

Bridging the Digital Divide in Underserved Community

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ABSTRACT

In underprivileged communities around the world, the digital divide continues to be a major obstacle to social and economic mobility. By putting in place a comprehensive program that incorporates community-led digital empowerment initiatives, device donations, and digital literacy training, this project seeks to close this gap. Our strategy focuses on tackling the intersectional elements such as a lack of devices, internet connectivity, and important digital skills that lead to digital exclusion. By implementing well setup targeted strategies to provide affordable internet connectivity, digital devices, and customized training programs, the goal of bridging the digital divide in underserved communities is to address the significant gap in digital literacy and access among marginalized populations. Furthermore, advanced digital capabilities like social media or computer networks are frequently necessary for career progression.

INTRODUCTION

Empowering communities is a key aspect of bridging the digital divide. Digitalisation is fundamentally transforming how we live, work, & connect as

a society, from scheduling meetings online to remote employment. For the vast majority of us, digitalisation delivers a degree of connectedness and convenience that previous



generations could not imagine. It's easy to think that giving children access to technology will level the playing field as education gets more digitalized. However, a closer examination tells a different tale, the opportunity gap cannot be closed by having access to digital tools alone. Students coming from historically or systematic dropped backgrounds, including low-income students, learners of English, and students with disabilities, are more likely to rely on assistive tools like text-to-speech, despite the fact that all students accomplished a training course to learn how to use the digital tools. In contrast, their more accomplished peers are more likely to employ sophisticated features like elimination capacity, which allows them to reject wrong multiple-choice responses, and digital pencils, which let them scribble and draw on the screen. Just giving pupils access to technology is insufficient to address the digital divide; we also need to make sure they are trained how to use it properly. We must concentrate on teaching digital literacy, especially to those who need it most, if we are serious about reducing the opportunity gap. Intentional training on how to interact with digital technologies in ways that improve learning is necessary to provide underprivileged kids the tools they need to use technology efficiently. Teachers have a vital function. Students need to know how to incorporate tools like digital pencils and elimination capacity into their math problem-solving processes, including creating visual representations, rather than just knowing that they exist. For students to feel at ease and proficient with these tools, teachers should set an example in the classroom, help them practice using them on a regular basis, and provide them feedback. We also need to make investments in teachers' professional development. However, not all aspects of society have been equally impacted by digitalisation. Many citizens in communities around the country have not been able to

access digital public services, which have significant implications for government organisations at all stages, from regional governments to the federal government (AMIA, 2004). Through embracing innovation, establishing trust, and putting constituents' needs first, local governments can collaborate with their communities to develop a more digitally connected, inclusive future for everybody. Improving local lives and creating a truly equal society in the digital age can only be accomplished by cooperating.

Overcoming the Digital Divide: Connecting with At-Risk Groups

The term "digital divide" was used prior to the turn of the century to refer to the differences between people who owned and didn't have telephones. During the late 1990s, a word emerged for distinguishing between people who had and did not have internet connection, namely broadband. The phrase "digital divide" now encompasses urban against rural, educated versus uneducated, socioeconomic groups, and, globally, more and less industrialised emerging nations (Civica, 2025). Even among individuals who have access to technology, the digital divide may be observed in lower-performance PCs, slower connections via wireless, and less priced internet connections, such as dial-up.

Necessary of closing the digital gap

Improved digital literacy, democracy, social mobility, and economic equality and growth are all facilitated by closing the digital divide. Ensuring internet connectivity for everybody is also essential. According to numerous organizations and experts, that is essential for the following reasons:

1. Attaining worldwide development that is sustainable.
2. Lowering obstacles to social and digital inclusion.

3. Accelerating welfare and economic growth.
4. Accelerating the Sustainable Development Goals (SDGs) of the Nations.

Important tactics for bridging the digital gap and reaching vulnerable populations includes

1. **Enhance infrastructure:** by lowering the cost of internet service providers and extending broadband connectivity to underserved areas, especially rural populations.
2. **Affordable gadgets:** Efforts to give those with low incomes access to inexpensive or reconditioned devices.
3. **Training in digital literacy:** Create specialized programs that address the requirements of at-risk groups by teaching fundamental digital skills like internet navigation, online safety, and the use of necessary software.
4. **Community partnerships:** To provide access points and support training in digital literacy, work with neighbourhood associations, community centre, and non-profits.
5. **Mobile technology:** To offer internet access in places with inadequate broadband infrastructure, make use of mobile devices' reach and data plans.
6. Ensuring that training materials and digital content are accessible in the languages that the targeted communities speak is important for linguistic accessibility.
7. **Characteristics of accessibility:** Include tools like text-to-speech capabilities and screen readers to assist those with disabilities. Reach out to at-risk groups in a proactive manner to learn about their

unique needs and obstacles, and then create programs that take care of them.

Consequences of the digital divide:

In addition to causing financial disadvantages for individuals, the digital divide can impede a society's overall economic progress. Even worse, pre-existing disparities worldwide are being exacerbated by the digital divide.

1. **Individual Economic Effects:** As was previously mentioned, people may lose out on healthcare and education if they are not connected. Forgoing schooling due to the digital divide may result in lower lifetime earnings because better educational attainment is associated with higher earning potential. Additionally, a reduced life expectancy and quality of life could result from losing healthcare due to technology. The majority of entry-level middle-skills employment requires digital productivity skills, including word processing or spreadsheets, even outside of industries that demand occupationally specific digital skills. Furthermore, advanced digital capabilities like social media or computer networks are frequently necessary for career program. Furthermore, some of the worst effects of the digital divide are felt by women. UNESCO estimates that 2 billion women worldwide lack internet access. The gender digital divide is this. A total of 130 million girls were deprived an education prior to the COVID-19 pandemic. UNESCO believes that an additional 11 million girls are at danger of not going back to school as a result of COVID-19's interruptions in education and the shift to digital learning.
2. **Income Divide:** Furthermore, a study conducted across 191 nations revealed a favourable correlation between access to technology and increased wealth and educational achievement. Information and



communication technology (ICT) dispersion is positively correlated with GDP per capita. This holds true for both rural communities in rich countries and developing ones. Another problem with digital inclusion is digital inequality. This happens when customers cannot afford broadband or can only afford speeds that are insufficient for daily tasks, even while the proper technological infrastructure is in place. The digital divide exacerbates injustices for marginalized populations, making it an intersectional problem.

In order to interact with our societies, services, and a global economy that is becoming more and more digital, digital access and skills are and will remain essential. They are now required for everyone, not just a select few. Even while there has been amazing progress in closing the gap between those who can connect and acquire the necessary skills to engage and those who cannot, some groups are still completely overlooked by our combined efforts. In order to create communities and economies that are really inclusive, we must make a commitment to redefine success in a way that reaches everyone before the gap widens and becomes a crisis.

CONCLUSION

Access to digital resources is essential for academic success in today's linked society; yet educational equity is still threatened by the digital divide. To give all students access to learning opportunities, irrespective of their geography or socioeconomic background, this gap must be closed. Through initiatives like the United Nations Sustainable Development Goals to extend internet access, global efforts are concentrating on improving infrastructure and connection, especially in underserved places. Creating a more equitable society

requires bridging the digital divide in underserved communities so that everyone has access to the advantages of technology, such as education, employment opportunities, and essential information. This calls for a multifaceted strategy that emphasizes affordable internet access, device provision, specialized training in digital literacy, and strong community engagement. Government, the private sector, and local organizations work together to create solutions that meet the unique needs of each community, ultimately.

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