



KC NWAKALOR FOR USAID / DIGITAL DEVELOPMENT COMMUNICATIONS

UNDERSTANDING THE GENDER DIGITAL DIVIDE IN NIGERIA

LEARNING BRIEF

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INTRODUCTION

Digital technology offers life-changing opportunities and innovations to promote inclusive growth, expand education opportunities, improve health services, and foster governance. At the same time, however, the use of digital technology comes with the risk of exacerbating existing inequalities among those who can access and benefit from its use.¹ This learning brief was developed for USAID/Nigeria staff and implementing partners to deepen their understanding of the importance of bridging digital divides in development programming, with a focus on the gender digital divide.

Box 1: Definitions

The “**digital divide**” refers to the gap between those who have access to and can use technology, including the internet and mobile phones, and those who do not. The “**gender digital divide**” is the gap or differences between men’s, women’s, boys’, girls’, and gender-diverse individuals’ access and use of technology, the internet, and/or mobile phones; these differences may reflect inequalities.

Source: Adapted from the 2021 [Gender Digital Divide: Desk Review Report](#).

WHAT IS THE GENDER DIGITAL DIVIDE IN NIGERIA?

The National Digital Economy Policy and Strategy aims to “transform Nigeria into a leading digital economy, providing quality life and digital economies for all.” Digital technologies have become increasingly prevalent and essential in daily life in Nigeria, with over 140 million internet subscribers,² or approximately 36 percent of the population.³ However, significant disparities exist within access to and usage of digital technologies. Digital access favors men, individuals of higher income and education levels, and residents of major urban areas.⁴ The gender gap in internet usage is 17.05 percent: 37.20 percent of men use the internet, compared to 20.05 percent of women.⁵ For additional statistics that demonstrate digital divides in Nigeria, see Box 2.

Notably, the gender gap in mobile internet use has widened in recent years. Data indicated a steady increase in internet usage until 2019 when women’s use of technology and ownership of mobile phones started to decline.⁶ However, the COVID-19 pandemic also underscored the importance of digital access, as some private schools shifted to online learning and many businesses relied on online platforms to survive. As the country continues to invest in its tech ecosystem, it is

Box 2: Nigeria Digital Divide Data

- **92** percent of men own mobile phones, compared to **88** percent of women.¹
- **54** percent of men use mobile internet, compared to **34** percent of women.¹
- Women have less autonomy (**62** percent) in paying for and selecting handsets than men (**93** percent).¹
- **68** percent of women do not have a smart phone.¹
- **37** percent of adolescent girls own phones compared to approximately **77** percent of boys.²
- **42** percent of people in urban areas use the internet, compared to **22** percent in rural areas.³

¹ [The Mobile Gender Gap Report 2022](#)

² [Real girls, real lives, connected](#)

³ [The State of ICT in Nigeria in 2018](#)

¹ USAID Digital Strategy 2021-2024 ([Link](#))

² National Bureau of Statistics ([Link](#))

³ The World Bank ([Link](#))

⁴ The State of ICT in Nigeria 2018 ([Link](#))

⁵ The State of ICT in Nigeria 2018 ([Link](#))

⁶ Strategic Roadmap and Action Plan (SRAP 2021-2024) ([link](#)); The Mobile Gender Gap Report 2022 ([Link](#))

critical to renew efforts to close the digital divides with a particular focus on disparities faced by women and girls.

WHY DOES THE GENDER DIGITAL DIVIDE EXIST?

The gender digital divide reinforces existing socioeconomic inequalities affecting women and girls. Three broad but interlinked factors contributing to the gender digital divide in Nigeria are: 1) access, 2) use, and 3) safety and security.

Access. Women and girls often have less access to technology than men and boys and when they do, they often begin using it later. First, there are considerations of access to digital devices. In Nigeria, two of the top three barriers to mobile ownership identified by women are related to access—affordability (35 percent) and lack of family approval (10 percent).⁷ In some communities, restrictive social norms discourage women and girls from using technology. For example, a study conducted by the Centre for Information Technology and Development found that 55 percent of men in Northern Nigeria opposed their wives using the internet, and 61 percent of fathers expressed concerns about their daughter’s internet use.⁸ Awareness and norms also play a role in influencing access to and the perceived value of technology. In Nigeria, there is a gender gap in awareness of mobile internet, which may contribute to fewer women seeking access: 83 percent of women are aware of mobile internet compared to 90 percent of men.

Use. Another significant barrier is the lack of literacy and digital skills. In Nigeria, 26 percent of women identified difficulties reading and writing as a top barrier to mobile ownership.⁹ Further, of those who are aware of mobile internet but have not yet used it, 41 percent of women and 32 percent of men expressed concerns about difficulties reading and writing.¹⁰

Safety and Security. Risks of technology-facilitated gender-based violence (TFGBV) (see Box 3), including harassment and cyberbullying, act as a deterrent to women’s and girls’ technology use. In Nigeria, a study found that 61 percent of respondents have experienced online abuse or violence and 62 percent know people who have experienced it.¹¹ Further, 88 percent think online harassment is becoming worse. Additionally, Plan International found in a separate study that more than half (58 percent) of girls aged 15-25 across 22 countries, including Nigeria, have been harassed or abused online.¹²

Box 3: Definition of Technology-Facilitated Gender-Based Violence¹

A threat or act of violence committed, assisted, aggravated, and amplified in part or fully by using information and communication technologies or digital media that is disproportionately targeted at women, girls, and gender non-conforming individuals. It is a continuum of multiple, recurring, and interrelated forms of gender-based violence that takes place both online and offline.

¹ [U.S. Department of State and USAID](#)

⁷ The Mobile Gender Gap Report 2022 ([link](#))

⁸ Internet for men? ([link](#))

⁹ The Mobile Gender Gap Report 2022 ([link](#))

¹⁰ The Mobile Gender Gap Report 2022 ([link](#))

¹¹ UReport ([link](#))

¹² Free to be ONLINE? ([link](#))

The gender gap in technology access and use is most pronounced where inequalities are prevalent. In Nigeria, variables that contribute to the digital divide include gender identity, age, urban/rural difference, education, and disability.¹³ As described in Box 4, recognizing and addressing these multiple intersecting variables, along with existing social norms, is crucial for effectively addressing the gender digital divide and reducing existing inequalities.

Box 4: Approaching the gender digital divide through with an intersectional lens

Technology impacts diverse individuals differently. While women and girls are less likely to have access to technology, women and girls are not a homogenous group. An intersectional approach in addressing the gender digital divide recognizes that people's access to and use of technologies is affected by many intersecting characteristics within their identities, including their age, class, geographic location, education level, citizenship status, sexual orientation, and gender identity. For example, older people, especially women over the age of 60, use the internet on a more limited basis than younger women. In Nigeria, the digital divide disproportionately affects women and girls with low income, low literacy, those with disabilities, those living in remote or rural areas, internally displaced people, younger adolescent girls,¹ and older women.

¹ Understanding of the digital divide among adolescent girls is not well known. For insights into girls' internet use and the access, refer to the Vodafone and Girl Effect study, "[Real girls. real lives. connected.](#)" and UNICEF's brief "[What we know about the gender digital divide for girls.](#)"

Digital technologies can drive development outcomes across all sectors, making the digital divide a significant obstacle to achieving those outcomes. Reduced digital access hinders women's and girls' access to crucial information and life-saving services, such as health care information and financial products. Furthermore, this restricted access has far-reaching consequences, impacting academic performance, access to economic opportunities, and utilization of digital finance. See [Annex A](#) for examples of interventions to reduce the digital divide through education, economic growth, peace and democratic governance, and health activities.

WHAT WORKS IN CLOSING THE GENDER DIGITAL DIVIDE?

To close the gender digital divide, development practitioners need to design interventions that address the underlying factors that contribute to the divide in Nigeria. Through the [WomenConnect Challenge](#), USAID identified five proven strategies to close the gender digital gap and improve women and girls digital access and use. In implementing these strategies, it is important to recall how intersecting identities impact individuals' access and use of technology. See Table I which describes five strategies with examples of Nigeria-based initiatives that use technology-based solutions.

¹³ Gender Disparity in Internet Access and Usage in Nigeria ([Link](#))

TABLE 1: STRATEGIES FOR CLOSING THE GENDER DIGITAL DIVIDE

**STRATEGY 1:
CHANGE SOCIAL
NORMS AND
CULTURAL
PERCEPTIONS**



Who and how individuals access technology and the internet is influenced by social norms and perceptions of appropriate behavior. Working with power holders including men, elders, and community and religious leaders can help women and girls gain access to the information, services, and opportunities that technology affords.

Tip: Advocating for women's and girls' access to and use of technology can trigger strong gatekeeper responses that can reinforce negative gender norms and stereotypes, often with the risk of gender-based violence. It is important that practitioners understand these triggers and develop mitigating strategies that reduce women's and girls' risk to GBV, including forms that arise from technology use (i.e. TFGBV).

Nigeria initiative: Equal Access International's [Tech4Families](#) promoted new norms at the family level in Northern Nigeria through a behavior change strategy that included radio programs, family discussion groups, digital literacy trainings, and community action.

**STRATEGY 2:
CREATE ECONOMIC
OPPORTUNITIES**



Pairing technology with economic opportunities reduces digital divide barriers. When technology use is promoted as an avenue for increasing economic opportunities and benefiting families, men and women often become more supportive of using technology. Financial gains for women in all their diversity support increased agency, skills, and ability to overcome affordability issues.

Tip: Educating gatekeepers about the potential economic opportunities that technology access can unlock for their family, coupled with positive norms change messaging, can increase their support for women and girls accessing technology and developing digital skills. Gatekeepers, often men and other family members, play a crucial role in whether women and girls in all their diversity have access to ICT resources.

Nigeria initiative: [StartUp Kano](#), an ICT hub in northwest Nigeria, helps women entrepreneurs grow their ideas, scale their businesses, and access funding as well as address norms that limit women's use of technology.

**STRATEGY 3:
CULTIVATE
WOMEN'S AND
GIRLS'
CONFIDENCE**



Programs that provide digital and literacy training, skills building, and mentoring can help build women's and girls' confidence, increase self-efficacy, and demonstrate that they are able to effectively use technology. This in turn can help position women and girls in all their diversity as role models in their communities, thereby cultivating technology use and agency improvements.

Tip: Promoting technology opportunities should also address potential risks, such as TFGBV, so women and girls adopt safe online behaviors and report incidences.

Nigeria initiative: Plan International's [Girls Get Equal Nigeria](#), an organic girl-driven movement demanding girl power and representation, demonstrates that girls can use technology effectively. This has helped build girls' confidence.

**STRATEGY 4:
DESIGN CREATIVE
WOMEN- AND
GIRL- CENTRIC
TECHNOLOGY**



Diverse technology options should be tailored to women's and girls' access, skills, and needs. For example, innovative videos and audio platforms, offline content in local languages, accessible content for persons with disabilities, affordable data packages, content that is easily accessed using basic feature phones extend technology benefits across digital divides.

Tip: Involving women and girls in the design of customized technology options, services, and devices can help ensure their needs are met. This is much better, more cost effective, and more impactful than technology designed to be 'universal.'

Nigeria initiative: [Springster](#), Girl Effect's digital platform available in 66 countries including Nigeria, connects girls to each other and blends educational and entertaining content to enhance engagement. The platform is designed to support girls to develop confidence, skills, and resilience online. Springster covers a range of topics, including health and mental well-being, through real-life stories and features written by girls.

**STRATEGY 5:
DEVELOP
COMMUNITY
SUPPORT**



Bridging the gender digital divide requires community support. As women and girls gain access to technology, many become advocates for beneficial change in their communities and help increase acceptance of women's and girls' use of technology.

Tip: Identifying men and women to work with as change champions can help gain greater access and acceptability of women's and girls' use of technology.

Nigeria initiative: ONE's [Make Naija Stronger](#) project aims to achieve universal access to primary health care. The project uses digital tools to encourage activism and track state-level steps towards free healthcare primary health, utilizing technology to promote a common community cause.

Box 5: Additional Resources

For more information on why the gender digital divide exists, see the “[Understanding the Gender Digital Divide](#)” section of the [Gender Digital Divide Gender Analysis Technical Resource](#).

For a checklist on digital approaches that includes a gender lens, see “[Tool 3: Addressing the Gender Digital Divide in Project Activity and Design](#)” within the [Gender Digital Divide Gender Analysis Technical Resource](#).

For a checklist on how to mitigate risks associated with your programs, see the [Gender Digital Divide Risk Mitigation Technical Note](#).

To understand gender-based violence within the digital space and strategies to ensure women and girls are safe online, see [Learning Brief 1: Understanding Technology-Facilitated GBV](#).

For more information on the WomenConnect Challenge, refer to [womenconnectchallenge.org](#).

REFERENCES

- Adeleke, R. 2021. “Digital divide in Nigeria: The role of regional differentials.” *African Journal of Science, Technology, Innovation and Development* 13, Issue 3: 333-346. Available at: <https://doi.org/10.1080/20421338.2020.1748335>.
- Banyan Global. 2021. *Gender Digital Divide: Desk Review Report*. Available at: https://www.marketlinks.org/sites/default/files/media/file/2021-03/GDD_Desk%20Review_final-with%20links_updated%203.18.21.pdf.
- Banyan Global. 2021. *Gender Digital Divide Gender Analysis Technical Resource*. Available at: <https://www.marketlinks.org/weege-wiki/gender-digital-divide>.
- Banyan Global. 2021. “Understanding the Gender Digital Divide.” *Gender Digital Divide Gender Analysis Technical Resource*. Available at: https://www.marketlinks.org/sites/default/files/media/file/2021-03/GDD_GATR_Understanding-with%20links.pdf.
- Centre for Information Technology and Development. 2017. *Internet for men? The Digital Marginalisation of Women in Northern Nigeria*. Available at: <https://www.citad.org/wp-content/uploads/2021/07/INTERNET-FOR-MEN-The-Digital-Marginalisation-of-women-in-Northern-Nigeria.pdf>.
- DAI. 2020. *The Gender Digital Divide Primer*. Available at: <https://www.usaid.gov/digital-development/gender-digital-divide-primer>.
- DAKA advisory and Women in Digital Transformation. 2022. *Gender Digital Divide Index Report*. Available at: <https://gddindex.com/wp-content/uploads/2022/02/GDDI-Report-2022.pdf>.
- Eneh, O. 2010. “Gender Digital Divide: Comparative Assessment of the Information Communications Technologies and Literacy Levels of Students in Nigeria.” *Information Technology Journal* 9, Issue 8: 1739-1746. Available at: <https://scialert.net/abstract/?doi=itj.2010.1739.1746>.
- Forenbacher, I. Siniša Husnjak, Ivan Cvitić, and Ivan Jovović. 2019. “Determinants of mobile phone ownership in Nigeria.” *Telecommunications Policy* 43, Issue 7: 101812. Available at: <https://doi.org/10.1016/j.telpol.2019.03.001>.
- Forenbacher, I. Siniša Husnjak, Ivan Cvitić, and Ivan Jovović. 2017. “Exploring Digital Divide in Mobile Phone Ownership: Evidence from Nigeria.” *The 5th International Virtual Research Conference in Technical Disciplines*. Available at:

https://www.bib.irb.hr/915133/download/915133.Exploring_Digital_Divide_in_Mobile_Phone_Ownership_-_Evidence_from_Nigeria.pdf.

Gender-Based Violence AoR. GBV AoR Helpdesk: 2021. “Gender-Based Violence in Emergencies. Learning Series on Technology-Facilitated Gender-Based Violence.” *Learning Brief 1: Understanding technology-facilitated GBV*. Available at: https://www.sddirect.org.uk/sites/default/files/2022-07/GBVAOR~1_5.PDF.

Gillwald, A., Fola Odufuwa, and Onkokame Mothobi. 2018. *The State of ICT in Nigeria 2018*. Available at: <https://researchictafrica.net/wp/wp-content/uploads/2018/12/After-Access-Nigeria-State-of-ICT-2017.pdf>.

GSMA. 2020. *The Mobile Gender Gap Report 2020*. Available at: <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/GSMA-The-Mobile-Gender-Gap-Report-2020.pdf>.

GSMA. 2022. *The Mobile Gender Gap Report 2022*. Available at: <https://www.gsma.com/r/gender-gap/>.

Ibrahim, H. J. 2018. “Gender Disparity in Internet Access and Usage in Nigeria: Implication for Development.” *International Journal of Law, Government and Communication* 3, Issue 12: 41-50. Available at: <http://www.ijlgc.com/PDF/IJLGC-2018-12-12-05.pdf>.

International Telecommunication Union (ITU). 2021. *Measuring digital developments: Facts and figures 2021*. Available at: <https://www.itu.int/itu-d/reports/statistics/facts-figures-2021/>.

National Bureau of Statistics. 2021. “Telecoms Data: Active Voice and Internet per State, Porting and Tariff Information (Q2, Q3, Q4 2021).” Available at: <https://nigerianstat.gov.ng/elibrary/read/1241133>.

National Information Technology Development Agency (NITDA). 2021. *Strategic Roadmap and Action Plan (SRAP 2021-2024)*. Available at: <https://nitda.gov.ng/wp-content/uploads/2021/04/NITDA-ROADMAP.pdf>.

Plan International. n.d. “Bridging the Gender Digital Divide.” Available at: <https://plan-international.org/quality-education/bridging-the-digital-divide/>.

Plan International. 2020. *Free to be ONLINE? Girls’ and young women’s experiences of online harassment*. Available at: <https://plan-international.org/uploads/2022/02/sotwgr2020-commsreport-en-2.pdf>.

The World Bank. 2020. “Individuals using the Internet (% of population) – Nigeria.” 2020. Available at: <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=NG>.

UNICEF. 2020. “Internet Safety Day – Online harassment.” UReport. Available at: <https://ureport.in/opinion/3983/>.

UNICEF. 2021. *What we know about the gender digital divide for girls: A Literature Review*. Gender and Innovation Evidence briefs – Insights into the gender digital divide for girls. Available at: <https://www.unicef.org/eap/media/8311/file/What%20we%20know%20about%20the%20gender%20digital%20divide%20for%20girls:%20A%20literature%20review.pdf>.

USAID. n.d. “Digital Strategy 2020-2024.” Available at: https://www.usaid.gov/sites/default/files/2022-05/USAID_Digital_Strategy.pdf.pdf.

U.S. Department of State and USAID. 2022. “United States Strategy to Prevent and Respond to Gender-Based Violence Globally.” Available at: https://www.state.gov/wp-content/uploads/2022/12/GBV-Global-Strategy-Report_v6-Accessible-1292022.pdf.

Vodafone Foundation and Girl Effect. 2018. *Real lives, real girls, connected: A global study of girls’ access and usage of mobile told through 3000 voices*. Available at: <https://girleffect.org/real-girls-real-lives-connected-a-global-study-of-girls-access-and-usage-of-mobile-told-through-3000-voices/>.

ANNEX A

TABLE 2: CLOSING THE GENDER DIGITAL DIVIDE TO IMPROVE USAID SECTOR OUTCOMES

SECTOR	EXAMPLES OF INTERVENTIONS TO IMPROVE SECTOR-SPECIFIC DEVELOPMENT OUTCOMES
DEMOCRACY, HUMAN RIGHTS, AND GOVERNANCE	<ul style="list-style-type: none"> • Through learning new skills and using digital platforms, women and girls have been able to build self-confidence, increase their economic power and independence, and make better-informed decisions. <i>Design activities to encourage women and girls to learn new skills and use digital platforms.</i> • Mobile and Internet can enable women to communicate with peers online, to exchange information and build solidarity, and to lobby decision-makers. <i>Develop opportunities for women and girls to communicate with peers online and build solidarity.</i> • The Internet is a space for commentary on important issues, and in some contexts, the Internet has made it safer for women to express their views. <i>Encourage women and girls to use the Internet as a space to raise their voices.</i> • Internet use can also make women and girls more aware of their rights, including government assistance and pension rights, and protection from gender-based violence. <i>Utilize the Internet and digital tools to encourage women and girls to be more aware of their rights.</i> • There is evidence that women’s increased access to mobile devices and the Internet has increased female participation in government elections. <i>Utilize digital tools to promote increased knowledge of and participation in government elections; also implement strategies to improve the participation of women who do not have access to mobile devices and the Internet.</i>
ECONOMIC GROWTH AND TRADE	<ul style="list-style-type: none"> • Mobile phones and the Internet can help overcome the structural barriers faced by female farmers and entrepreneurs by giving them information on production, storage, prices, transportation, or weather. <i>Utilize mobile phones and internet to deliver information tailored to women’s specific needs and increase access to markets, services, and information.</i> • Financial technology and access to mobile and the Internet can help overcome the credit gap for female entrepreneurs by offering opportunities for women to increase revenues and savings, making them more resilient to risk. <i>Develop interventions to help women utilize digital finance.</i> • Mobile and mobile services have been used to assess creditworthiness and lending for female-led businesses, where more traditional financial institutions are not as engaged. <i>Explore opportunities for alternative credit evaluation methods using mobile services.</i>
EDUCATION	<ul style="list-style-type: none"> • Mobile phones and the Internet can provide education and training opportunities for school-aged girls who are out of school, as well as for adult women, giving them opportunities for “any time, any place” learning through their devices. <i>Explore opportunities to support flexible digital learning for women and girls.</i> • Education environments shape social norms for technology use. <i>Promote an interest in and create opportunities for building digital skill at young ages, especially with young and adolescent girls.</i>
HEALTH	<ul style="list-style-type: none"> • Access to and use of mobile and the Internet gives women increased access to information, which can improve their access to treatments and healthcare, especially maternal health. <i>Develop strategies for improving women’s access to information on health care.</i> • Giving life-saving information to women through mobile or Internet can shape healthy behaviors to address the main causes of maternal, newborn, and child deaths (for example, information about safe delivery of babies and preventive prenatal and postnatal care). It can provide life-saving information for other health areas, such as HIV/AIDS. <i>Develop ways to provide women with life-saving information to help prevent maternal, newborn, and child deaths.</i> • mHealth can also benefit women more indirectly, by allowing data collection through digital technologies that may complement socioeconomic statistics, especially in areas where data is scarce. <i>Collect data collection through digital technologies to complement socioeconomic and sex-disaggregated statistics.</i>

Source: “[Tool 2: Closing the Gender Digital Divide to Improve USAID Sector Outcomes](#)” section of *The Gender Digital Divide Gender Analysis Technical Resource*. The table has been reproduced with modifications and additions to the Education sector.