

Gender and Digital Public Infrastructure Opportunity for Innovation, Inclusion, and Transformation

Evelyne Mukamana
Kabeza Market, Rwanda

Digital Public Infrastructure (DPI) presents a unique opportunity to accelerate the achievement of the Sustainable Development Goals (SDGs), including Goals 5 (achieve gender equality and women's economic empowerment) and 8 (promoting work and economic development for all). DPI is "society-wide, digital capabilities that are essential to participation in society and markets as a citizen, entrepreneur, and consumer in a digital era" – much like the physical infrastructure (roads, bridges, electricity grids) that enable people, businesses, and governments to participate in the economy and deliver social services. Three common components of DPI are digital payments, digital ID, and data exchange.

DPI presents a once-in-a-generation opportunity to design and implement equitable, society-wide digital infrastructure that works for all. As half the world's population, women and girls should make up half of the users of DPI in each country where it is adopted; thus, designing DPI systems to ensure women and girls benefit from them is crucial. Women and girls are often left out of the design of digital systems, deepening their exclusion from the modern economy and limiting their access to essential services.

Why DPI Should Be Designed for Gender Equity Digital Payments

Many women face barriers to participating in the economy, including limited access to financing, markets, jobs, training, education, and skills-building opportunities. The digital economy has broadly replicated these challenges, resulting in a gender gap in digital financial access. In 2021, 74 percent of men but only 68 percent of women in developing economies had an account.

Digital payments have already shown significant potential to expand women's financial inclusion in many ways, including reducing the time it takes to access financial services (e.g. opening a bank account or applying for credit), making it easier to save money, and improving physical security because women do not need to carry cash.

Digital payments can also reduce gender-based discrimination in financial services by automating decisions about credit-worthiness and by allowing financial services providers to better understand business operations over time. These lead to lower interest rates for women-owned businesses, which is particularly important as women-owned businesses are more likely to operate in the informal economy, and therefore can be harder to reach with traditional financial institutions and services.

In addition, digital government-to-person (G2P) payments make it easier for women to access social protection payments that improve the wellbeing of women and girls. Often G2P payments serve as a catalyst for women to open bank accounts; across developing countries, 36 percent of adults who received digital government payments opened their first account specifically in order to receive the benefit, with countries like Brazil, Mexico, South Africa, Mongolia, and Iran leading the way.

“
DPI presents a once-in-a-generation opportunity to design and implement equitable, society-wide digital infrastructure that works for all.”

Digital ID

Legal identity is a fundamental driver of access to rights. In many countries, a child's birth certificate is the foundational document that unlocks access to future opportunities, including education, social protection benefits, marriage certificates, and more. Yet women often face greater barriers to accessing an official ID, including onerous documentation requirements, prohibitive registration fees, and in some cases different registration requirements from men, resulting in a gender gap in official IDs. As of 2022, the World Bank estimated that women in low and middle income countries were 8 percent less likely than men to have a formal ID.

While there is limited formal research on its impacts, reports suggest that digital ID can increase women's access to social services, including financial services, particularly when combined with strong data exchange mechanisms. Moreover, having an official ID can create a sense of belonging; as one woman in Ghana shared with DIAL, the GhanaCard "makes you believe and know that you are from Ghana."

Challenges and Risks to Address

While DPI holds tremendous potential to increase the social and economic inclusion of women and girls globally, there are challenges and risks that must be addressed:

- Complex data collection processes that can serve as barriers to participation for women, especially those from marginalized communities, who tend to have more caretaking responsibilities and greater constraints on their time.
- Inconsistent access to the internet, whether through limited access to a mobile phone, frequent internet outages, high mobile data costs, or low levels of literacy and digital literacy.
- Poorly designed data systems where small but meaningful data collection choices can exclude women – for example, drop down menus for primary occupation might not adequately capture the roles of women who have multiple informal sector jobs.
- Insufficient safeguards. In the absence of strong data privacy laws and enforcement mechanisms, data can be misused to target vulnerable populations.
- Gender-based violence can increase when men feel threatened by women's increased economic independence; however, greater financial resources can also enable women and their children to leave abusive relationships.
- A lack of dispute resolution can deepen women's exclusion if mistakes in one database are transferred to multiple programs through data exchange mechanisms. There must be accountability and safeguard mechanisms designed using a clear gender lens.

Recommendations

DPI presents a unique opportunity to dramatically expand the economic and social opportunities of women and girls globally. To do so, a gender-equitable design cannot be a one-off activity. "Rather," as IT for Change says, "it is a continuous process of making deliberate and conscious choices to prioritize the aims of gender equality and social justice across all stages of the system design and implementation." However, this will require a conscious decision to invest in DPI applications and campaigns that proactively consider the full life arc of a woman and understand how DPI can be leveraged to deliver real benefits for women and girls in all their diversity.

Data Exchange

While there is limited direct research on the challenges and opportunities of data exchange for hindering or achieving gender equality, there are many reasons to believe that a DPI approach to data exchange, when coupled with strong digital privacy and data protection, can improve outcomes for women and girls. Analog social protection systems often involve duplicative processes to access different services, which is disproportionately burdensome to women, as they are more likely to serve as primary caretakers and have greater constraints on their time and movement. By contrast, data exchange layers can streamline enrollment processes for service delivery, thereby saving women time and increasing their access to additional services and benefits. In India, for example, the 300 million unorganized workers who are registered for the e-Shram portal can currently use it to access 10 different social welfare schemes.

For Governments

- Utilize the D3 criteria: "digitizing priority social protection programs, directing the payments into women's accounts, and designing the program so that they expand women's opportunities."
- Engage local communities and encourage training when using DPI systems to target and validate beneficiaries, and when evaluating social protection program results.
- Develop strong grievance redressal mechanisms that can be utilized remotely. For example, Bangladesh has set up a call center to address issues with G2P payments.
- Enact strong data protection and privacy laws to avoid misuse of data and engender greater trust in DPI systems.
- Continue to allow analog options for participating in social protection programs, to avoid deepening the exclusion of those who are unable or unwilling to utilize digital methods.

For Digital Public Goods and Technical Assistance Providers

- Employ the Principles for Digital Design to ensure a thoughtful and comprehensive approach to platform design.
- Rather than design for a generic non-gendered user, design with women and specific marginalized subpopulations in mind.
- Incorporate mechanisms to seek consent both when collecting and when using data.

For Donors

- Invest in applications of DPI and DPGs that have a primary aim of promoting gender equality, inclusion and safety, and preventing forms of technology-facilitated gender-based violence.
- Include gender analysis and design in funding allocations for DPI and DPGs, and fund research on the impacts of DPI on women and girls.