G2O BRASIL 2024

T20 Brasil 2024
Let's rethink the world

Task Force 05
INCLUSIVE DIGITAL TRANSFORMATION

Ensuring Accessible and Inclusive Digital Infrastructure

Camila Fernandez Achutti, Co-Chair of the Women in STEM Working Group and Delegate, W20 Brazil (Brazil)

Tamara Dancheva, Senior International Relations Manager, GSMA; Co-Chair of the Women in STEM Working Group and EU Head Delegate, W20 European Union (EU)

Lauren S Power, Adjunct Professor, Sophia University; Co-Chair of the Women in STEM Working Group and Delegate, W20 USA (Japan, USA)

TF05

Abstract

The digital divide remains a significant barrier to economic and social participation, with underserved communities facing systemic exclusion from digital access. This gap hinders their ability to participate fully in the digital economy, access educational resources, and engage in society digitally. Expanding accessible and inclusive digital infrastructure supports the G20's objectives of promoting an inclusive digital economy and reducing inequalities. This approach is also critical for achieving the United Nations Sustainable Development Goals, particularly reducing disparities, promoting gender equality, and fostering innovation and infrastructure development. The Broadband Commission for Sustainable Development has emphasized the need for universal internet access, while the United Nations EQUALS Global Partnership focuses on gender equality in the digital age. However, there is a need for more concerted efforts explicitly targeting the intersection of gender and socioeconomic factors that lead to digital exclusion. Actionable recommendations for the G20 include: 1) Expanding digital access in underserved communities by providing safe and accessible public internet access and training facilities to serve women and girls, specifically focusing on communities with significant populations of underserved women. Public-private partnerships can be leveraged to deploy affordable and reliable internet services; 2) Improving the usability and accessibility of e-government content and services for women with limited literacy, language, and ICT-related skills and confidence can involve providing an interactive voice response (IVR) helpline using simple terminology, local languages, icons/symbols/pictures/videos, and comic-style stories in addition to (or instead of) text. Local content creation and ensuring that women with lower literacy levels are included in pilot projects and user testing of e-government services are crucial.

Keywords: digital gender divide; digital economy; coverage gap; usage gap

Diagnosis of the Issue: The Widening Digital Gender Divide

The digital divide, characterized by unequal access to and use of digital technologies, presents a significant barrier to global economic and social participation. This gap disproportionately affects underserved communities, particularly those with large populations of women. This translates into a widening digital gender divide, where women are less likely than men to own smartphones, access mobile internet, and leverage the full potential of digital tools. Statistics show a persistent gap across low—and middle-income countries: women are 17% less likely than men to own a smartphone and 15% less likely to use mobile internet, which remains the primary way many users access the internet in these regions.

This lack of access hinders underserved women's ability to fully integrate into the digital economy, access educational resources, and participate in society through digital means. It exacerbates existing inequalities and undermines efforts to promote economic growth, reduce disparities, and enhance social inclusion. The G20's commitment to fostering an inclusive digital economy and the United Nations' Sustainable Development Goals (SDGs), particularly those focused on gender equality, become even more crucial in addressing this challenge.

The digital divide manifests in two key areas: coverage and usage. The coverage gap refers to the 5% of the global population lacking access to mobile broadband networks. The usage gap, a more significant barrier for many, refers to the 38% of the global population living within a network but still not using mobile internet services. Research by the GSMA highlights the key reasons behind this usage gap, particularly among underserved women in low- and middle-income countries:

- Affordability: The affordability of internet-enabled devices and data plans can be a significant barrier for many women.

- Digital literacy: A lack of awareness about the benefits of mobile internet and the skills needed to use it effectively can prevent women from using these resources.

- Content relevance: The absence of content and services tailored to women's needs and interests can further limit their engagement with the digital world.

- Safety and Security: Concerns about the negative aspects and risks of mobile and internet use, such as harassment, theft, fraud, and online security, can deter women from participating fully in the digital sphere.

- Lack of access to networks and enablers (such as internet-enabled handsets, agents, and formal identification documents (IDs) or devices and services that are inaccessible or easy to use).

Addressing these challenges requires a multifaceted approach. This policy brief proposes actionable recommendations for the G20, emphasizing the critical role of expanding digital access in underserved communities with a focus on women. By prioritizing investments in infrastructure development, fostering public-private partnerships to deliver affordable internet services, and promoting digital literacy programs, the G20 can bridge the digital divide and empower underserved women to participate fully in the digital age.

Underserved women face a complex web of challenges regarding digital inclusion. Socioeconomic factors like income level, geographic location, and disability status all play a significant role. Women from low-income backgrounds, rural areas, or those lacking formal education or training may need help accessing technology and the Internet. Additionally, cultural and linguistic barriers can limit their digital literacy and confidence.

This intersection of socioeconomic status, race/ethnicity, and disability creates a multitude of obstacles that hinder their ability to access education, economic opportunities, and online communities. Recognizing this complexity is crucial for developing targeted solutions that empower underserved women and bridge the digital gender divide.

Recommendations

Recommendation 1: Invest in Expanding Digital Infrastructure with a Focus on Women's Inclusion.

Implementation:

- Prioritize investment in broadband infrastructure: Focus on rural and remote regions where globally, women are 14% less likely than men to access the internet, according to a 2021 World Bank report. This can be achieved through:

- High-speed internet connections: Facilitate remote work opportunities often preferred by women due to childcare responsibilities.

- Mobile network development: Ensure reliable and affordable mobile data access, the primary internet connection method for many in developing regions.

- Investment-friendly policy frameworks: Streamline permitting processes for mobile network deployments, attracting private investment.

- Leverage public-private partnerships (PPPs) with gender-inclusive targets: Incentivize private sector investment with clear goals for increasing women's internet access in underserved areas. This can be achieved through:

  - Investment-friendly spectrum policies: Offer incentives for mobile operators to expand network coverage in rural areas, specifically targeting regions with high female populations.

  - PPP contracts with gender-focused metrics: These contracts hold private partners accountable for achieving specific targets related to women's digital inclusion.

  - Support the development of local Internet Exchange Points (IXPs): This will improve internet quality and reduce costs, making it more affordable for women who are often financially constrained.

Argument:

- Reduced Gender Divide: The World Bank reports that closing the gender gap in internet access could add $180 billion to the GDPs of low- and middle-income countries. By focusing on underserved areas with high female populations, we can significantly impact the digital gender divide.

- Economic Empowerment: Internet access empowers women to:

  - Start and grow businesses: Online platforms provide access to markets and customers, fostering female entrepreneurship.

  - Find better employment: Job opportunities are increasingly available online, requiring internet access for applications and training.

     o Develop skills: Online courses and educational resources can empower women to pursue careers in technology and other fields.

- Education and Social Inclusion: The Internet provides access to educational resources, healthcare information, and communication tools, promoting social inclusion for all women in underserved communities.

Implementing these strategies, which focus on women's inclusion, can leverage digital infrastructure to unlock economic opportunities, education, and social participation for women in underserved areas.

Recommendation 2: Ensure Availability of Inclusive Digital Tools for Women's Empowerment

Implementation:

- Develop Digital Public Services for Women: Design and test government content, applications, and services through consultations with diverse women. This includes:

     o Women from low-income groups: Ensure services address the specific needs of women facing economic hardship.

     o Women with disabilities: Develop accessible services that cater to the needs of women with visual, hearing, or mobility impairments.

     o Women who don't use mobile services: Design services accessible through various platforms (web, SMS) beyond mobile apps.

- Promote Local Content by and for Women: Fund and incentivize the creation of digital content that:

  o Addresses the needs and interests of underserved women: Focus on topics relevant to their experiences and aspirations.

  o Is created by women: Support content creation by women entrepreneurs and community leaders, fostering diverse voices and perspectives.

- Invest in Gender-Inclusive Digital Literacy Programs: Provide training programs tailored to the needs of women in marginalized communities, including:

  o Mobile-first Basic Skills: Make mobile literacy a core focus, considering it's the primary internet access method for many women.

  o Advanced Skills for Economic Opportunities: Offer training in areas like e-commerce, digital marketing, and coding to equip women with skills for online businesses and careers.

Argument:

- Bridging the Gap: Globally, 25% fewer women than men have the basic digital skills needed to use the internet effectively (ITU Digital Gender Divide Report, 2022). These programs can bridge this gap and empower women.

- Empowering Women Entrepreneurs: Digital literacy helps women launch and manage online businesses, fostering economic independence.

- Social Inclusion and Safety: Training equips women to access information, connect with support networks, and navigate the online world confidently and safely.

By focusing on these strategies, we can ensure digital tools are accessible and empowering for all women, regardless of background or technological experience.

This will unlock the full potential of digital technologies for women's participation in society and the economy.

Recommendation 3: Foster Digital Innovation and Entrepreneurship for Women

Implementation:

- Support Women-Led Businesses with Inclusive Solutions:
- Funding for Inclusive Apps and Content: Allocate grants and funding for applications and online content that specifically address the needs and challenges faced by women. Prioritize solutions developed with and for women.
- Empower Women Digital Entrepreneurs:

  o Funding and Mentorship Programs: These programs provide financial assistance, mentorship opportunities, and access to venture capital specifically for women-led digital startups. They also connect them with experienced mentors who can provide guidance and support.

  o Networking Opportunities: Facilitate networking events and online communities for women in tech, fostering collaboration and knowledge sharing.

  o Technical Assistance Programs: Offer training programs in areas like coding, product development, and business management, equipping women with the technical skills needed to succeed in the digital space.

- Create Policies Promoting Inclusive Innovation:

  o Tax Incentives for Women-Focused Technologies: Implement tax breaks or subsidies for companies developing digital solutions that cater

to the specific needs of underserved communities, particularly those led by women.

    o   Innovation Grants for Women Entrepreneurs: Offer competitive grants for women-led startups developing innovative digital products or services.

Argument:

- Closing the Gender Funding Gap: The Global Entrepreneurship Monitor reports that only 2.3% of venture capital funding goes to female founders (Global Entrepreneurship Monitor Report). These initiatives can address this gap and empower women entrepreneurs.

- Diversity Drives Innovation: By supporting women-led startups, we can foster a broader range of ideas and solutions that cater to society's diverse needs, leading to more inclusive and impactful innovation.

- Economic Growth and Empowerment: Women-led businesses are a powerful economic force. Investing in women entrepreneurs fosters job creation and economic growth and empowers women to be key players in the digital economy.

Implementing these strategies can create an enabling environment for women to thrive as digital innovators and entrepreneurs. This will drive the creation of inclusive digital solutions, bridge the gender gap in tech leadership, and unlock women's full potential in shaping the future of the digital world.

Recommendation 4: Enhance Gender-Disaggregated Data Collection and Research for Underserved Women in the Digital Economy

Implementation:

- Collect Intersectional Data: Improve data collection mechanisms to capture data on the digital divide disaggregated by factors that contribute to underserved status, including:

  o Focus on Underserved Women: This includes women from low-income backgrounds, living in rural areas, and/or with linguistic, ethnic, and culturally diverse realities.

  o Track Key Metrics: Collect data on internet access rates, digital literacy levels, and online participation among women across these demographics.

- Fund Research on Closing the Digital Divide for Underserved Women: Invest in research initiatives that explore:

  o Effective Interventions: Identify and evaluate strategies that have been successful in closing the digital divide for underserved women. This could include research on affordability programs, mobile phone voucher initiatives, and targeted training programs tailored to specific needs (e.g., language-specific digital literacy courses).

  o Intersectionality and Digital Exclusion: Understand the complex interplay of factors like income, location, language, and cultural background that contribute to digital exclusion for underserved women.

- Leverage Data for Evidence-Based Policy: Data and research findings inform policy decisions and resource allocation. This ensures interventions are:

o　Targeted: This approach focuses on the specific needs of women who face the most significant barriers to digital access, considering factors like income, location, language, and cultural background.

o　Evidence-Based: Supported by data on what works best to close the digital divide for underserved women.

Argument:

- Data Drives Inclusive Solutions: The lack of data disaggregated by factors like income, location, language, and cultural background hinders our understanding of the specific challenges faced by underserved women. Improved data collection is essential for developing inclusive solutions.

- Closing the Gap for All Underserved Women: Research on intersectionality ensures interventions address the unique needs of all underserved women who may face barriers due to income, location, language, or cultural background.

- Data for Better Policy: Data-driven decision-making ensures we invest resources in interventions with the greatest potential to empower underserved women and bridge the digital gender divide.

By prioritizing data collection and research focused on the various factors contributing to underserved status, we can better understand the digital divide's impact on these women and develop targeted strategies for their inclusion in the digital world.

Embracing the recommendations to close the digital divide, especially among underserved communities and women, presents the G20 with a path toward a more inclusive and equitable digital future. Implementing these recommendations can lead to diverse outcomes, each with its own set of implications, contradictions, and trade-offs. Here, we explore three possible scenarios that could emerge from adopting these policy suggestions.

Scenario 1: Broadened Digital Access and Enhanced Opportunities

Outcome: Investments in digital infrastructure and literacy programs significantly reduce the digital gender divide. High-speed internet becomes accessible in previously underserved areas, and tailored digital literacy programs empower local populations, especially underserved women, to leverage digital tools for education, entrepreneurship, and civic participation. This leads to a surge in local innovation, with new businesses and social enterprises emerging, driving economic growth and job creation.

Contradictions and trade-offs:

1. Resource Allocation: Financial resources are required to build infrastructure and implement programs, potentially diverting funds from other critical areas like healthcare or traditional education.

2. Overdependence on Technology: Increased digital access could lead to an overreliance on technology, overshadowing the importance of face-to-face interactions and traditional forms of commerce and community engagement.

3. Vulnerability to Online Threats: Without adequate digital literacy programs, users can spread fake news, misinformation, and online scams. This can have serious consequences, impacting personal finances health decisions, and even fueling social unrest.

Scenario 2: Inequality within Digital Spaces

Outcome: As digital tools and the internet become more accessible, there's an unintended consequence of replicating existing societal inequalities within digital spaces. Despite greater access, not all individuals have the same capacity to leverage these tools effectively. Those with higher levels of education or more resources are better positioned to benefit from the digital economy, potentially exacerbating income and social inequalities even within marginalized communities.

Contradictions and trade-offs:

1. Digital Skills Gap: Bridging the digital divide regarding access does not automatically close the digital skills and literacy gap. Continuous effort and investment are needed to ensure everyone benefits equally from digital opportunities.

2. Privacy and Data Security: Increased digital participation raises concerns about privacy and data protection, especially for vulnerable populations. Ensuring these communities understand and can protect their digital rights becomes an added challenge.

Scenario 3: Cultural and Social Transformation

Outcome: The widespread adoption of digital technologies in underserved communities leads to significant cultural and social changes. Increased access to information and platforms for expression enriches the cultural tapestry, empowering communities to share their stories and preserve their heritage digitally. Additionally, democratizing digital access fosters a new global interconnectedness, promoting cross-cultural understanding and collaboration.

Contradictions and trade-offs:

1. Cultural Homogenization: The internet's global nature could lead to cultural homogenization, where dominant cultures overshadow local traditions and languages, potentially eroding cultural diversity.

2. Digital Divide within Communities: While digital access may increase on a broad scale, disparities in usage and proficiency can emerge within communities, particularly among different age groups or between those with different levels of education. This internal digital divide could lead to social fragmentation and alienation among those left behind.

Conclusion

The decision by the G20 to tackle the digital divide through targeted investments and policies has the potential to reshape the global economic and social landscape, offering unprecedented opportunities for growth and inclusion. However, the pathways to this future are fraught with complexities. Each scenario underscores the importance of nuanced, context-sensitive approaches beyond providing access to technology. Addressing the digital divide effectively requires a multifaceted strategy considering digital inclusion's economic, social, and cultural dimensions. As such, the G20's actions must be accompanied by vigilant monitoring and adaptive strategies to mitigate unintended consequences and ensure that all, especially historically marginalized, equitably share the benefits of the digital age.

References

Global Entrepreneurship Monitor. *Global Report: 25 Years and Growing 2023/2024*. February 2024. https://bit.ly/4bDRj77

GSMA. *Policy considerations to accelerate digital inclusion for women in low- and middle-income countries*. September 2022. https://bit.ly/4aFu6jL.

GSMA. *The Mobile Gender Gap Report 2023*. May 2023a. https://bit.ly/4bzMjQR.

GSMA. *Understanding women micro-entrepreneurs' use of mobile phones for business*. November 2023b. https://bit.ly/4dVSFvv.

GSMA. *State of Mobile Internet Connectivity Report 2023*. October 2023. https://bit.ly/3KoMjHD

ITU. *"The gender digital divide". Facts and Figures 2023*. Accessed 8 May 2024. https://bit.ly/3KjCJFI.

World Bank Group. *Digital Development Note on Gender Equality*. November 2021. https://bit.ly/4aEnbaC