital inequality can play out.

REGIONAL DIFFERENCES

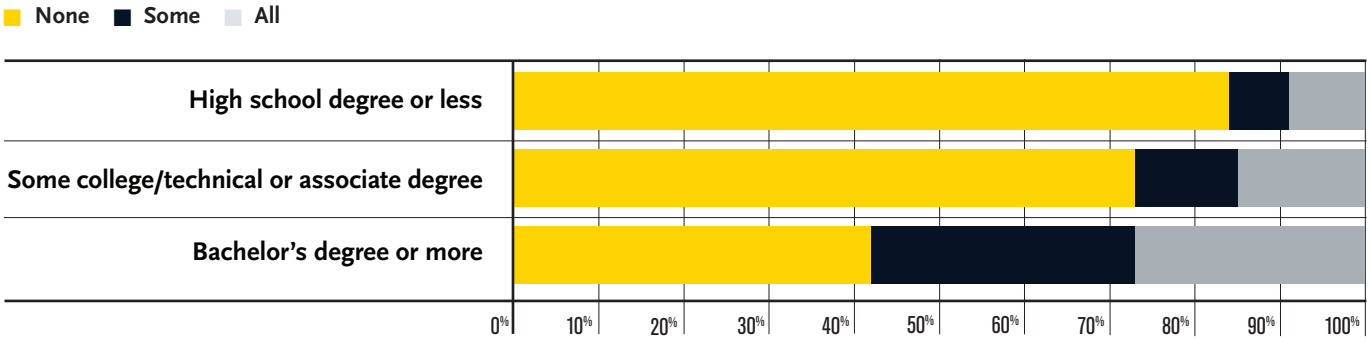
High-income vs. low-income: Generally, high-income regions have a higher level of internet penetration and greater access to digital technologies than low-income regions. For example, in many parts of North America and Europe, broadband access is widespread, yet there are still areas where access is much more limited. The reasons for this discrepancy include lack of infrastructure, high costs, and lower levels of education. The World Bank estimates that a 10 percentage point increase in broadband penetration can lead to a 1.2% jump in real per capita GDP growth and a 3.6% increase in economic efficiency.[1]

Urban vs. rural: Even within developed countries—including the U.S.—there can be a significant digital divide between urban and rural areas. Urban areas typically have better internet access due to better infrastructure, whereas rural areas often lack the necessary infrastructure (fiber optic cables, cell towers, etc.). This issue is prevalent in both developed and developing countries. Another barrier to connecting rural communities is the expense and difficulty of building the infrastructure in far-flung locations. Within the High-Speed Internet for Everyone initiative of the federal government, for example, leaders are discovering that the cost of creating some of the rural broadband connections initially planned exceeds the value of the properties they are connecting. They are then faced with the tough choices about whether to connect more people elsewhere or to pursue the more expensive rural network.[2]

SOCIOECONOMIC STATUS

Income: Households with higher income generally have better access to the internet and digital devices. On average, racial and ethnic minority groups often have higher proportions of lower incomes, which can make it harder to afford internet service and digital devices. The cost of digital access can be a significant barrier for these families. Many people with lower incomes have access to the internet only at work, school, or in public spaces where there is free Wi-Fi. This limits how and when they can connect and for what purpose. People with lower incomes spend a higher proportion of their incomes on basic needs. For example, a family of three earning 200% above the 2023 poverty line of $49,720[3] still uses at least 75% of their monthly take-home income of $3,838 to pay for basic needs[4]—a higher proportion if they live in a high-rent area. Twenty-two percent of these households will not be able to pay their bills in full each month, and almost 40% will not be able to cover an unexpected expense of $400 using

FIGURE 2
Amount of work done from home (by education)



Source: Federal Reserve System, *Economic Well-Being of U.S. Households in 2022.*

cash.[5] While cell phone service is on the list of basic needs, broadband is not. With the 2023 cost of broadband connection ranging from an average of $77 per month where fiber-optic cable is available to almost $189 per month where only satellite connection may be available, this additional expense of broadband is out of reach for almost half of Americans.[6]

Education: Higher levels of education are associated with better digital literacy, meaning those with more education are generally more experienced with technology and are therefore more capable of using digital technologies effectively. This is, of course, a two-way street. Those who have support to develop better digital literacy earlier will have more educational opportunities. Schools in low-income areas, which are often predominantly populated by students of color, may lack the resources to provide quality digital education. This limits the types of work and options available to those with lower levels of education. For example, lower education levels typically correlate to lower wages and less flexible work arrangements, further burdening these households with higher commute time requirements and transportation costs and lower work-life balance.

Lower levels of digital literacy can also create disadvantages and reluctance to engage with technology, which impedes progress. Those who don't adopt early may also be more vulnerable to misinformation or scamming, hacking, or bullying. Having an experience with any one of those negative events can create reluctance to engage further with technology.

RACE, ETHNICITY, AGE, AND GENDER

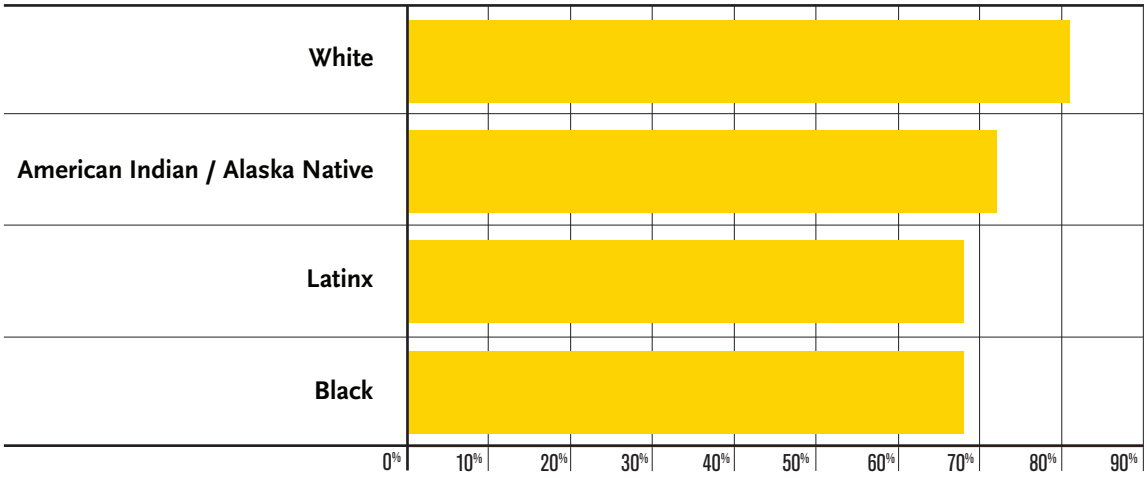
Minorities and marginalized groups: Based on our research, racial and ethnic minorities and other marginalized groups have lower rates of internet and computer access. This can be due to a complex mix of factors, including lower average income levels, less access to education, and systemic discrimination.[7] People of color are generally underrepresented in leadership roles, in business in general, and in tech-related careers even more acutely. The public and private programs intended to bridge the digital divide in disadvantaged Native American tribes sometimes exacerbate the issue with complicated processes of grant applications, requirements for

cost share, demands for tech-savvy leadership, and other hurdles that disadvantage tribes. For example, according to an American Indian Policy Institute analysis of Federal Communications Commission (FCC) data, just 67% of tribal lands in the continental U.S. have access to broadband internet, with the majority having access only to broadband speeds considered by the FCC to fall short of what is "minimally acceptable."[8] The legacies of discriminatory racial policies from the 20th century—most notably the Depression-era practice of neighborhood redlining that restricted loans to neighborhoods that were mostly low income and inhabited by people of color—are seen even in current technology distribution. Despite internet service provider self-reports of similar technological availability, broadband access generally decreases in tandem with historic neighborhood classification.[9]

Women: The gender digital divide refers to the disparities between men and women in terms of access to and use of information and communication technology (ICT). Recent studies indicate that women are underrepresented in tech-related fields and roles. For example, despite making up about half of the global population, women hold only about a quarter of computer science jobs. This lack of representation can perpetuate stereotypes and discourage women from entering tech-related fields. Cyberbullying, sexual harassment, and other forms of online violence disproportionately affect women and girls, which can further discourage them from using digital technology.

Age: As people who have experienced the digital divide for the last 40 years age, their challenges with access to technology increase. Elderly people may be challenged to execute basic tasks,

FIGURE 3
Access to home broadband by race



Source: Free Press Analysis of July 2015 Current Population Survey Computer and Internet Use Supplement.

from booking tickets or renewing bus cards to claiming old-age benefits because most systems are now digitized. Social and economic exclusion also continue as many older people are not prepared for or supported to continue their working lives with remote work. Elder abuse can take the form of targeting older people for digital scams, which can create reluctance among older people to engage online. Loneliness and isolation may be more acute among disconnected older people because they cannot connect with peers through digital networks due to lack of digital skills.[10]

Sociocultural factors: Language barriers or cultural norms can also affect digital access and usage among gender, age, racial, and ethnic groups. For example, individuals who aren't proficient in the dominant language used online or in digital interfaces may find it more difficult to access and benefit from digital resources.

Addressing racial, ethnic, and gender digital divides is crucial for achieving equality, as digital technology plays an increasingly important role in education, employment, and social participation.

1 "Impact of Broadband on the Economy," *International Telecommunication Union website*, www.itu.int/ITU-D/treg/broadband/ITU-BB-Reports_Impact-of-Broadband-on-the-Economy.pdf, accessed 6 September 2023.

2 "The $53,000 Connection: The High Cost of High-Speed Internet for Everyone," *The Wall Street Journal website*, www.wsj.com/us-news/the-53-000-connection-the-high-cost-of-high-speed-internet-for-everyone-c903163f, accessed 7 September 2023.

3 "2023 Federal Poverty Guidelines/Federal Poverty Levels," *Paying for Senior Care website*, www.payingforseniorcare.com/federal-poverty-level, accessed 6 September 2023.

4 "How Do Low-Income Families Spend Their Money?" *Econofact website*, econofact.org/how-do-low-income-families-spend-their-money, accessed 6 September 2023.

5 "Economic Well-Being of U.S. Households in 2022," Board of Governors of the Federal Reserve System, May 2023, www.federalreserve.gov/publications/files/2022-report-economic-well-being-us-households-202305.pdf.

6 "How Much Do Internet and Wi-Fi Cost?" 27 November 2023, *Reviews.org website*, www.reviews.org/internet-service/how-much-do-internet-and-wi-fi-cost.

7 "How Broadband Access Advances Systemic Equality," 28 April 2021, *ACLU website*, www.aclu.org/news/privacy-technology/how-broadband-access-hinders-systemic-equality-and-deepens-the-digital-divide.

8 Edelman, Adam, "Congress could spend big on broadband. Tribal nations say it can't come soon enough," 23 May 2021, *NBC News website*, www.nbcnews.com/politics/joe-biden/congress-could-spend-big-broadband-tribal-nations-say-it-can-n1267923.

9 Skinner, Benjamin T., Levy, Hazel, and Burtch, Taylor, "Digital Redlining: The Relevance of 20th Century Housing Policy to 21st Century Broadband Access and Education," 6 June 2023, *Sage Journals website*, doi.org/10.1177/08959048231174882=.

10 "Elderly Forgotten? Digital Exclusion in the Information Age and the Rising Grey Digital Divide," January 2022, *PubMed website*, pubmed.ncbi.nlm.nih.gov/35471138.

US SCORE no. 23045-241US

Bridging the digital divide and building a better working world

As part of the company's effort to build a better working world and in support of our commitment to social justice, EY US is creating digital equity in the U.S. through the Bridging the Digital Divide program.

Fundamentally, EY believes access equals enablement and opportunity. With the right training, tools, and connectivity, more people can access more resources in pursuit of healthier, more connected, and successful lives. EY provides mentorship to digitally upskill and facilitate access to devices and broadband internet service.

There is no one-size-fits-all approach to bridge the digital divide. The key is to match local solutions to the needs and objectives of local communities, with an emphasis on hands-on support and training by individuals committed to making a difference. EY US is focused on local solutions, led by EY professionals and driven by members of the communities it aims to serve. EY leaders continue to raise public awareness of digital equity as a critical issue.

The firm is committed to engaging key stakeholders, including nonprofits and community organizations, technology providers, and other businesses to expand the impact of these efforts.

"Our initiative embraces a 'Now, Next and Beyond' strategy that applies our consulting acumen, with an eye toward social inclusion. 'Now' focuses on working with organizations to support students, families, and educators to provide devices and broadband access. 'Next' is a stabilizing phase where mentorship creates a path to digital upskilling that can transform communities for the 'Beyond.'"

Kevin Brown
Principal, Consulting Services and Life Sciences Technology Lead
EY US

This is an introduction to the full report.

For tools you can use to implement programs that address the digital divide,

visit ccc.bc.edu/EY-digital-divide