Accelerating Gender Equality in Digital Development

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1. Motivation and Approach

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Motivation

The Digital Development Note on Gender Equality outlines how the Global Practice (GP) can actively close gaps between women and men, boys and girls through its operations, analytical work, and partnerships. It provides a high-level overview of key issues, identifies good practices, and notes gaps in data, research, and evidence.

This Note responds to the World Bank Group Gender Strategy (2016-2023). It is also guided by IDA19 and is forward-looking toward IDA20, which highlights technology as a cross-cutting issue. IDA19 includes commitments on adopting modern technology in agriculture in at least 66% of projects and expanding digital infrastructure under the Jobs and Economic Transformation special theme across 25 IDA countries. IDA19 also includes specific commitments at the intersection of gender equality and digital development under the gender special theme.

Beyond institutional momentum, the COVID-19 pandemic has brought digital technologies to the fore. Access is no longer a luxury but a necessity. The pandemic has further revealed the disparities across and within countries as technology has become a lifeline for education and work, as well as access to information and services, among other functions.

The pandemic has had different impacts on women and men. For instance, women are overrepresented in some of the hardest hit occupations by the pandemic, like retail, entertainment, and tourism; women are more likely to work informally in low- and middle-income contexts with less access to safety nets; and women face increasing time constraints due to caring for children as a result of school closures, as well as for the sick and elderly in their families and communities. Emerging research from high-income countries reflects these trends and highlights that gender gaps in employment due to the pandemic are almost entirely concentrated among workers who are unable to telecommute. This may suggest that women have the most to gain from being able to work from home, but mothers also reported significantly larger productivity declines than fathers among parents of school-aged children.

Overall, COVID-19 threatens hard won gains on gender equality and has turned technology into a critical lifeline. Ensuring gender equality is at the center of the design and implementation of digital development interventions is essential to a green, inclusive, and resilient recovery in the aftermath of COVID-19.

Approach

The Digital Development Note on Gender Equality was informed by a desk review of secondary literature to identify key issues and potential solutions that may help bridge gender digital divides.

Given the lack of impact evaluations in digital development, the Note considers a wide range of qualitative studies, grey literature, and where possible, information from impact evaluations in adjacent fields that may inform the design and implementation of digital development programs.

A needs assessment was conducted with task team leaders in the GP to help inform the focus areas of the overall Note as well as include lessons learned from previously implemented projects relevant to gender inclusion.

After a draft of the Note was completed, unit-level feedback was sought from all units within the Global Practice to help enhance its relevance and focus areas for all task teams. Feedback from the management team was also solicited and incorporated. A decision meeting with peer reviewers from within and outside the World Bank Group helped provide further insights and sharpen the document.

The Note is the first step in outlining the approach. The goal is to move forward on implementation through the development of supporting tools for operational teams, including insights on how to conduct gender analyses; good practice interventions and components; sample indicators; as well as a consultant roster and sample terms of reference documents.

2. Gender Equality at the World Bank Group

World Bank Gender Strategy (2016–2023)

1 Improving Gaps in Human Endowments (health/education/ social protection)

2 Removing Constraints for More and Better Jobs

3 Removing Barriers to Women's Ownership and Control of Assets

4 Enhancing Women's Voice and Agency and Engaging Men and Boys

Addressing "sticky" first generation gaps in health (maternal mortality) and education. Working on emerging, second-generation issues, such as, ageing and noncommunicable diseases.

Lifting constraints to increase the quantity and quality of jobs and closing earnings gaps with a focus on women's labor force participation, occupational sex segregation, care services, and safe transport.

Improving conditions under which women can secure ownership of and control over productive assets and access the finance and insurance needed to acquire those assets.
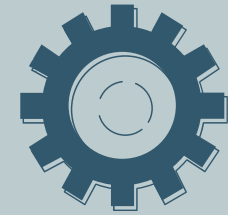
Helping to prevent and respond to gender-based violence and address adverse masculinity norms and enhance women's voice and agency.

Building the resilience of women and men to cope with natural (climate change) and human (conflict) shocks

(World Bank 2015)

World Bank Gender Strategy: Operationalizing the Objectives

To achieve these objectives, the Strategy emphasizes:

1. Outcomes and results through strengthening the country-driven approach using better diagnostics, policy dialogue, and sex-disaggregated data

2. Improving the evidence base to build on what works (especially investing in impact evaluations, especially on women's employment and asset ownership)

3. Building on what works—better identifying and disseminating of sectoral good practices, building staff capacity, and encouraging cross-sectoral collaboration

4. Adopting a strategic approach to project design (rather than gender mainstreaming everywhere) and developing a new monitoring system focused on results (the gender tag)

5. Leveraging partnerships for effective outcomes, especially with key UN agencies, among others

WBG Gender Strategy: Links to Digital Development

1 — Improving Gaps in Human Endowments (health/education/ social protection) → Increasing girls' enrollment and engagement in STEM; basic digital literacy and skills, access to educational technologies, and access to technologies as an endowment.

2 — Removing Constraints for More and Better Jobs → Digital technologies as a pathway to economic opportunities, especially through online work that may provide flexibility, and opportunities to overcome challenges to women's mobility; addressing occupational sex segregation by increasing women's participation in STEM employment.

3 — Removing Barriers to Women's Ownership and Control of Assets → Technology as an asset and key enabler of digital financial inclusion; digital tools to help women entrepreneurs start and grow businesses; better connecting women entrepreneurs to markets through e-commerce.

4 — Enhancing Women's Voice and Agency and Engaging Men and Boys → Enhancing women's access to information and knowledge through technology; digital platforms for organizing and building social and professional networks and capital; opportunities for civic participation.

IDA19 Policy Commitments on Gender Equality and Technology

At least 60 percent of IDA19 financing operations for digital skills development will support women's access to higher productivity jobs, including online work.

All IDA19 financing operations for Digital Development will support women's increased access to and usage of digital services.

50 percent of entrepreneurship and micro, small and medium enterprises (MSMEs) projects will incorporate digital financial services and/or digital entrepreneurship elements and ensure they address constraints facing women and people with disabilities.
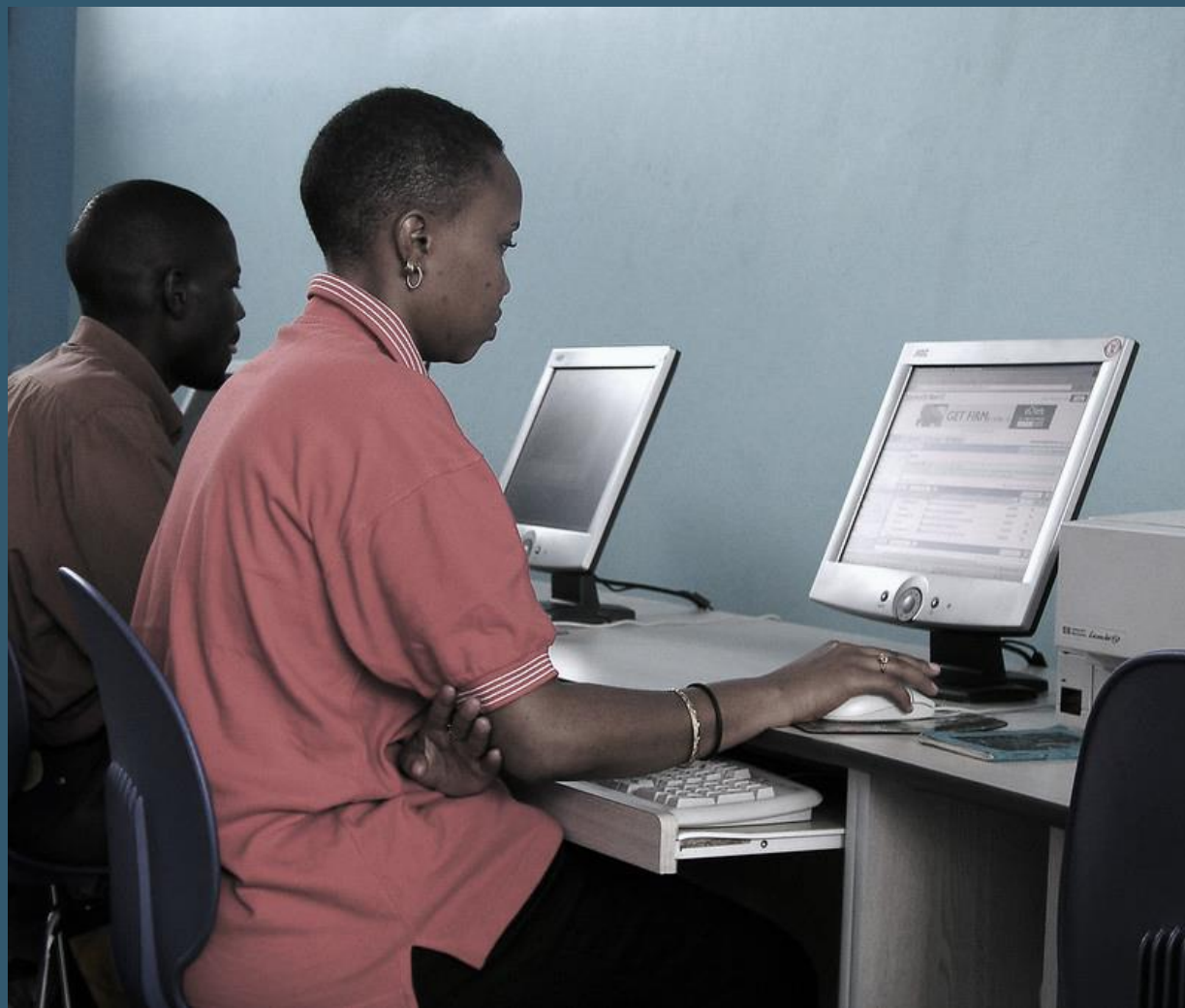
(IDA19 Final Replenishment Report)

Links to the Twin Goals

Closing gender gaps in access to and use of digital technologies is central to the World Bank Group twin goals of ending extreme poverty and boosting shared prosperity.

Digital technologies can facilitate access to education, information, and expand access to economic opportunities, while overcoming mobility constraints. They can also create new jobs, facilitate access to digital financial services and enable the growth of digital businesses, thereby supporting the twin goals.

Access to and use of digital technologies also helps improve public service delivery, increase access to information and fosters greater citizen engagement.

Yet, gender gaps exist across all these domains. For example, women's economic opportunities have stagnated, with women more likely to engage in lower paid work, lower productivity activities, and informal employment. Gaps between men and women persist in ownership of physical and financial assets, such as land, housing, and digital financial services.

Closing the Gender Digital Divide is Key to a Green, Inclusive, and Resilient Recovery

Digital technologies can attract more women into agriculture and enable their growth by providing information on demand and supply, cropping techniques, prices, weather, and transportation; providing access to digital financial services; and providing access to a community of farmers, cooperatives, and markets.

If women farmers had the same access to resources as men, agricultural production in LMICs would increase by 2.5-4 percent, which can lead to a 12-17 percent reduction in global hunger (equating to 100-150 million fewer hungry people) *(FAO 2011)*.

Digital technologies enhance access to markets, services, and information, boosting women's agency, self-reliance, and economic activity. Women with daily internet access are three times as likely to see their income increase compared to infrequent users.

Economies with higher levels of female entrepreneurial activity are more resilient to financial crises. If women were to fully participate in the economy identically to men, this would contribute US$28 trillion to annual global GDP by 2025 *(McKinsey 2015)*.

Access to digital technologies can help assess creditworthiness and enhance lending for women-led businesses, which are currently financially underserved and see a $260-320 billion gap within formal small and medium enterprises *(World Bank 2010)*.

Closing the gender gap in mobile Internet use in low- and middle-income countries can deliver an additional $700 billion in GDP growth *(GSMA 2019)*.

3. Digital Development and Gender Equality: Key Issues

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i. Digital Infrastructure*

*Digital infrastructure refers not only to the physical infrastructure of connectivity, but also the social and economic issues that affect access, such as affordability, usage, literacy, and social norms.

Barriers to Access and Use

1

Barriers to ICT access and use for women are varied; these include lack of physical infrastructure, lack of a supportive policy environment that integrates gender targets in policy and regulatory frameworks, affordability, lack of digital literacy and skills, availability of relevant content, threats to safety, and social norms. Even when physical infrastructure is present, social and gender norms may limit access and use. Due to affordability and other challenges, women may rely on sharing and borrowing devices more than men. Yet these practices often raise privacy concerns and can also prevent women from developing their digital skills *(World Bank 2018)*.

2

The cost of data and internet-enabled devices are especially prohibitive *(GSMA 2015; Broadband Commission 2017)*. The prices of equipment are unnecessarily inflated because of various taxes, duties and royalty stacking on IT devices *(Broadband Commission 2013)*. Regulatory challenges, like a lack of healthy competition in telecommunications markets and the misuse and allocation of spectrum, also impact costs and quality *(IGF CENB 2016)*. However, low-cost devices tend to lack the functionality and design that users demand or prefer *(A4AI 2016)*.

3

Due to gaps in economic opportunity, such as lower paying or less secure jobs, women may have less disposable income and fewer opportunities to access credit; as a result, lower prices and costs could disproportionately benefit women. However, other measures need to be considered, such as digital skills and literacy, relevant content, social norms, and safety considerations *(A4AI 2016; APC 2015; GSMA 2015)*.

Gender gaps persist in access and use of digital technologies across low- and middle-income countries

- Globally, **48.4%** of women are using the internet versus **58.3%** of men. In all regions, men use the Internet more than women.

- Globally, gender gaps in internet use have decreased in Europe and Central Asia but these disparities have increased in all other regions between 2013 and 2019.

Internet penetration rate for men and women (2019)*

■ Male ■ Female
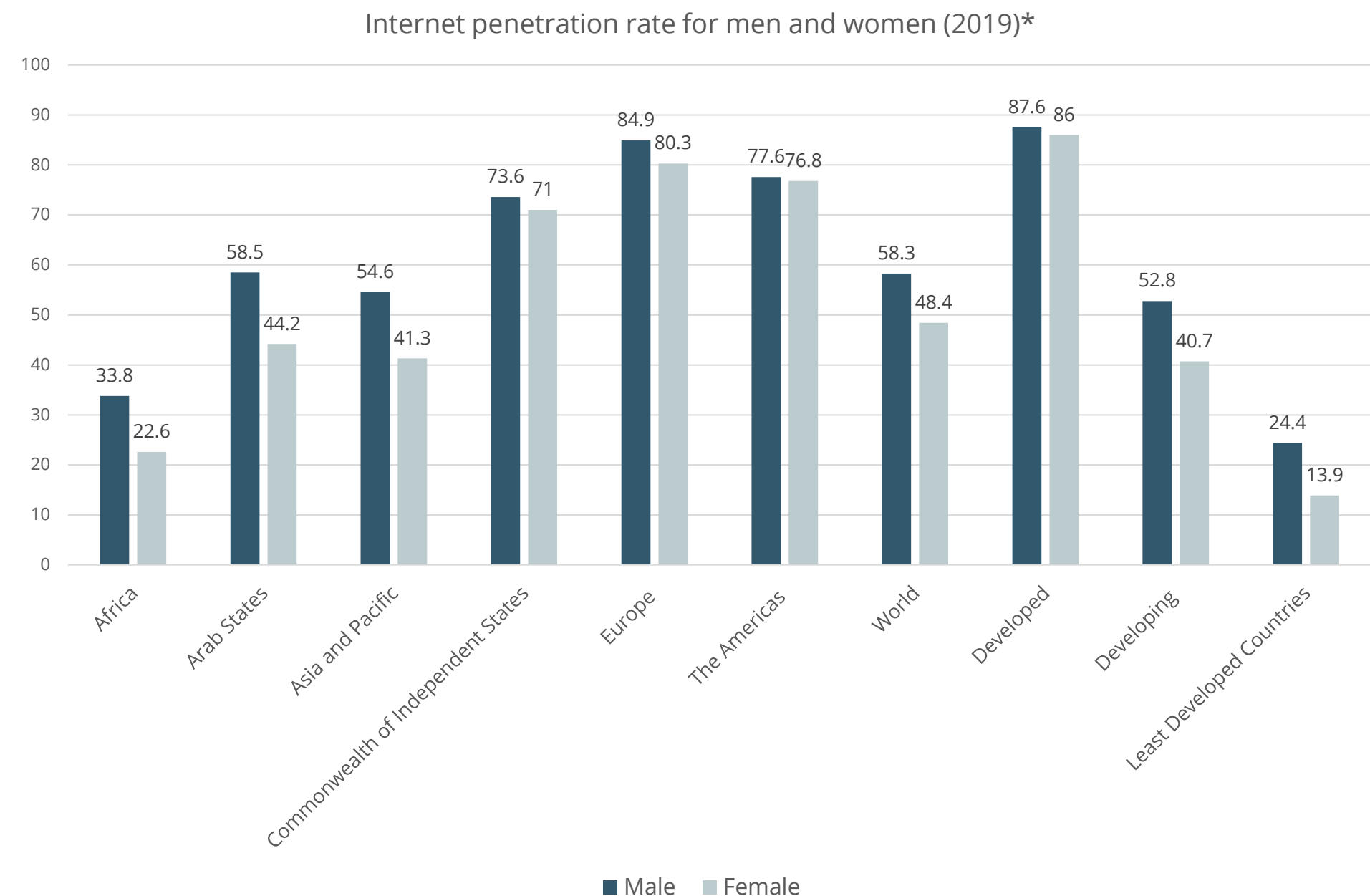
Note: *ITU estimate. Penetration rates refer to the number of women/men that use the internet, as a percentage of the respective total female/male population.

(ITU 2019)

Gender gaps persist in access and use of digital technologies across low- and middle-income countries

83% of women own a mobile phone, but women are 7% less likely to own a mobile phone than men, equivalent to 143M fewer women than men.

58% of women use mobile internet, but women are 15% less likely to use mobile internet compared to men.

933M women not using mobile internet. Largest gender gaps are in South Asia (36%) and the Africa Region (37%).

When looking at mobile internet, the coverage gap (referring to those living outside of areas covered by mobile broadband networks) continues to narrow and is just under 600 million people. The usage gap is much bigger—approximately 3.4 billion people live in areas covered by a mobile broadband network but do not use mobile internet. The usage gap is six times bigger than the coverage gap and more significant.

(GSMA 2020; GSMA 2021)

Key barriers to access and use

Affordability

The high cost of handsets and data are often cited as barriers to access. While this is often a challenge for both women and men, women's lack of access to economic opportunities tends to exacerbate exclusion. For example, 42% of female mobile users in Uganda who are aware of mobile internet cite the cost of handsets as the most important barrier to them using it, vs. only 29% of men.

Literacy/skills

Challenges related to skills, literacy and education also limit access and use for women. For example, 36% of female mobile users in Senegal who are aware of mobile internet cite problems reading and writing as the most important barriers to them using it, vs. only 12% of men. These limitations contribute to a lack of confidence in using technology.

Social norms

Gender norms also play a strong role in limiting access for women and girls. In many cases, family members discourage women's use of the internet. For example, in Pakistan, 38% of women who do not own a mobile phone cite family disapproval as the main reason, vs. only 7% of men.

These barriers tend to differ according to location, income, and education levels among other factors. Exclusion is often worse for older women living in rural contexts as well as the urban poor. In many cases the urban/rural divide or age disparities are larger gaps than gender. Therefore, further analysis is typically needed. In many ways each of these barriers is cross-cutting and can compound other vulnerabilities, highlighting the need for intersectional analysis in design, implementation, and evaluations in this space.

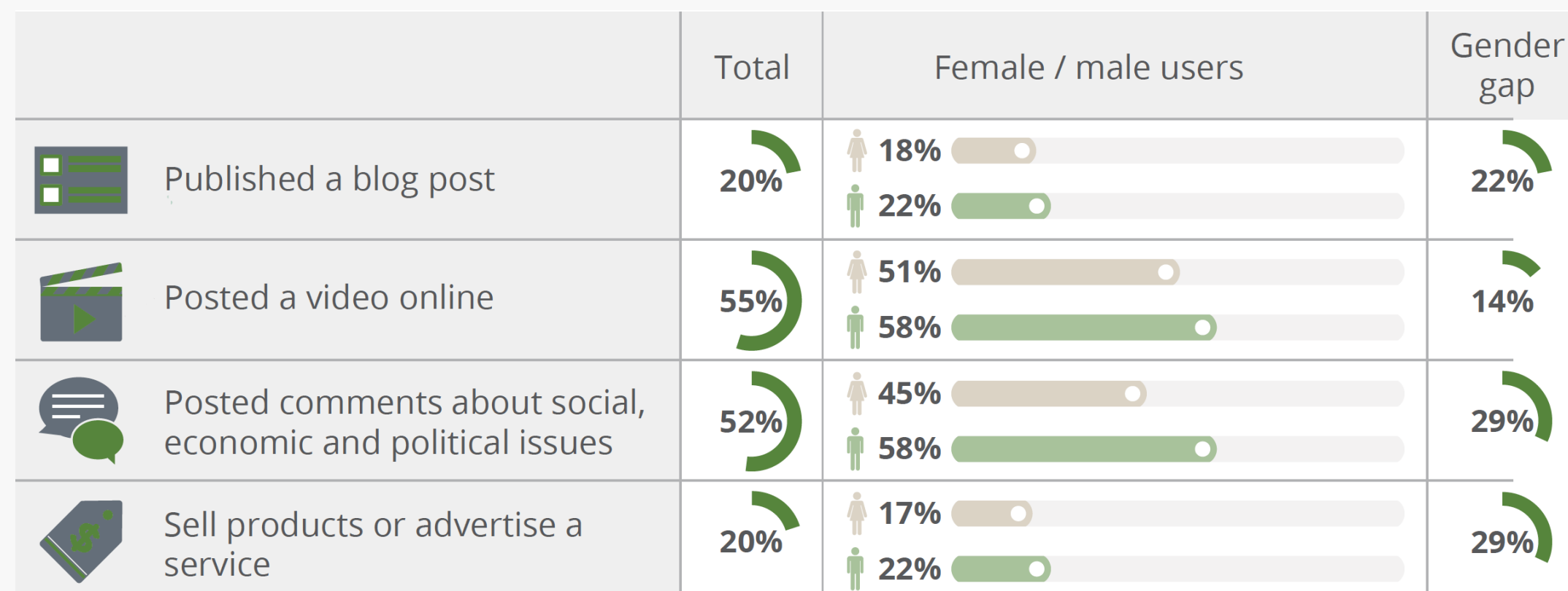*(GSMA 2015; Broadband Commission 2017; World Bank 2018; GSMA 2020a)*

The lack of relevant content is also a constraint

Many women are unsure about what the internet is and sometimes equate it with social media. For women with little disposable income and even less time, this uncertainty coupled with the lack of relevant content on the internet means that they do not see the value in sacrificing time and money to access and consistently use the internet. The creation of more content relevant to women in their specific circumstances, and in languages they understand, is thus often cited as crucial in generating demand. This is also linked to underrepresentation of women in STEM, highlighting the need for women to also participate in the creation of tech-related solutions.

(Wang and Wang 2010; Jouhki 2013; A4AI 2016; Broadband Commission 2017)

A survey conducted by the Web Foundation finds that women are less likely to publish content, such as blogs, videos, commentary of social issues or selling/advertising a product or service.

	Total	Female / male users		Gender gap
Published a blog post	20%	18%	22%	22%
Posted a video online	55%	51%	58%	14%
Posted comments about social, economic and political issues	52%	45%	58%	29%
Sell products or advertise a service	20%	17%	22%	29%

Content generation for men and women internet users (percent)

Source: Women's Rights Online nationally representative survey data in Colombia, Ghana, Uganda and Indonesia (2020)

(Web Foundation 2020)

ii. Digital Public Platforms

Gender gaps in digital identification prevent women and girls from accessing key public platforms and services
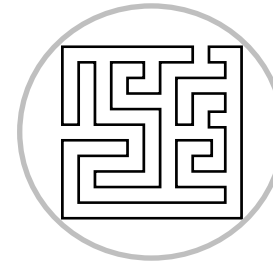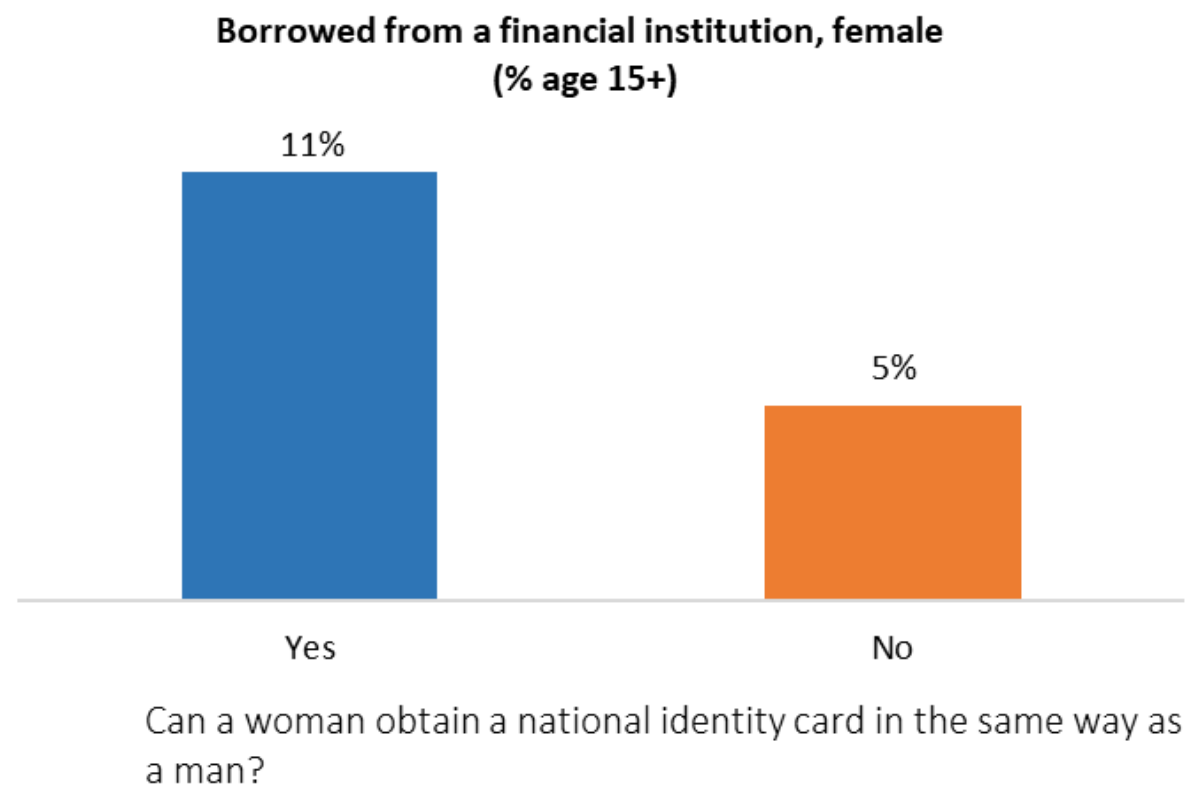
Women and girls are disproportionately affected by lack of government-recognized identification (ID) in developing countries.

According to the 2017 ID4D-Findex survey, 44% of women in low-income countries—compared with 28% of men—do not have their country's national ID or similar foundational document, limiting their access to critical services and participation in formal political and economic life.

Many of the largest ID gender gaps are in Sub-Saharan Africa—in Chad, Niger, Benin, and South Sudan, for example, there is more than a 20 percentage point difference in ID ownership between men and women.

(World Bank 2019)

Several barriers lead to a digital ID gap that then prevents women's access to critical services

Borrowed from a financial institution, female (% age 15+)

11% — Yes
5% — No

Can a woman obtain a national identity card in the same way as a man?

The gender gap in women's access to identification is due to a combination of legal, procedural, economic, and social barriers to obtaining IDs.
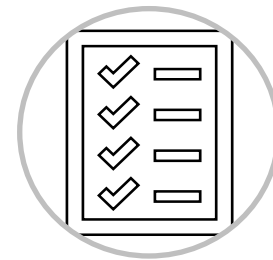
Women may need to present additional documents, such as a marriage certificate, to obtain an ID, or even be accompanied by a male relative.
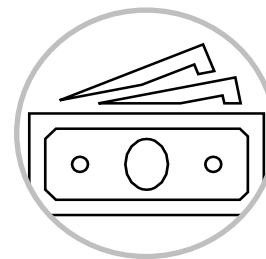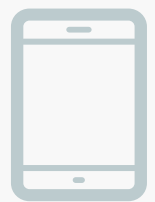
Women are also often less able to afford fees for identity documents, and do not have the time nor resources to travel to distant registration points.
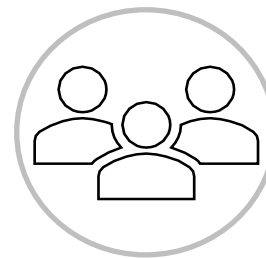
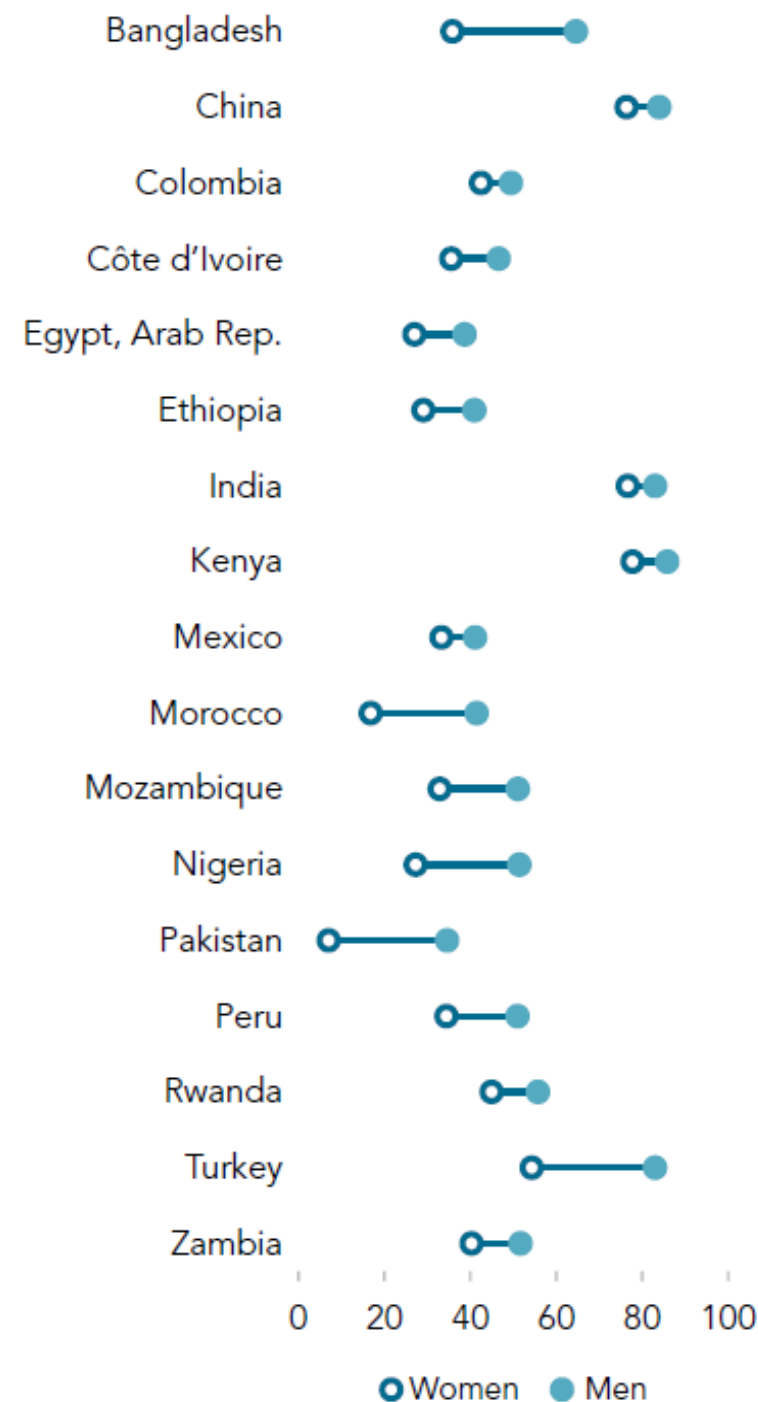Lack of support or even opposition to registration from other family members can also be barriers.

(ID4D-Findex Survey 2017; ID4D 2019)

iii. Digital Financial Services

Gender Gap in Account Ownership in Select Countries, Findex, 2017 figures

Source: Global Findex database.

Gender gaps persist in financial inclusion

- Globally, women are less likely than men to have an account, with 72% of men versus 65% of men reporting account ownership.

- In low- and middle-income countries, 67% of men have an account versus 59% of women.

- In LICS/MICS economies, 43% of men have both a mobile phone and access to the internet, versus 37% of women.

- Men are twice as likely as women to have access to both these technologies in some economies, including Bangladesh, Ethiopia, and India. But men and women have equal access in China, Colombia, and South Africa.

(World Bank/Findex 2017)

Barriers to women's financial inclusion

Financial inclusion enables low-income women with the tools to save, borrow money, make and receive payments, manage risks, smooth income, and guard against economic shocks.

These are all critical pathways to women's economic empowerment; however, a range of barriers are important to consider:

| Demand side barriers	Supply side barriers	Legal and regulatory barriers
• Lack of bargaining power in the household • Concentration in lower-paying economic activities • Time constraints due to care and domestic responsibilities • Lack of assets for collateral • Lack of formal identification • Reduced mobility due to restrictive gender and social norms • Lower rates of mobile phone ownership	• Lack of suitable products • Lack of gender lens for relevant policies, program design, and marketing • Lack of appropriate distribution channels and mechanisms	• Requirements for opening accounts that disadvantage women • Barriers to obtaining formal identification • Legal barriers to owning and inheriting property • Credit reporting systems that are not inclusive

(IPA 2017)

iv. Digital Businesses

Women are underrepresented as entrepreneurs in the ICT sector

Available data suggest among women entrepreneurs: 1.7% participate in the ICT sector versus 4.9% of men.

(out of 59 economies)
(Global Entrepreneurship Monitor 2018/19)

Percentage of entrepreneurs
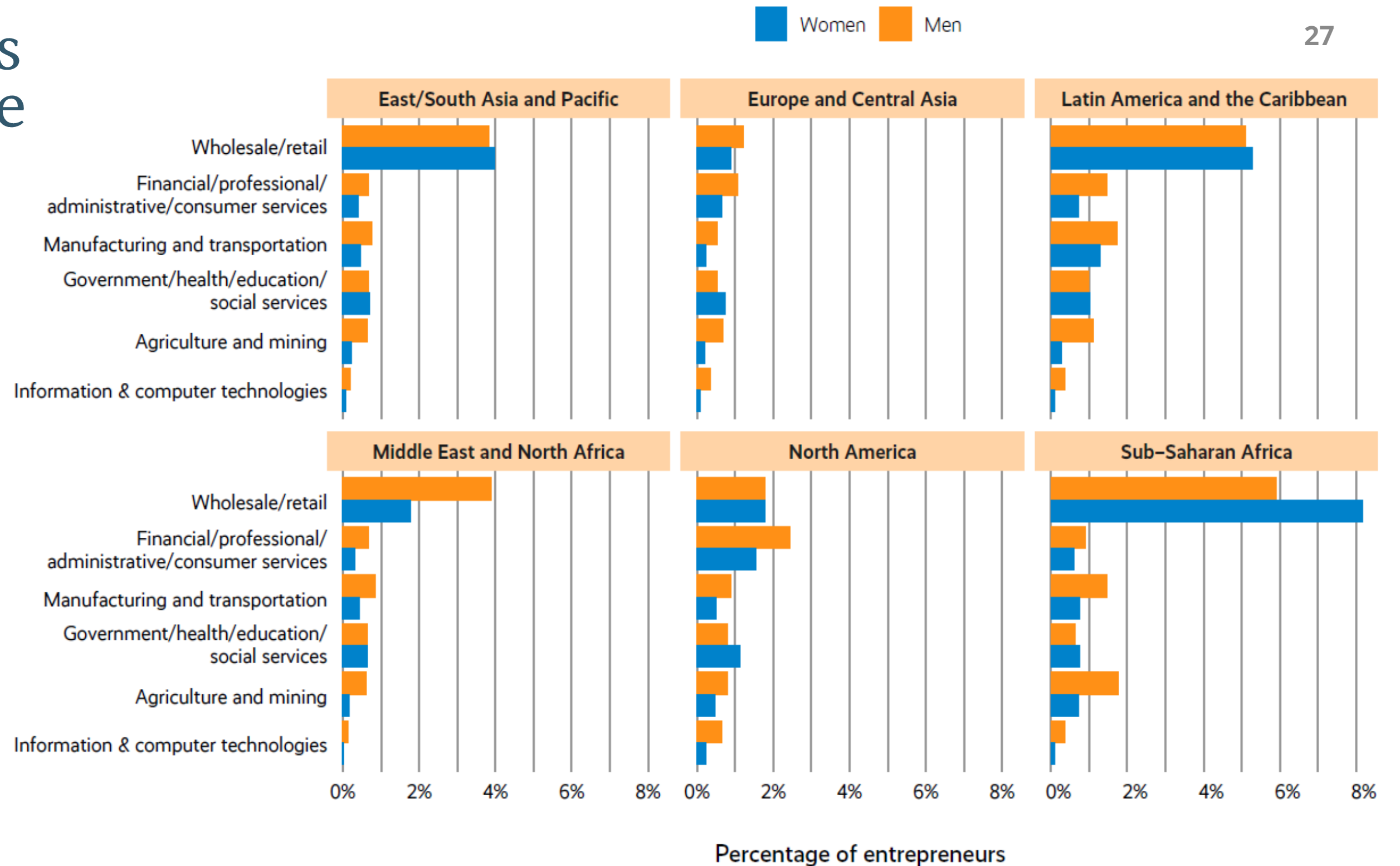
Female digital entrepreneurs are likely to face similar constraints as women entrepreneurs in other sectors

- Women entrepreneurs face a funding gap: In fact, the IFC reports a credit gap of up to $320 billion globally. Companies founded by women receive only 2.3% of venture capital investment.

- Women continue to face a range of gender legal barriers in entrepreneurship, including the inability to sign a contract, register a business or open a bank account in the same way as men.

- Preferences and personal qualities also influence women's entrepreneurship. For example, differences in risk-taking, confidence, and perception of opportunities also contribute to gaps in numerous ways, including firm performance and sector of operation.

- In some contexts, restrictive social norms influence how women interact with suppliers and buyers.

- Women also face constraints to their mobility, especially in relation to safe transportation, and experience time constraints due to care and domestic responsibilities.

(TrustRadius 2020;Qasim/World Bank 2018)

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v. Digital Skills

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Gaps between women and men persist in basic ICT skills in countries across the world

- There is a gender data gap in the measurement of basic digital skills. Indicators from the International Telecommunication Union (ITU) that measure basic digital literacy suffer from lack of coverage. Even among the countries that have shared data on basic ICT skills, only nine have data for all the skills ITU monitors.
- Literacy and digital skills remain the primary barrier to mobile internet use among those having used a mobile and are aware of mobile internet but have not used it in the last three months.
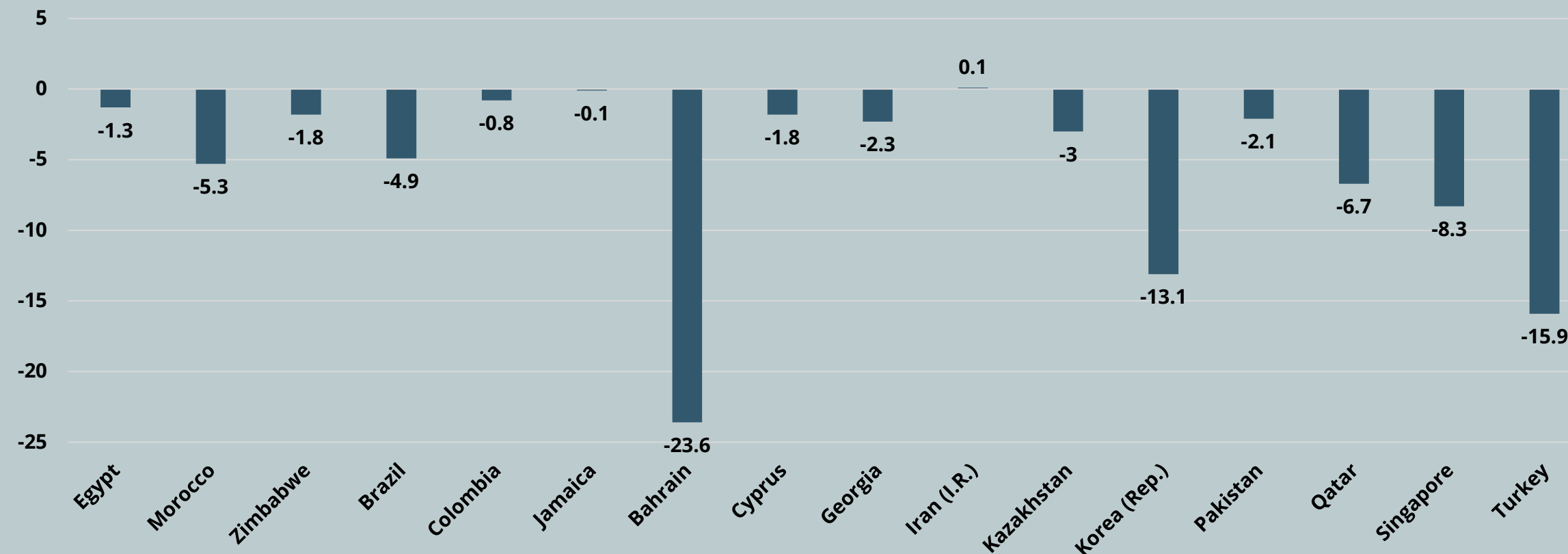

Difference in percentages between males and females on different aspects of digital skills in Africa, the Americas and Asia

(EQUALS 2019; GSMA 2020a)

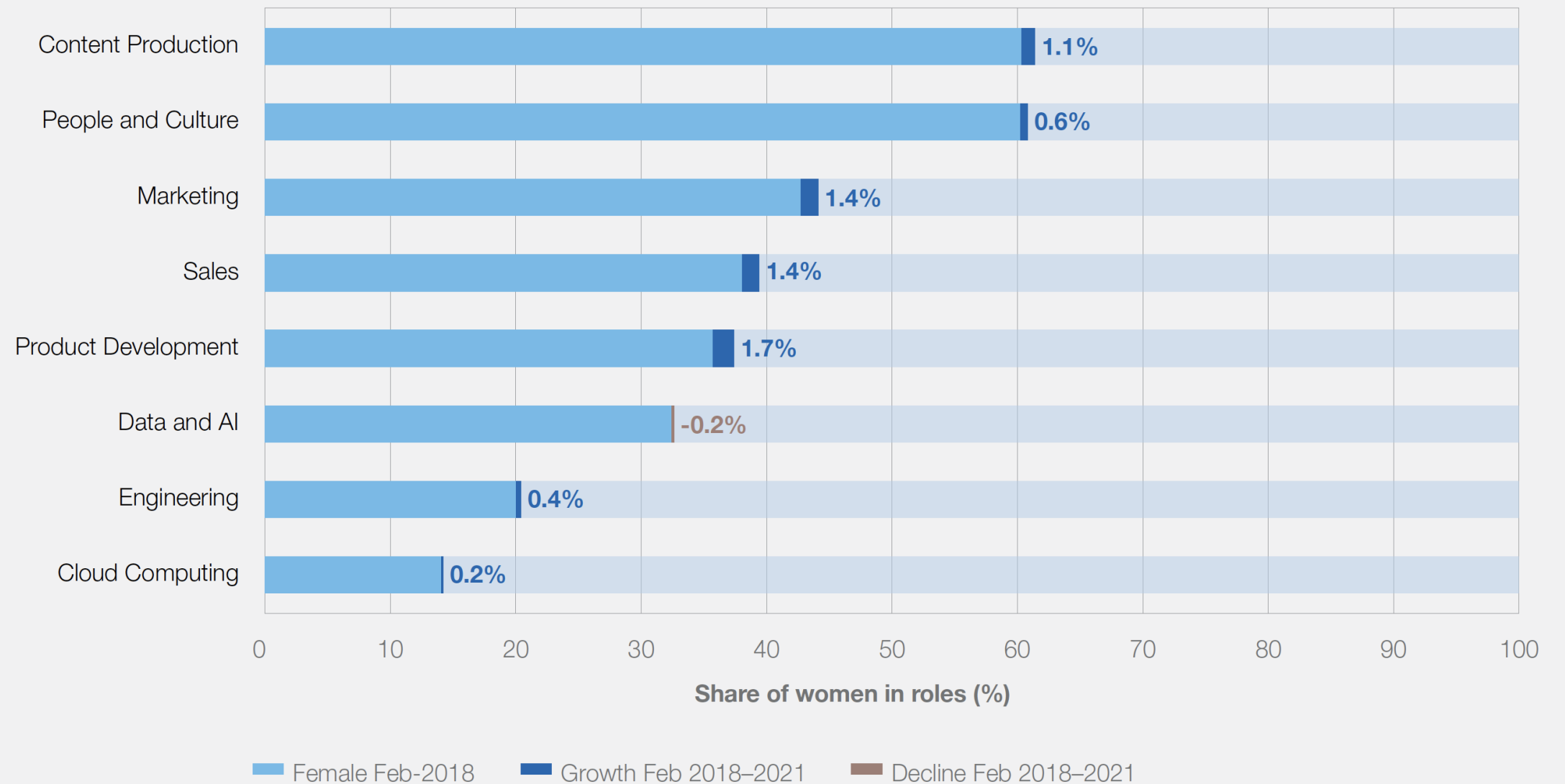# Women are underrepresented among those creating technologies

- The number of women studying STEM subjects has remained as low as 35% in the past 15 years.
- Women are underrepresented in the ICT labor market. When women do work in these fields, they face on average, a 21 percent pay gap.
- Although men and women are equally capable, women do not pursue STEM studies and careers at the same rate as men. This is likely linked to gender stereotypes and biases that also contribute to gender gaps in interest, aspirations, and confidence.
- Occupational segregation contributes to persistent economic gaps between women and men. Job streaming is tied to differences in job quality, including dimensions such as wages, benefits, and opportunities for advancement.
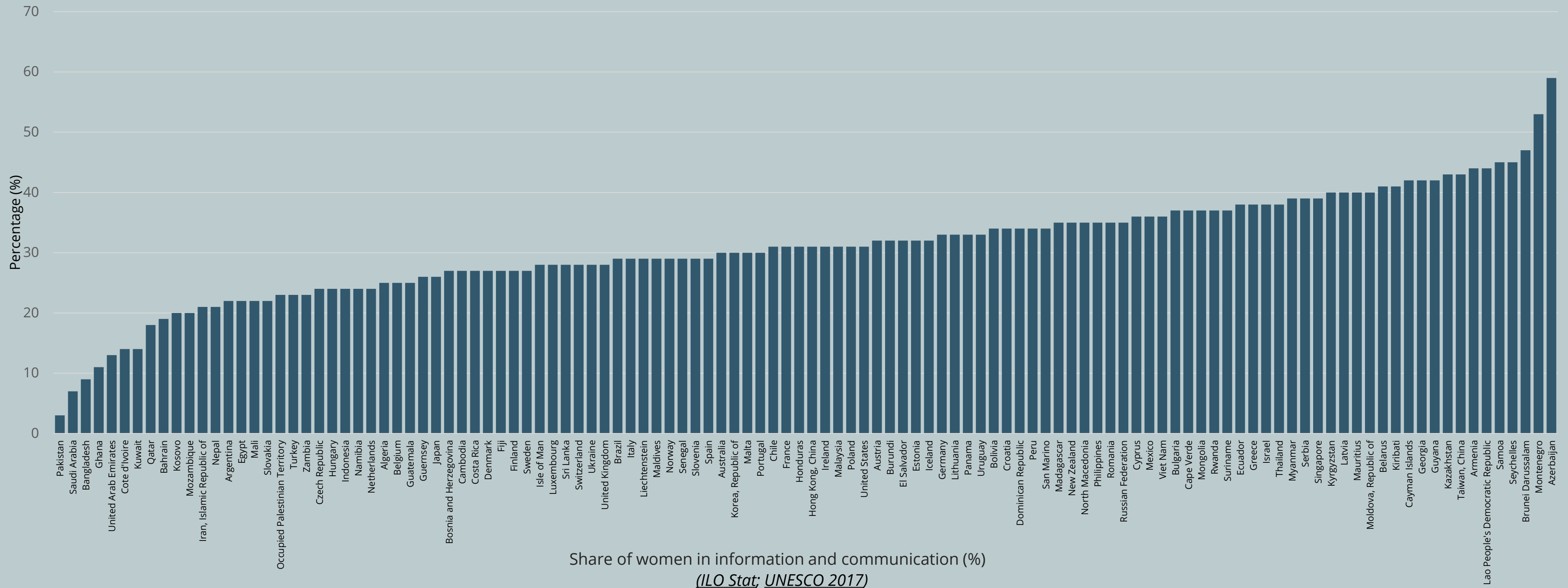
Share of women in information and communication (%)
(ILO Stat; UNESCO 2017)

Women are underrepresented in jobs at the technical frontier

Gender gaps are more likely in fields that require advanced technical skills across 20 economies. Women make up 32% in data and artificial intelligence, 20% of the engineering workforce, and 14% in cloud computing.

Content Production 1.1%
People and Culture 0.6%
Marketing 1.4%
Sales 1.4%
Product Development 1.7%
Data and AI -0.2%
Engineering 0.4%
Cloud Computing 0.2%

Share of women in roles (%)

Female Feb-2018 ▪ Growth Feb 2018–2021 ▪ Decline Feb 2018–2021

(WEF 2021)

Women's jobs are at risk of automation

Available evidence shows that across 30 high-income countries, 10% of the workforce (54 million workers) are at high risk of losing their jobs due to automation. The IMF finds that compared to their male peers in the same occupations, women often perform more routine and less abstract tasks and in roles with less job flexibility and little on the job learning. As a result, a larger share of the female workforce is at risk than the male workforce (11% versus 9%, respectively) amounting to 26 million female jobs.*

Female workers with less education (typically younger women who have not yet had the chance to accumulate human capital through education), older female workers (over 40 years), and those in clerical, services, and sales roles are disproportionately at risk.

Gender Gap in the Probability of Automation
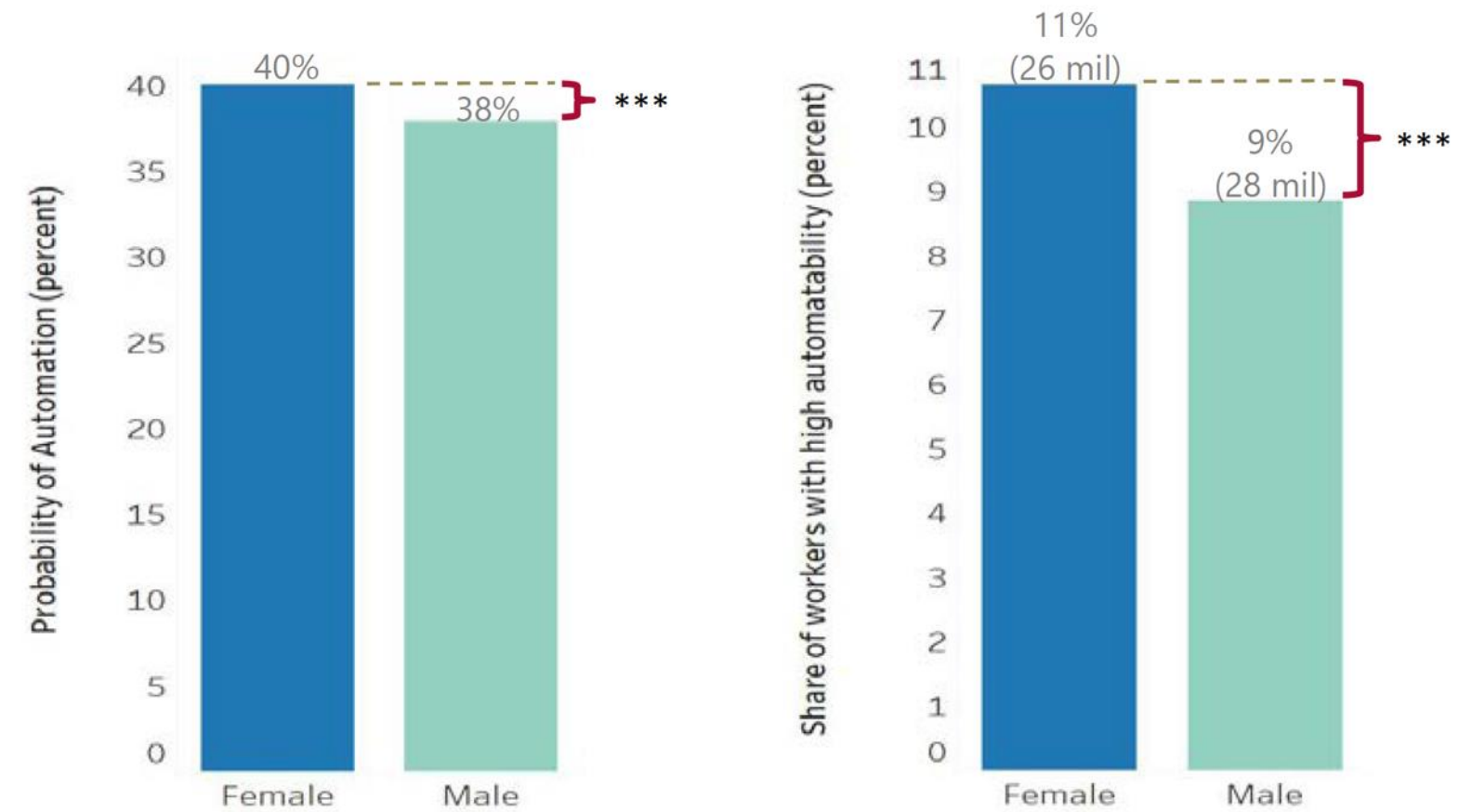
Sources: Frey and Osbourne (2017); PIAAC survey; and IMF staff estimates.

High Probability of Automation and Age

(IMF 2018)
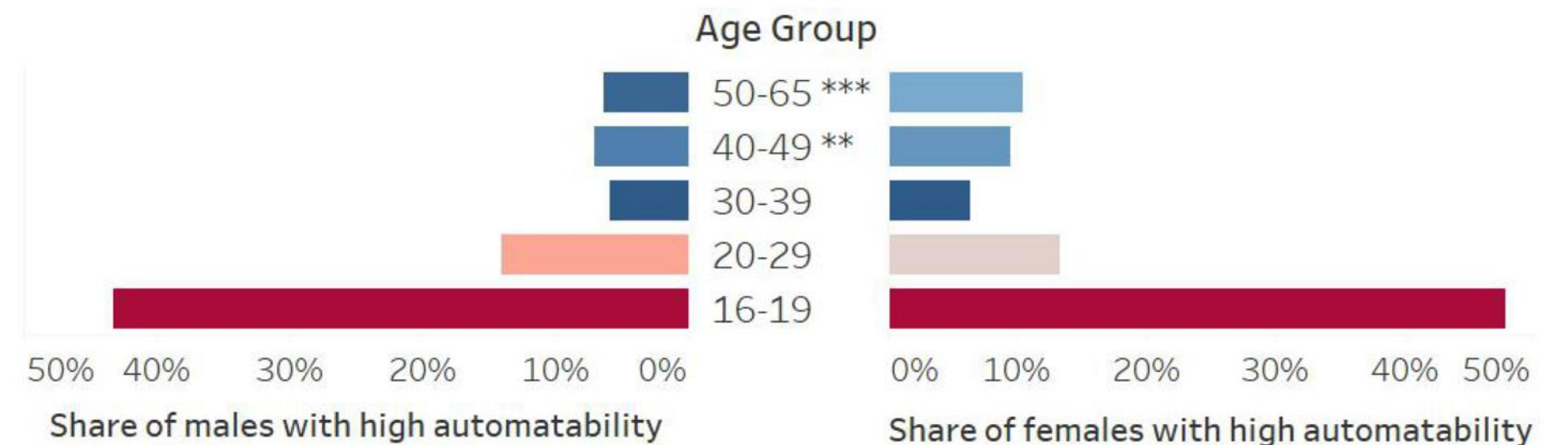
vi. Online Safety and Security

Online safety is a key concern for both women and men

- Despite the promise of digital technologies and the new opportunities they offer, there are also increased risks.

- Despite lacking a standard definition, online or cyber violence refers to gender-based violence that is perpetuated through electronic communication and the internet.

- Once online, women face a range of risks including various forms of cyber harassment, cyberstalking, and cyberbullying, as well as infringements of privacy, surveillance and monitoring, and misuse of nonconsensual intimate images, among other forms of abuse.

- In the EU, 11% of women have experienced cyber harassment. Highest risk is among women 18-29 years. Rates are higher in countries with higher internet penetration.

- Data from low-income countries are especially challenging, but small surveys help to fill the gap. For example, in Uganda, 45% of women versus 8% of men report incidents of online harassment, bullying, or stalking.

- In Kenya, these figures are 21% of women and 19% of men. Nigeria, reports higher rates of online violence among men than women.

(European Agency for Fundamental Rights 2015; Web Foundation 2015; APC 2017; World Bank 2018)

Online safety is a key concern for both women and men

- Women's concern about online safety could prevent or reduce internet use. Women and girls with low levels of digital literacy may also lack full awareness of the threats of online violence, strategies to mitigate risk of online violence, and avenues to report incidents, if available.

- Online violence can also reduce women's voice as they self-censor or withdraw from the public sphere. There are also psychological impacts, with women reporting anxiety, panic attacks, stress, and concerns about online violence escalating into physical or sexual violence.

- These risks might also limit women's willingness to explore digital jobs or participate more generally in the digital economy. These risks can also lead gatekeepers to forbid women and girls from using digital technologies and the internet.

(European Agency for Fundamental Rights 2015; Web Foundation 2015; APC 2017; World Bank 2018)

vii. Social Norms

Social Norms: A Cross-Cutting Issue in Digital Development

- Social norms are the implicit rules that people follow and accept. These are embedded in both formal and informal institutions, and they are reproduced through social interactions. Gender norms are a subset of social norms that govern expectations, behaviors and beliefs linked to gender in a particular context *(Heise et al. 2019; Harper et al. 2020)*.

- Social and gender norms influence a range of issues in digital development. For example, restrictive gender norms can influence women's access and use of the Internet and devices. For instance, in Pakistan and Bangladesh, conservative social norms govern women's choices and behaviors with family disapproval acting as a main constraint *(GSMA 2020a)*. Young women in Egypt, India, and Jordan, particularly from rural areas, often have their mobile phone use monitored and controlled by their families; this is said to protect them from harassment and to control their communication with men outside the immediate family *(GSMA 2015)*.

Social Norms: A Cross–Cutting Issue in Digital Development

- Social norms also shape gender roles and stereotypes, which in turn affect digital skills and the participation of women and girls in technology through gender biases in families, schools, and the media, as well as their aspirations, interests, and subject choice. Another stream of influence is career choice and occupational sex segregation, as well as sector choice in entrepreneurship *(World Bank 2020, 2019)*.

- As a space for accessing information and engaging in dialogue, the internet plays a key role in shaping values and opinions. However, the restrictive gender norms that exist offline and often reproduced online result in challenges to women's safety *(Council of Europe)*.

- There are also concerns about these norms and biases being reproduced in frontier technologies. For instance, artificial intelligence (AI) is increasingly used to improve human processes; however, there is concern about biases becoming embedded in machine learning algorithms. One study from MIT that analyzed 1,270 unique faces shows that algorithms can embed not only gender, but also racial, bias. Facial recognition software performed better on male faces than female faces, and better on lighter faces than darker faces. Darker-skinned females had the highest error rate, of up to 34.7 percent *(Buolamwini 2018)*.

viii. Algorithmic Bias Amid the Rise of AI

Algorithmic Bias

- Algorithms are harnessing volumes of macro- and micro-data to influence decisions affecting people in a range of tasks, from making shopping recommendations to helping financial and nonbanking financial institutions determine the creditworthiness of individuals.

- Left unchecked, algorithms run the risk of replicating and even amplifying human biases, especially harming vulnerable groups, including those in low- and middle-income countries, and especially women and girls.

(Brookings 2019)

Biases can occur due to:
- *Incomplete or unrepresentative training data*: If the data used to train the algorithm are more representative of some groups of people than others, algorithmic model outcomes may be systematically worse for unrepresented or underrepresented groups. Given the disparities between women and men using the internet, training data sets are likely to underrepresent women and girls, especially in low- and middle-income contexts.

- *Historical human biases:* Historical biases are shaped by pervasive and often deeply embedded norms and cultural prejudices, which can lead to their reproduction and amplification in computer models. For instance, algorithms may associate women with domestic activities and chores more often than with industrial contexts if an image classifier is run on a range of images online where more images of the former are likelier than the latter.

- *Lack of transparent and comprehensive testing prior to deployment:* While more and more institutions are auditing their systems, data on testing and training are often kept confidential, preventing meaningful external accountability in several instances. When an algorithm is considering several types of identity factors at the same time (race and gender and income, for instance), it is particularly important to ensure that testing on bias occurs across intersectional dimensions, not merely in isolation.

ix. Lack of Sex-Disaggregated Data

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Sex-Disaggregated Data and Evidence on Gender and ICT Access Is Patchy, Non-Standardized and Available in Select LMICs Only

- There are **no standardized measurement methods** for the gender digital divide. Only 69 countries report sex-disaggregated data on internet access to the ITU, and use indicators vary widely among organizations engaged in data collection. For instance, ITU data are narrowly focused on computer usage—for example, indicators such as "copy and paste" and "transferring files," that are not relevant to mobile usage.

- There is **little statistically relevant data at a global level on use**—most available data is from country-level/cross-country studies (GSMA, After Access) and are of sampled populations within these countries. Private sector data are either not collected, or not publicly shared. Little to no data are available for younger age groups who are increasingly also internet users.

- There is also **limited rigorous qualitative or quantitative research** in this space. Issues such as intersectionality and negative and unintended consequences of gender-based digital initiatives require more targeted research, data collection, analyses, and reporting.

(USAID 2021)

4. Highlights on Gender Equality in the Digital Development Global Practice

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Knowledge Work and Innovative Pilots

Building foundational knowledge on gender equality and digital development

The toolkit provides a comprehensive literature review as well as a range of practical solutions and sample sex-disaggregated indicators.

Innovative pilots demonstrate how to advance gender equality in operations

Click on Kaduna (Nigeria)

- The project empowers disadvantaged youth between the ages of 18 and 40—with a strong focus on gender equality—in fragile and conflict zones by training them to leverage employment opportunities in the digital economy.
- The program is using digital technologies to drive innovation, digital skills, and job creation and break the cycle of unemployment, fragility, and violent conflict.

Women in Online Work (Kosovo)

- The project trained women in coding, graphic design, and digital marketing as well as online job bidding.
- Trainees also worked with career counselors and participated in networking events to build communication skills.
- Trainees found jobs in IT, started businesses, and increased their incomes.

Good Practice Operations

Haiti Digital Acceleration Project
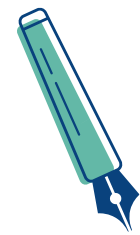
Analysis

- Only about 7 percent of women and girls have access to the internet, the lowest in the region.

- Given the population's low educational attainment and high unemployment rate, access to the internet and acquisition of digital skills is out of reach for many Haitians, especially women.

- Online violence and harmful digital content also pose a challenge in Haiti—women's concerns about online violence might prevent them from getting online or result in women going offline after bad experiences, thereby restricting their online participation.

- Women and girls with low levels of digital literacy may lack full awareness of the threats of online violence and strategies to mitigate this risk.

Actions

- Conduct a digital economy assessment with policy recommendations and a roadmap for digital infrastructure, finance, entrepreneurship, platforms, and skills with a gender lens.

- Facilitate advanced tech training for cyber security professionals with a focus of targeting and increasing the skills of female cyber security professionals to close gender gaps in STEM.

- Facilitate advanced, intensive tech and soft skills training with a focus on artificial intelligence, blockchain, and coding with a target of 30% women.

- Work through women's groups to target and deliver digital literacy training. The activities will consider the differential needs of men and women and other factors, such as flexibility, timing, care, and transportation needs. If appropriate, the project will hold gender-segregated sessions. These trainings will also incorporate a focus on online safety.
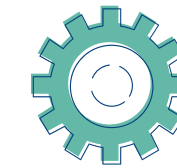
Indicators

- Digital economy strategy with an integrated gender and resilience lens (Yes/No)

- Development of national broadband strategy with a gender lens (Yes/No)

For different target demographics:

- Percentage of women completing digital literacy training. Target: 50 percent.

- Percentage of women completing cybersecurity training. Target: 30 percent.

- Percentage of women completing advanced skills training Target: 30 percent.

Good Practice Operations

## Niger: Smart Villages For Rural Growth And Digital Inclusion Project
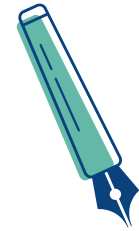
Analysis

- A gender gap in mobile phone ownership exists with 62% of men owning phones versus 43% of women (2017 figures).

- The gender gap in device ownership limits access to digital financial services for women: only 5% of women have a mobile money account versus 12% of men.

Actions

- Support the establishment of public access centers that are suitable for women (adequate coverage and accessibility, adequate opening hours, availability of female intermediaries).

- Support innovative pricing schemes that enable take-up by women (encouraging private mobile operators to pursue innovative pricing models for devices and data).

- Support access to financial services through access to mobile money and credit (using innovative mechanisms of credit scoring for unbanked populations).

- Support employment of women in access centers.

- Support the development of digital financial products for women by financial institutions, startups, and FinTech companies.
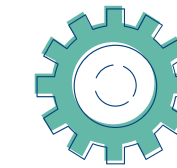
Indicators

- Mobile broadband (3G and above) estimated penetration rates for women (per 100 inhabitants). Baseline: 4.59%. Target: 25%.

- Number of female adults (age 15 and above) with a mobile money account. Baseline: 1,074,000.00. Target: 7,520,000.00.

- Number of women who have been enabled, under the project, to make and receive mobile financial payments for the first time. Baseline: 0. Target: 120,000.00.

Good Practice Operations

## Nigeria Digital Identification for Development Project
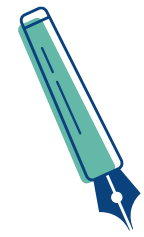
Analysis

- Over 66 percent of girls in the north of Nigeria (ages 15-9) are unable to read, compared with less than 10 percent in the south. In the north, only 3 percent of girls complete secondary school, and 76 percent are married by age 18 in the northwest.

- The gender gap in use of formal financial services is also large, with men nearly twice as likely as women to have bank accounts.

- Persistent gender-based violence and high fertility rates further disadvantage women, and women also face additional institutional and cost barriers (such as distance and price) in accessing services.

- Only 40 percent of those registered for national identity numbers (NINs) are women.

Actions

- The project will make a concerted effort to close gender gaps in access to identification through a gender action plan informed by the gender deep dive research project.

- The ID4D Initiative has financed a research study on gender barriers to identification in Nigeria as part of project preparation. This study used qualitative research methods to understand the barriers to women's access to identification as well as potential solutions to be included in the project, which will inform the gender action plan.

- The study considers the intersectionality of poverty, culture, religion, and gender and how this may compound barriers to identification for women.
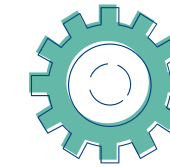
Indicators

- Persons who have a national identification number (NIN). Females who have a NIN (women and girls). Baseline 14,965,282.00. Target: 65,000,000.00.

- Successful digital authentications on behalf of women. Baseline 0. Target: 50%.
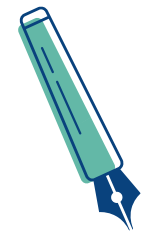
Good Practice Operations
## Digital Federated States Of Micronesia (FSM) Project

Analysis

- There is no evidence of a gender gap in FSM for access to the internet or digital services—age and poverty are bigger barriers.

- Community consultations revealed major concerns about online safety—specifically, digital circulation of sexually degrading images and videos, often circulated without consent and including girls below the age of consent, including several examples of the circulation of "revenge pornography" online.

- No legislation or policy framework on cyber-safety or harmful digital communications.

Actions

- $1M allocated to support the Gender Development Office to contribute to the development of gender-informed cyber-safety materials and the passage of legislative reform criminalizing harmful digital communications.

- Targeted awareness activities to bridge knowledge gaps at the community level, which will include the development and rollout of digital literacy and digital entrepreneurship programs.

- Legislative reforms to deter, prevent, and mitigate harm caused to individuals by digital communications—cyberbullying, harassment and/or "revenge pornography".
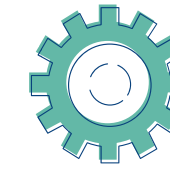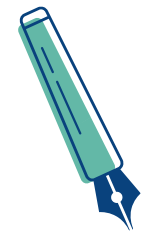
Indicators

- Progress toward closing this gap will be measured with the following indicator: passage of bill legislating against harmful digital communication. (Y/N)

4. HIGHLIGHTS ON GENDER EQUALITY IN THE DIGITAL DEVELOPMENT GLOBAL PRACTICE

Good Practice Operations

Kosovo Digital Economy Project

Analysis

- Women are underrepresented in the labor market—only 11.5 percent of 15 — 4-year-old women are actively contributing to the economy through employment.
- Within the ICT sector, only 20% of employees are female.
- Cultural attitudes to female employment and biases in employers' assessments of skills for men and women make it difficult to attract more women to the ICT field specifically and in the labor force, more broadly.

Actions

- The project is working to ensure that 50% of participants in the online skilling program funded by the project are women.
- It builds on lessons learned from the Women Working Online pilots, which found that female beneficiaries perceived greater confidence and ability to bid for jobs when technical ICT training was coupled with soft skills training.
- The project will hold awareness activities for female-only groups and at times convenient to women who have household/childcare duties, based on the need for targeted outreach to this community identified during project preparation.
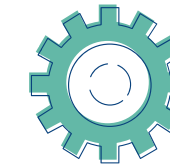
Indicators

- Beneficiaries of improved HEI access to high-speed broadband through the project, of which female. Target: 80%.

- Youth (ages 18-35) provided with digital skills training under the YOU Program, of which female. Target 50% (1,000 of 2,000 beneficiaries).

5. Accelerating Progress on Gender Equality in Digital Development

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The Digital Transformation Initiative

For dynamic, inclusive, and safe digital economies to emerge, a holistic approach is needed to enable use cases to flourish across a range of sectors (e.g., e-agriculture, e-health, and e-government applications, among others). With this approach in mind, the World Bank has identified five foundational pillars that are used as a framework for its digital transformation agenda.

1 **DIGITAL INFRASTRUCTURE:** Digital infrastructure provides the way for people, businesses, and governments to get online, and link with local and global digital services—thus connecting them to the global digital economy. For a flourishing digital economy, good connectivity given by internet or broadband is therefore a critical foundation.

2 **DIGITAL PUBLIC PLATFORMS:** Digital platforms offer products and services, accessible through digital channels, such as mobile devices, computers, and internet, for all aspects of life. For example, digital ID systems and services such as electronic signatures underpin trust in online transactions and create opportunities to innovate how products and services are delivered. Governments can stimulate usage of digital platforms by digitizing some of its own operations or processes, such as procurement, invoicing, or communications. Digital platforms enable producers and users to create value by interacting with each other, with network effects provided by users generating content, data, and larger pools of buyers and sellers.

3 **DIGITAL FINANCIAL SERVICES:** Access to affordable and appropriate digital financial services is critical for the participation of individuals and businesses in the digital economy. Firms can leverage digital financial services to more easily transact with their customers and suppliers, as well as to build digital credit histories and seek financing. Governments can use digital financial services to increase efficiency and accountability in various payment streams, including for the disbursement of social transfers and receipt of tax payments.

4 **DIGITAL BUSINESSES:** Digital entrepreneurship and innovation create an ecosystem to bring the digital economy to life—with new, growth-oriented ventures and transformation of existing businesses—contributing to net employment growth and helping enhance competitiveness and productivity of an economy. Digital entrepreneurship offers new products and services, leverages new technologies and business models, and opens new markets.

5 **DIGITAL SKILLS:** Economies require a digitally savvy workforce in order to build robust digital economies and competitive markets. Digital skills constitute technology skills, together with business skills, for building or running a startup or enterprise. Greater digital literacy further enhances adoption and use of digital products and services among the larger population.

The Digital Transformation Initiative

DIGITAL INFRASTRUCTURE

Universal internet network coverage

Affordable internet for all at less than 2% of GNI per capita

Interim milestone doubling broadband connectivity by 2021

DIGITAL PUBLIC PLATFORMS

Doubling of online services index rating for all governments

All individuals are able to prove their identity digitally

At least 50% of the population regularly uses the internet to access government or commercial services

DIGITAL FINANCIAL SERVICES

Universal Access to digital financial services

Africa-wide payments infrastructure/platform in place

DIGITAL BUSINESSES

Tripling the number of new digitally enabled businesses created annually

Financing for venture capital to reach .25% of GDP

DIGITAL SKILLS

All 15-year-old students with basic "digital skills" competencies

100,000 graduates in advanced digital skills programs annually

I. Digital Infrastructure: Potential Solutions

INFRASTRUCTURE SHARING

Allow and encourage more infrastructure sharing among private sector telecom players. Example: countries like Mauritius, Brazil, New Zealand, the US, and the UK among others, allow for spectrum trading, allowing for cheaper telecom infrastructure availability *(Foster, 2008)*.

PUBLIC ACCESS CENTERS

Ensure adequate coverage in remote and poor locations, where women are often concentrated. Also, ensure that services at public access centers are safe and accessible for women; design separate areas for women and men, when appropriate; employ female trainers or staff to interact with female clients; consider childcare facilities; and ensure operating hours cater to women's time constraints and need for flexibility *(Adera et al. 2014; A4AI 2015 ,and 2016; GSMA 2015; Cummings, C. and O'Neil, T. 2015)*.

UNIVERSAL SERVICE FUNDS

- Universal Service and Access Funds (USAFs) were established to expand access to connectivity for those who are the least likely to be connected. However, these funds typically go unused. For example, in the AFR region, estimates indicate that about $400M has gone unused.

- Most USAFs also fail to properly include or cater to women. Therefore, teams can consider repurposing funds to close gender gaps in access and digital skills. Among 69 countries that established a USAF, an ITU report finds that only 4 countries had funds making provision for special digital inclusion for women.

- USAFs can also be used to subsidize devices. Caution needs to be exercised in the case of device vouchers/subsidies to prevent or minimize system leakage (i.e., male household/family members taking control of the device, either for their own use or for resale), corruption, cost of allocation exceeding benefits, and misdirection of subsidies.

- If not well managed, these funds can be counterproductive. The GSMA recommends that USAFs should be targeted, time-bound, and managed transparently.

I. Digital Infrastructure: Potential Solutions

MORE AFFORDABLE/INNOVATIVE PRICING MODELS

- Encourage private MNOs and retail sellers to pursue affordable/innovative pricing models that help women obtain devices or access the internet without large up-front costs. This includes installment plans, low-cost operating systems, subsidies, and more research and development into affordable handsets.

- For example, as a part of _Maishi ni Digital_ _("Life is Digital")_, a partnership between Google and Safaricom designed to drive access to smartphones and to the internet, particularly among women in rural areas, introduced several solutions in Kenya:

    - The partnership launched Neon—an entry-level smartphone for $35-40 to help address affordability challenges.

    - Android Go, a lighter version of the operating system, also helps reduce data costs for customers.

    - Lipa Mdogo Mdogo, the smartphone financing plan, allows customers to purchase a smartphone via manageable daily installments.

II. Digital Public Platforms: Potential Solutions

DIGITAL IDENTIFICATION

- When developing identification systems, operations can <u>gather sex-disaggregated data and evidence</u> that help assess disparities as well as other pathways of exclusion, like location, income, disability, ethnicity, religion, and other factors.
- Remove legal barriers to obtaining identification.
- Encourage women's registration by opening women-only registration counters.
- Use mobile registration services that bring enrollment closer to women's homes, which can help reduce the transport and opportunity costs of registration. Also engage female agents where possible and relevant according to gender and social norms.
- Create tailored messaging on the benefits of identification and provide special incentives for women's registration.

DIGITAL GOVERNMENT SERVICES

- Use these activities as a way to improve the availability of sex-disaggregated data on the gender digital divide.
- Address digital skills gaps among employees and help women support women in STEM in government.
- Ensure that measures to increase access to affordable infrastructure are integrated here as well.
- Consider other barriers, like access to electricity, constraints to device ownership, the high cost of voice/data services, lack of digital literacy, privacy concerns, and lack of awareness about services.

(Dahan,Mariana; Hanmer,Lucia C. 2015; UNESCAP 2016; World Bank 2018)

III. Digital Financial Services: Potential Solutions

A growing body of evidence suggests that digital financial services can be better designed to contribute to women's economic empowerment.

PAYMENTS

- Digitizing payments, such as wages, agricultural transfers, or social assistance, can save women time, and provide added privacy, security, and control.

- Emerging research suggests that digital payment products designed with women's control and privacy in mind can also increase women's bargaining power in the household, influence expenditure decisions, and increase labor force participation.

- For example, in India when women's wages were digitized and placed in their own personal account as a part of a public works program, women's labor force participation increased *(Field et al., 2016).*

SAVINGS

- Since the costs of opening and maintaining accounts are often cited as a barrier, offering simplified, low-cost accounts could help to improve account ownership.

- However, experimental evidence is mixed, highlighting the need for more research. In Chile and Nepal studies suggest that these accounts helped households better respond to health emergencies and increased schooling among daughters. However, in Uganda, Malawi, and India there were no observable impacts on employment or earnings.

- In the Philippines, commitment savings accounts increased spending on goods preferred by women for married women with low bargaining power.

CREDIT

- Although gender gaps in access to credit persist, available evidence is mixed when trying to identify impacts on women's economic empowerment.

- For example, one study from Mongolia finds moderate increases in business creation and profits as a result of women's access to group lending credit.

- On the other hand, studies from Mexico, Ghana, and Sri Lanka suggest that access to credit has not increased women's empowerment, particularly for micro-entrepreneurs.

(IPA 2017)

III. Digital Financial Services: Potential Solutions

There are also regulatory and policy enablers that hold promise for women's empowerment.

- **Non-bank e-money issuance.** Fintechs and mobile network operators (MNOs) with a large female customer base often target DFS to women and others who are underserved.

- **Use of female agents.** Using a wide range of third-party agents helps facilitate wider access and also creates income-generating opportunities for women. Women agents can also help to further increase access for female clients in contexts with restrictive social norms.

- **Risk-based customer due diligence.** People with low incomes, especially women, often lack access to an official identification document. Traditional approaches tend to deepen exclusion. Regulation that helps simplify customer due diligence and recognizes a wider range of IDs can help to increase access.

- **Interoperability and ecosystem competition.** DFS solutions need to be safe, convenient, and affordable. Interoperability makes it easier to send and receive funds from different sources, thereby reducing transaction and time costs of cashing in and out. And, enabling interoperability between mobile money and bank accounts can help to increase women's access to savings accounts. Meaningful competition also increases incentives for banks, MNOs, fintech companies, and microfinance institutions to better tailor solutions to the needs of women and to provide better customer service.

- ***Consumer protection.*** Financial consumer protection that addresses women's needs and ensures data protection and privacy are vital. Good practices include clear, transparent, and simple language about pricing and terms as well as effective redress mechanisms.

- **Key enablers and complements.** Facilitating access to digital identification and mobile devices are also key enablers of digital financial services, along with financial and digital literacy.

(Bin-Humam et al. 2018 (CGAP); GPFI 2020)

IV. Digital Businesses: Potential Solutions

Solutions for women entrepreneurs, more broadly relevant for those operating in the digital sector or integrating digital solutions into businesses that operate in other sectors. These approaches include:

Facilitating Access to Funding

- Establish funding mechanisms that have ambitious targets for women entrepreneurs.
- Link high-growth women entrepreneurs to angel investors and venture funds; enabling access to digital credit could also be helpful for micro-entrepreneurs.
- Provide support and encourage special venture funds that specifically invest in female entrepreneurs.
- Attract more women investors into traditional male-centered venture capital and angel networks.
- Consider facilitating the formation of women's venture capital funds supporting women-owned enterprises.
- Review funding processes for potential investor bias.

Enabling Access to Networks and Markets

- Facilitate or strengthen the development of networks for female digital entrepreneurs.
- Help women tap into existing networking events /trade fairs related to digital entrepreneurship.
- Organize specific women digital entrepreneurs only meetups, hackathons, and conferences.
- Facilitate awareness and linkages between local and international buyers and entrepreneurs/female entrepreneur networks.

Combining Business Skills with Soft Skills Training

- Soft skills—especially those focused on developing an entrepreneurial mindset, persistence, and future-oriented thinking have helped woman entrepreneurs to increase their profits, sales, motivation, and confidence (South Africa, Togo, Uganda, Mozambique).
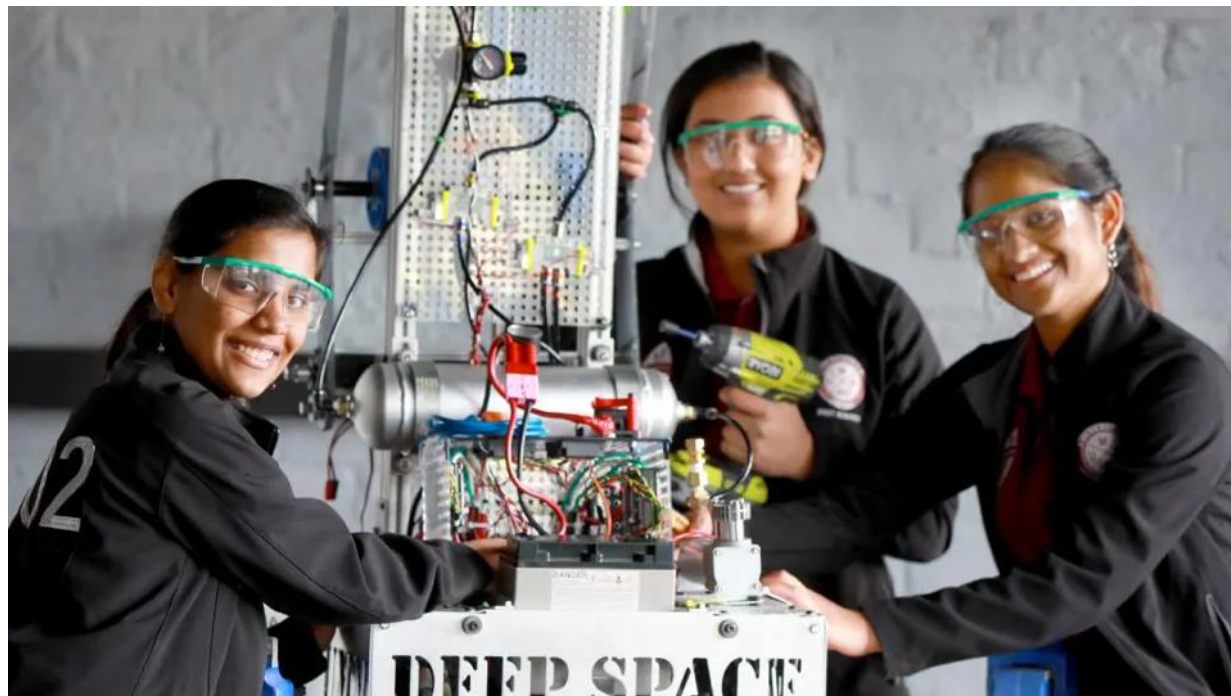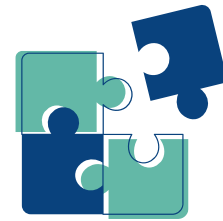
(World Bank Group. 2019. Profiting from Parity; Qasim 2018; World Bank 2018)

V. Digital Skills: Potential Solutions

Girls in Technology

Design trainings with an intentional gender lens with the goal of mitigating gender stereotypes related to technology, eliminating gender bias among instructors, and integrating design features that help to build technical skills and confidence in technology.

- Review curriculum for potential gender biases in teaching materials. Instead use content that actively breaks gender stereotypes.
- Guard against and address potential gender biases among instructors.
- Make trainings as practical and hands-on as possible to build confidence.
- Engage female mentors and female role models.
- Explore single-sex sessions, if appropriate.
- Try to have a gender-balanced teaching staff.
- For voluntary extracurricular activities, ask teachers to directly encourage girls to participate.
- Communicate how technology can help to solve social problems.
- Emphasize the high incomes that these skills could later help to provide.
- Review curriculum for potential gender biases in messaging.
- Consider setting up peer support groups for group-based learning.
- Consider integrating a module on online safety.

(Jirout and Newcombe 2015; Patrick et al. 2009; Dabney et al. 2012; Gonsalves et al. 2013; Bhattacharyya et al. 2011 in Hammond, Rubiano-Matulevich, Beegle and Kumaraswamy 2020; Hammond,A. Mulas,V.; Nadres,Pilar L. 2018)

V. Digital Skills: Potential Solutions

Intensive Skills Training

- Explicitly target and engage young women using female role models, such as current women working in technology. Consider mentorships programs or community events with women leaders in technology, which help to build self-efficacy.
- Address constraints to physical mobility, time burden, costs, and care.
- Consider restrictive social norms. In contexts with restrictive social norms, it may be necessary to have sex-segregated training sessions. Likewise, the instructor may also have to be female.
- Incorporate socio-emotional and life skills.
- Minimize women's risk of and exposure to sexual harassment. Programs can consider integrating a holistic approach, including anti-sexual harassment policies, a complaints procedure, defined consequences, and training and awareness-raising, as well as monitoring and evaluation.
- Consider including information to help prepare women for risks they may face online, like cyber violence. Include training on privacy, safety, and encryption mechanisms.
- Include modules on professional development and ensure linkages to networks and the labor market through internships, apprenticeships, job matching, and job placement.

(Hammond,A. Mulas,V.; Nadres,Pilar L. 2018 ; Robinson, D. et al./World Bank 2018;

Adult Digital Literacy

- Address constraints to physical mobility, time burden. Ensure timing does not conflict with care responsibilities. Build flexibility into program design.
- In contexts with restrictive gender and social norms, engage the community as well as men to build trust and to mitigate potential exclusion.
- Build women's digital financial capabilities through combining human and tech interactions; customized content; and behaviorally-informed approaches, like nudges.
- Integrate online safety training as well to help build trust in technology.

(Beegle and Rubiano-Matulevich 2020; Arnold and Venkatesan 2020)

A Focus on Frontier Issues

Integrate a Gender Lens in the ICT Regulatory and Policy Framework

ICT policies often fail to integrate an intersectional lens and do not consider the differentiated needs, preferences, and capabilities of population groups. Gender equality policies, strategies, and action plans often do not leverage ICTs as enabling tools. An opportunity exists to more effectively bring these efforts together. To integrate a gender lens in ICT regulatory and policy frameworks, teams can consider the following:

- Set clear measurable targets for ICT sector outcomes, including on inclusive access, female digital livelihood opportunities, and employment, as well as female enrollment in STEM education.

- Set clear accountability structures for achieving targets and implementing gender strategies.

- Identify leadership to prioritize gender at the highest level of government. Consider the identification of a "gender champion" to ensure commitments to gender equality are implemented. Also, consult and involve women as well as local communities and experts in the policy development process.

- Leverage procurement opportunities to create income-generating opportunities for women-owned businesses. These could include ICT infrastructure contracts, contracts to conduct digital skills training, or contracts to run telecenters, among others.

Costa Rica's National Telecommunications Development Plan includes specific goals for providing female-headed households and women entrepreneurs with subsidies for internet service and devices.

Botswana's National Broadband Strategy includes targets on women's usage of smart devices, and digital literacy, as well as the share of ICT graduates who are women.

(A4AI 2020; Web Foundation 2017; World Bank 2018)

A Focus on Frontier Issues

Integrate Online Safety in the ICT Regulatory and Policy Framework

1) Training to address lack of awareness of cyberrisks

- Public campaigns conducted in a manner that suit women's needs, intermediated through ICT can help target existing users. For example, a video on how to defend against online harassment can be shared through social media to increase awareness.
- Awareness on cybersecurity/online risks can also be incorporated as a module on online security at digital literacy training.
- Cybersecurity and online safety modules can also be integrated into school curricula or through school ICT clubs.

2) Strengthen legislation for online safety

- The gaps in policies and regulations that govern ICTs with respect to ethics, privacy, security, and safety, and which create significant risks for women and girls, such as a public information act and cybersecurity policies with limitations on internet surveillance, need to be reviewed.
- In particular, access to information, freedom of expression, and the right to know policy need to be reviewed to see if they cover the online environment.
- Protection measures and reporting mechanisms need to be strengthened through legal and policy frameworks.
- Care must be taken to keep definitions precise and ensure protection of free speech.

(World Bank 2018)

A Focus on Frontier Issues

Integrate Online Safety in the ICT Regulatory and Policy Framework

3. Capacity building for tackling cybercrimes against women

- Design or strengthen an appropriate and confidential mechanism for women to report complaints (special police desk/hotline/online crime reporting platform) in consultation with gender experts and women.
- Capacity building of law enforcement officers on: 1) tackling cybercrime by training officers on the latest developments on technological and legal aspects of cybercrime investigation. Training would include cyber-forensic tools that empower law enforcement officers to investigate using digital evidence; 2) providing an enabling environment to women to seek legal redressal against crimes; this would help increase reporting of gender-based violence, irrespective of where it is encountered—online or otherwise. Some aspects to be addressed include victim shaming, aggressive/sexist interrogation, not taking crimes such as cyberbullying or cyberstalking seriously.
- Introduce mechanisms to recruit more women law enforcement officers, trained in dealing with cybercrime as women survivors may be more comfortable with female interface at the time of reporting crime.

(World Bank 2018)

4. Integrate Online Safety in Digital Skills Training and Address Social Norms

- Integrate in-country resources on GBV and technology-facilitated GBV in curricula for digital skills training across all participant groups (men and women).
- Educate children of digital skills training participants— both sons and daughters — on the risks of technology and how to mitigate these risks and where to turn to for help. Children can also act as change agents vis-á-vis fathers and other male gatekeepers, relatives, or the wider community.
- Train multiple stakeholders, partner to avoid duplication of efforts, and engage in a community-wide approach to online safety. Parents, brothers, guardians, teachers, and caretakers can all be included within a wider approach to engage men and boys (besides women and girls) on online safety.
- Train influential people in the community, such as local government officials, popular artists, and other community leaders on digital literacy and risks to help overcome trust issues around mobile or the internet.

(USAID 2021)

Collect More Data and Evidence:
A Cross-Cutting Enabler

Gender and sex-disaggregated data help us understand how various issues and policies related to the use, implementation, and coverage of digital technologies impact women differently. This can help inform policy and assess interventions' impacts.

Based on data are reliable, valid and representative, and free of gender biases

Has the desirable features of complexity, where data from different domains in women's lives (health, employment) can be cross-referenced and cross-tabulated, and granularity (to get smaller units by race and ethnicity, age, and geographical location, beyond sex)

Has good coverage, including country coverage and regular country production, and is comparable across countries in terms of concepts, definitions, and measures

(Buvinic et al 2015)

Collect More Data and Evidence:
A Cross-Cutting Enabler

Recommendations for Operational Teams

Collect more sex-disaggregated data for standardized indicators across countries using a transparent methodology as part of results frameworks

Partner with research and public interest organizations to collect data and assess the long-term impacts of interventions funded by WB projects

Make operational data and research more widely accessible in easily digestible formats to governments, researchers, and the wider public

6. Partnerships

→

Partnerships: A key enabler of gender equality in digital development

- The World Bank Digital Development Global Practice engages in partnerships within the World Bank Group and across the public and private sectors to help close the gender digital divide. Strategically, the World Bank engages with
  a) Multilateral organizations (ITU, EQUALS).
  b) Private sector partners (Consumer Technology Association, GSMA).
  c) Government ministries and regulators.
  d) Public interest and philanthropic organizations (Bill & Melinda Gates Foundation (BMGF), NGOs) in client countries.

- Partnerships have strategically helped push forward the work on closing the gender digital divide through
  - **Challenges** (such as the CES-WBG Solutions for Women Challenge 2020) to highlight and reward innovative solutions to bridge the gender digital divide.
  - **Grant programs** (in partnership with EQUALS and supported by the Digital Development Partnership).
  - **Initiatives** (such as G2Px in partnership with BMGF) for knowledge sharing, technical assistance to clients, and operational support to task teams.

Private sector, e.g., CES, GSMA

Governments, e.g., client countries, donor partners

World Bank

Public interest organizations e.g., BMGF, NGOs in client countries

Multilateral fora; e.g., ITU, EQUALS

CES/WBG Gender Challenge Winners

- CES/WBG Solutions for Women Challenge: Launched in 2020 in partnership with Consumer Technology Association. Winners were announced at CES2021.

- Seeks scalable, innovative technological solutions that seek to empower women in five areas: platforms, digital skills, online content, enhanced digital access, and COVID-19 response.

Objectives:
- Generate awareness about the gender digital divide
- Catalyze innovative solutions to bridge the gender digital divide
- Broker partnerships between the public and private sectors to implement solutions at scale

<u>Bridge for Billions</u> is a digital entrepreneurship ecosystem and mentoring platform for early-stage entrepreneurs focused on inclusivity and affordability. Since its creation in 2015, it has supported 717 female entrepreneurs from 70+ countries.

<u>MicroMentor</u>, a program of Mercy Corps, is a free mentoring platform that connects entrepreneurs and volunteer business mentors. Through MicroMentor, 12,481 women entrepreneurs have received business mentoring and opportunities.

<u>Soochnapreneur</u> is an entrepreneurship program by the Digital Empowerment Foundation that connects India's rural citizens to information, rights, government entitlements, and other necessary digital services. Since its creation, it has trained 25,000 rural women to further empower more than 5 million rural women in India.

Scale-up options for winners

- **RECOGNITION AWARDS:** Project is given visibility and mentorship through CES 2021 and WB Platforms
- **POSSIBLE SCALE-UP THROUGH WBG PROJECTS**: Project task teams are introduced to potential solutions for consideration for their own country work

G2Px

G2PX: DIGITIZING GOVERNMENT-TO-PERSON PAYMENTS

- The G2Px Initiative was launched in early 2020 in partnership with the Bill and Melinda Gates Foundation. This initiative contributes to the broader agenda of improving government-to-person (G2P) payments through digitization.

- The objective is to shift the G2P digitization paradigm beyond program-specific efficiency gains to one that simultaneously accelerates critical development outcomes such as financial inclusion, women's economic empowerment, and government fiscal savings. G2Px aims to establish best practices and to radically improve G2P payments at scale, especially to the poor and to women, by focusing on end-to-end digitization and integration with digital payment ecosystems.

- Enhancing women's economic empowerment is a core principle of G2Px, with a focus on directing payments to women as a pathway to safer access and increased control over funds, as well as access to financial services, including savings and credit. To achieve this, good practices include simplifying the onboarding and registration process, using differentiated outreach methods and working with women's groups to reach women, simplifying customer due diligence requirements to help overcome ID constraints, ensuring sufficient representation of women agents, establishing monitoring systems that collect sex-disaggregated data, and setting up well-functioning grievance redress mechanisms.

EQUALS Access Coalition/Digital Development Partnership Pilots

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• Joint efforts between the DD GP and EQUALS to design interventions to address the digital gender divide by socially and economically empowering at least 500 young African women and girls with digital skills.

• Three pilots in digital skills training will include analyses and assessments to identify gender gaps, design impactful programs, benchmarks results, and widely share the success stories and the findings.

• The pilots will be COVID-19 aware and seek to support women to access online/remote work opportunities and provide digital skills training to address the restricted mobility and security challenges women face.

• The results from these pilots will be scaled up through World Bank operational projects within the region.

DIGITAL OPPORTUNITY TRUST (Rwanda): Digital skills training focused on digital entrepreneurship (business needs assessments, business formalization and business management, digital finances as branding/marketing). Two groups: Young women entrepreneurs—young women ages 18-35 years, including those living with disabilities, who will receive the training; Digital Champions—youth leaders who will facilitate both virtual and face-to-face training sessions.

NATVIEW (Nigeria): Digital skills training focused on ICT skills (web development and programming, mobile app and game development, user interface and user experience, data analysis, creative industries (animation, Photoshop and video illustrations, and content marketing) and business skills (legal consulting, data entry, content development, and presentation).

TRICKLE UP (Uganda): Impact evaluation on a digital literacy training (animated video and follow-up paper-based curriculum) in the context of a graduation approach livelihood program targeted toward women in rural areas, as well as refugee and host populations.

7. Acknowledgments

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Acknowledgments

Questions?

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