WOMEN’S RIGHTS ONLINE
Closing the digital gender gap for a more equal world

October 2020
CONTENTS

Executive Summary 4
Introduction 8
1. The Gender Gap in “Meaningful Connectivity” 11
   Moving from basic access to ‘Meaningful Connectivity’ 12
   Barriers to meaningful connectivity and internet use 14
2. Women’s Experiences Using the Internet and Barriers to Participation 17
   Finding and verifying information online 18
   Privacy, data protection and trust 20
   From content consumption to creation 23
3. Policy Action to Close the Digital Gender Gap 25
   Policy Recommendations 25
Appendix: Methodology 30

ACKNOWLEDGEMENTS

AUTHORS:
Report led by Chenai Chair, Ingrid Brudivg and Calum Cameron with support from Dhanaraj Thakur, Carlos Iglesias and Ana Rodriguez.

LOCAL PROJECT PARTNERS:
Colombia: Aileen Aguero (IEP) & Olga Paz (Colnoldo)
Indonesia: Paksi Walandouw (Lemboga Demografi FE UI) & Widuri (ICTWatch)
Ghana: Richard Boateng (University of Ghana) & Jemilah Abdulai (Circumspecte)
Uganda: Hannington Obang (Uganda Communications Commission), Dr. Evelyn Lutwama-Rukundo, Mrs. Marjorie Edith Kasozi Sseruwo, Mr. Francis Wasswa & Neema Iyer, Bonnita Nyamwire and Phillip Ayazika (Policy)


This report is made available under a Creative Commons 4.0 International licence
For media or other inquiries: press@webfoundation.org.
The internet, with its great potential for economic opportunity and social empowerment, has long been celebrated as a force for greater equality — breaking down barriers for those previously held back by their geography, wealth, race, class and gender. But while digital connectivity has improved life for billions of people, it is falling short on its promise to beat back inequality.

While disappointing, this is unsurprising. Digital inequality is both a consequence, and a cause, of broader inequalities. Typically marginalised groups are less likely to have internet access and when they are online they face additional challenges in using the internet to its full potential. If we’re to achieve our goal of building a better, fairer digital future, that must change.

This report provides a global snapshot of the state of digital gender inequality and illustrates the barriers that women face in accessing and using the internet.

Around the world, fewer women than men use the internet. Web Foundation analysis has found men are 21% more likely to be online than women — rising to 52% in the world’s least developed countries (LDCs). And this gender gap in internet access continues to grow. Data from the International Telecommunications Union (ITU) suggests that globally it has increased by 55% between 2013 to 2019.

The gap in internet access is just one element of a much greater digital gender divide. This divide includes all of the ways that women are less able to use and influence the technology that is reshaping our world. There are many ways the internet we have today is not working equally well for men and women, from gaps in quality of connectivity and digital skills, to the threats that disproportionately impact the safety and rights of women and girls — all of which prevent women from fully benefiting from the opportunities that digital technology offers.

Left unchallenged, the growing divide threatens progress on gender equality. The internet is one of the most empowering technologies the world has ever seen, but unless women are equally able to benefit from it, the gender divide risks driving further inequality.

Evidence from four countries across three regions

There is a need for greater research in this space to deepen our understanding of the digital gender divide and to shape the policy responses needed to close it. This report, building on previous research from the Web Foundation, contributes new evidence about women’s experiences online from Global South countries. We surveyed almost 10,000 women and men across four countries — Colombia, Ghana, Indonesia and Uganda — to find out whether and how they use the internet, and their experiences using the internet. The surveys are complemented by qualitative focus groups with women and men and key informant interviews with government and civil society representatives.
This is what we found:

Internet access and meaningful connectivity

▶ Encouraging results on basic internet access: The gender gap in basic internet access in these countries was largely positive. Our survey found all countries besides Uganda had far smaller gaps than global figures. In Ghana, the gender gap in internet access was just 5.8%, while Colombia and Indonesia were near-parity. Uganda has further to go with a gender gap of 43%, though this is still lower than the regional average for Africa of 49.6%.

▶ Women experience a second-rate internet: In this report we go beyond basic access to understand the quality of internet people have, using the Alliance for Affordable Internet (A4AI) Meaningful Connectivity Target to measure these countries against minimum thresholds for regular access, an appropriate device, enough data and a fast connection. When using this more robust measure of access, gender gaps reappear.

In Colombia and Ghana, which both have small gender gaps in basic access, the gap in meaningful connectivity was 17% and 14% respectively. Given that important online tasks increasingly demand more bandwidth, reducing the gender gap in meaningful connectivity must be the goal for governments that are committed to digital equality.

▶ Multiple barriers to internet access: We asked participants about some of the barriers preventing or limiting their internet use. Their answers included time and financial constraints, poor service availability and quality, and a lack of digital skills.

The affordability of data emerged as one of the biggest factors, with 22% of non-internet users saying the cost of data packages kept them offline while 25% of users said this limited their use. This is in line with A4AI findings that the cost of data and devices is keeping people offline in great numbers. Among internet users in rural areas, women were 14% more likely than men to say cost limited how much they could use the internet.

A lack of digital skills was also ranked highly as a barrier to access, with 45% of non-internet users citing this as a key reason they do not use the internet. Digital literacy was a particular barrier for women in rural areas, with half of non internet users saying a lack of know-how kept them offline, compared with 45% of rural men.

1. The regional connectivity gender gap for Africa is 49.6% based on our women-centered analysis of ITU data.
Women’s experiences using the internet

Our survey found women are less likely to be creators of content when they do get online. Men were far more likely to engage in a range of online activities, including:

- **Posting comments** about political, social or economic issues (men 29% more likely).
- **Selling products** or advertising a service (men 29% more likely).
- **Publishing a blog post** (men 22% more likely).

Relevant content is critical to encourage people to use the web. Without women's full participation as creators, the internet will continue to be built with a bias towards male perspectives and miss out on the full knowledge, talent and contributions of all of society.

With fewer women on the internet, and women less likely to create online content, there is a shortage of women-created content to engage other women and encourage them to stay online and create content themselves.

- **Women are more concerned about their privacy online.** Across a range of personal data categories, we found women more concerned about their privacy than men, including private messages, home addresses and healthcare information. Focus group participants talked explicitly about the consequences of having their personal data misused, including experiencing and witnessing online harassment and online abuse, and that this increased online vulnerability means the right to privacy and data protection is particularly important.

- **Women have less trust in online companies.** Consistent with caring more about privacy issues, women were also more skeptical with regard to tech companies using their data responsibly. 54% of female respondents said they would not allow companies to use any of their data, compared with 47% of men. Focus group participants said their trust in companies was related to the degree of control they have when agreeing to terms of service, and they expressed frustration that companies offer an all-or-nothing approach to personal data. They also pointed out that the complexity of these terms of service means most people do not read them, raising questions about whether people understand what they’re agreeing to with respect to companies’ use of their data, particularly for users with lower levels of literacy.

Closing the digital gender gap for a more equal world

The Covid-19 pandemic has underscored the critical importance of internet access in today’s world while revealing the brutal inequalities along lines of wealth, geography, age and gender that leave some more vulnerable to the virus and its impacts. For the billions of women who have inadequate or zero internet access, being without this lifeline has devastating consequences. And as women play a disproportionate role as frontline workers, caregivers and educators, the gender gap has further costs for families, communities and economies.

Everyone benefits when we close the digital gender divide. Digital equality is important not only for individual rights and empowerment, but also as a vital driver of economic growth and prosperity. Inclusive economies are stronger economies, and inclusive digital development will be critical as countries look to bounce back from the Covid-19 crisis.

“COVID-19 has been the most disruptive global force in a generation. And where there is disruption, there is the potential to rebuild, reimagine, and create a radically better world. We can allow the coronavirus crisis to reinforce the worst impacts of the digital gender divide; or we can use the crisis to accelerate change, expand horizons, and get millions of girls and women online.” — UN Women Executive Director Phumzile Mlambo-Ngcuka & Plan international CEO Anne-Birgitte Albrectsen
We urgently need to close the digital gender divide and make sure that women and girls are able to fully participate online without fear for their safety or their rights. Until we do, the internet will continue to work against progress on gender equality.

Digital technologies will not automatically empower marginalised people and break traditional power structures without long term investment and commitment to overcome existing inequalities online. This report highlights key areas, with specific steps, that governments and companies must focus on to enable a truly gender-inclusive digital world.

Collect and publish gender data in the technology sector

To make policies that address the specific needs of women, decision makers need gender disaggregated data, taking into account specific experiences of men and women. However, less than half of countries report data on the percentage of men and women using the internet and few countries collect any other gender ICT data. Governments should commit to collecting gender data on the technology sector regularly and to publishing it openly for others to use.

Adopt Meaningful Connectivity as the target for internet use and tackle the gender gap

This report shows that the current definition used to measure internet use masks the true extent of the digital gender divide. The meaningful connectivity target gives a fuller picture of the quality of internet access people experience, and can help policymakers design better policies to close the digital gender gap and connect more people to a useful, empowering internet.

Promote digital skills and ICT education for women and girls

Digital literacy is one of the biggest barriers to internet use and women and girls are most impacted by a lack of digital skills. This is influenced by factors such as education access, income inequality, access to digital devices, and cultural biases discouraging women and girls from using technology. Governments must invest in and promote digital skills and information and communication technology (ICT) education to encourage women and girls to use the internet, create content online and navigate the online world safely.

Support women’s participation in technology development, local content creation and ICT innovation

To close the digital gender gap, women must be equal digital creators and producers. Today, women make up less than a third of professionals in the technology sector. If the majority of technology creators are men, the design of technology, products and services could be biased towards men. Companies might lack important perspectives to make policies, products and services that reach and benefit more people. Governments should develop national strategies to support technology education, innovation and leadership for women and girls so that their perspectives are reflected in the design and development of technology.

Safeguard the online privacy of women and girls

Women and girls face disproportionate risks to their data rights online, particularly in the form of online abuse, harassment and threats of violence. This means that violation of women’s personal data rights can have an exaggerated impact on their other human rights, such as freedom of expression, assembly, and psychological and physical safety. Both governments and companies have a role to play to keep people safe by protecting the right to privacy — which in turn makes the web safer for women, and for everyone.
The internet is one of the most transformative technologies the world has ever seen, upending politics, sparking social movements and changing how we live, work and play. But though revolutionary in many ways, the internet also reflects and reinforces existing power structures in society — and can create new inequalities that limit its potential to be a transformative force for digital equality. This is evident in the digital gender divide that exists between men and women.

A stubborn digital gender divide

Women are less likely than men to have access to and use the internet in developing and least-developed countries. Globally, they less frequently create online content, run web-based businesses or work as developers building internet platforms. Women and girls are also more likely than men to face online harassment, abuse and threats of violence. As Tim Berners-Lee wrote on the web’s 31st birthday, too often the web does not work for women and girls.

The reasons for this digital gender gap are many — from economic and education imbalances between men and women, to cultural expectations and traditional gender roles, to policies that fail to tackle systematic inequalities. These, of course, vary across countries and contexts.

What is the digital gender divide?

We define the gender digital divide as reflecting the inequalities between men and women in internet access and use. Though often understood as the gap between the number of men and women who can use the internet, the digital gender divide goes beyond access. Women across the world face unique barriers to fully benefiting from the internet, ranging from digital skills and education gaps, to affordability barriers worsened by income inequality, to online harassment and infringements on digital rights. And, with a shortage of women working in technology, online platforms and services are often not designed with women’s needs in mind. To fully empower women online, closing the digital gender divide means addressing all the ways women are less able to use and benefit from the internet.

But none of the drivers of digital inequality are beyond the reach of decision makers to change through smart policy. They must do so as a matter of urgency. As more of the world goes online and the internet becomes a central arena for social, economic and political life, being unable to use the internet fully has a dire impact on people’s rights and opportunities — online and offline.

Unless the digital gender divide is closed quickly, progress on gender equality — which has already been frustratingly slow — will be at risk.

2. This includes access to infrastructure; ICT/internet enabled devices such as smartphones, tablets and computers and use of internet based platforms and services.
The Covid-19 crisis has made meaningful access to the internet even more critical. For the billions of people who have inadequate or no internet access, being without this lifeline can have catastrophic consequences, leaving them without access to critical health information, cut off from loved ones and stripped of their livelihoods.

As women play a disproportionate role as frontline workers, caregivers and educators, the gender gap also has a huge knock on cost for families, communities and economies. The Web Foundation and the Alliance for Affordable Internet (A4AI) have urged governments and companies to take immediate action to keep people connected and expand internet access as the pandemic continues to affect lives around the world.

The digital gender divide is not only about inequalities in the technology women and men have access to, but how they are able to use that technology and the threats it poses to their safety, rights and opportunities. Digital equality means considering all of these factors as a whole, and building an online space that serves everyone equally without replication of existing social inequalities of gender, race, income, age or any other factor.

Building evidence and developing policy to close the digital gender gap

Despite clear benefits for increasing women’s online participation, very few countries — particularly in the Global South — have technology policies and strategies that target the gender digital divide. Moreover, most countries do not collect the data they need to understand the issue and formulate policy to address it. Just 24 countries in Africa and Asia submit sex-disaggregated data on internet access to the International Telecommunications Union, the UN agency that tracks information and communication technology (ICT) data. Many countries do not conduct any surveys on ICT access and use.

In addition to a lack of data on ICTs and gender from governments, there have been few global research initiatives focused on women’s unique use and experience of ICTs, leaving researchers, policymakers and technologists with little evidence on which to base decisions.

This report seeks to fill in some of this gap, providing a picture of the digital gender gap as it stands today, based on surveys of almost 10,000 women and men in four countries across three regions in the Global South, looking at how they are able to use the internet today and the barriers they face.
Nationally representative surveys in four countries

We conducted nationally representative household and individual surveys in Colombia, Ghana, Indonesia and Uganda. These countries were selected on the basis of their regional diversity, covering Latin America, Africa and Southeast Asia.

Each country also has unique characteristics:
Colombia, where the gender gap in basic internet access has been closed; Ghana, one of the regional leaders for internet uptake in Africa; Indonesia where a complex island archipelago geography has special challenges for internet infrastructure and access; and Uganda where low levels of internet access are further challenged by regressive policies such as a social media tax.

The surveys were complemented by qualitative focus groups and key informant interviews in those countries. While each country and region is unique, by using statistical analysis and drawing from qualitative discussion across four regions, we highlight globally-relevant issues around women's online experiences.

This report builds on groundbreaking research from the Women's Rights Online network — a partnership of organisations working for digital gender equality, hosted by the Web Foundation. The 2015 ‘Translating Access into Empowerment’ report revealed the severity of the digital gender gap, finding women were 50% less likely to have internet access than men in urban poor communities in countries of the Global South — and 30-50% less likely to use the internet for finding information, sharing opinions and pursuing economic opportunities — making clear that the internet was recreating offline inequalities.

Five years on, has the digital gender divide been closed? Sadly not. While more women are now online, globally the gap between men and women with access to the internet has grown indicating the increase of men online. And as this report underlines, there remain substantial divides between men and women in quality of access, internet use and digital empowerment.

Towards a gender-inclusive connected society

This report aims to better understand the ways women are kept from participating fully in our digital world and offers policy recommendations for governments and companies to close the digital gender gap and make the internet a safe and empowering space for women and girls everywhere.

We present trends in internet use and examine barriers that women face to using the internet fully and freely — zoning in on how women consume and produce content, and their awareness and exercise of their rights over personal data and information. This report will be followed by country-specific reports that present data gathered in each of the four countries in more detail and provide policy recommendations specific to those countries.

For the internet to meet its potential as a force for empowerment and gender equality, every country must urgently step up and invest in gender-responsive ICT policies now.
The gap in internet access between men and women is large and continues to grow, across regions and globally. Web Foundation analysis has found that men are 21% more likely to be online than women — rising to 52% more likely in the world’s least developed countries (LDCs).

The internet is one of the empowering tools of our time. This gender gap in internet access means hundreds of millions of women and girls are missing out on opportunities to use the internet to learn new skills, start businesses, access healthcare and advice, transfer cash, and much besides. According to International Telecommunications Union (ITU) data, the global gender gap in access has increased by 55% between 2013 to 2019.

Left unchallenged, this growing divide threatens progress on women’s equality.

Bodies like the United Nations (UN) have recognised that access to the internet is critical to individual and global development — and have codified this into various internet access targets. The UN Sustainable Development Goals (SGDs) include a target for universal internet access by 2020 and SDG 5 on gender equality specifically advocates for women’s empowerment through ICTs. The Web Foundation however, estimates that only 57% of people will have internet access by the end of 2020. One of the factors behind this gulf is a stubborn gender gap in access. It is impossible to meet these ambitious connectivity targets without dramatically increasing internet access for women.

The Web Foundation’s Women’s Rights Online research partners have been monitoring the progress of countries around the world towards meeting the SDG targets on women and technology with our Digital Gender Gap Audit Scorecards. Governments across the world are not doing nearly enough to tackle the barriers to women’s digital access and empowerment, and to meet the SDG targets by 2030.
Moving from basic access to ‘Meaningful Connectivity’

The digital gender gap is about more than basic internet access. The metric most commonly used to measure internet access today is “someone having used the internet in any form in the last three months”. But this metric captures only the first step towards meaningful internet use. Beyond basic access, there are a number factors that define how useful the internet actually is for people. That is why the Alliance for Affordable Internet (A4AI), a Web Foundation initiative, introduced “Meaningful Connectivity” — a target that differentiates levels of internet access.

The meaningful connectivity target focuses on four components of connectivity: regular internet use; an appropriate device; enough data; and a fast connection. It sets minimum thresholds people need around each of these components in order to use the internet in useful and empowering ways.

To bridge the digital gender divide — and support gender equality at-large — we need to understand not only inequalities in internet access, but get a full picture of how women’s experiences online diverge from men.

Meaningful connectivity provides us one lens to do so — and the results that follow show the huge scale of the work needed to be done in the fight for digital gender equality.

To calculate the meaningful connectivity score for a country, we take the average score across all four thresholds outlined in Box 1. These are weighted equally as we assume each threshold is equally important. This approach means that the score calculated at the country level is not a direct measure of individuals’ meaningful connectivity, but rather how countries score across the four thresholds.

The Meaningful Connectivity Target

The meaningful connectivity target is a tool to raise the bar for internet access and set more ambitious policy goals for digital development. It sets minimum thresholds across the four dimensions of internet access that matter most to users:

► Regular internet use
Minimum threshold: Daily use

► An appropriate device
Minimum threshold: Access to a smartphone

► Enough data
Minimum threshold: An unlimited broadband connection

► A fast connection
Minimum threshold: 4G mobile connectivity

It is clear that, across Colombia, Ghana and Indonesia, the gender gap in meaningful connectivity is larger than the gap in internet access (see Table 1). In Colombia, for instance, where internet access between men and women has reached near-parity, there is a 17% gender gap in meaningful connectivity. While women and men are online in equal numbers, men are likely to have a better quality connection with better devices, faster speeds, more data and more regular internet use (see Table 2). In Colombia, we found that 51% of men have a 4G connection compared with 36% of women.

In Colombia, Ghana and Indonesia, the gender gap in basic access we found using our women-centered approach is encouraging — far narrower than what we see in regional data. However, given that even in these high performing countries, gender gaps in meaningful connectivity are larger than access gaps — particularly in Colombia and Ghana — we can expect that countries with large divides in basic access will perform worse still on the critical areas measured as part of meaningful connectivity.

3. The Meaningful Connectivity report provides more detail on the score of the four thresholds in each country.
4. ibid
5. We take a women-centered approach to calculating the gender gap. Women are used as a reference group to place emphasis on the disparity and disadvantages faced by women ([% of women using the internet - % of men using the internet] / [% of women using the internet]).
Section 1: The Gender Gap in ‘Meaningful Connectivity’

Table 1: Meaningful Connectivity & Internet Use

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Access</th>
<th>Meaningful Connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>84.1%</td>
<td>50.9%</td>
</tr>
<tr>
<td>Gender Gap:</td>
<td>0.9%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Ghana</td>
<td>30.3%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Gender Gap:</td>
<td>5.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>77.6%</td>
<td>50.2%</td>
</tr>
<tr>
<td>Gender Gap:</td>
<td>-0.1%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Uganda</td>
<td>23.2%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Gender Gap:</td>
<td>42.9%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Source: A4AI 2020 | 2020 Web Foundation nationally representative household survey data in Colombia, Ghana, Uganda and Indonesia

Uganda still has a low level of internet access overall, and a substantial gender gap in access of 42% which is slightly lower than the African region’s digital gender gap of 50% in internet access. Unfortunately, methodological issues means we do not have a meaningful connectivity score for Uganda, but the access gap makes clear that the government must focus resources on connecting women as it invests to bring more of its population online.

Large gender gaps for meaningful connectivity thresholds in Colombia, where near-parity in access has been reached for example, suggest governments must develop policies beyond basic access to ensure women benefit equally from digital technologies (Table 1). In Ghana, with just a third of the population connected, solutions to address access should also take into account meaningful connectivity thresholds.

Reaching parity on basic internet access should be seen as part of the process — not the end goal.

6. Calculations done using data to 13 decimal points. Any inconsistencies to gaps shown here are a rounding effect. See original data.
7. Based on our women-centered approach and using ITU regional data.
8. See note on data limitations in the Methodology under the Appendix.
In today’s world, where the internet is used to access health information, learn online, work remotely and stream and share video entertainment, meaningful connectivity — with regular access, enough data, fast speeds and an adequate device — is critical. Moving from targeting equality in basic access to meaningful connectivity is vital to empower women and men, and to drive competitive, inclusive digital economies that harness everyone’s knowledge and talent.

### Barriers to meaningful connectivity and internet use

Our survey underlines the large gender gaps across the four thresholds of meaningful connectivity. The data also speaks to some of the barriers that need to be addressed to reach meaningful connectivity targets.

As we advocate for policies that work according to context, we also nuance the differences amongst women as we contrast the challenges for women in urban areas and women in rural areas. This approach highlights the need for policy approaches that are aware of different contexts.

### Service quality and availability

The rural-urban divide continues to be a deep source of inequality with internet access far more scarce in rural areas. In addressing digital gender gaps, it is important to take this context into account to avoid a “one size fits all” policy approach. We asked internet users what prevented them from using the internet more frequently. 22% of women living in rural areas cited unreliable service and 19% said there was no service available at all. This was a much less pressing issue for their counterparts in urban areas who listed these reasons at 13% and 12% respectively (Table 3). In countries with lower overall internet use where infrastructure is less developed, the urban-rural divide is greater still. In Ghana, 34% and 29% of women in rural areas cited unreliable service/no service as barriers, compared with 21% and 15% of women in urban areas citing those issues.

---

9. See note on data limitations in the Methodology under the Appendix.

---

### Table 2: % of population that meet meaningful connectivity thresholds

<table>
<thead>
<tr>
<th></th>
<th>Smartphone access</th>
<th>4G connection</th>
<th>Unlimited connection</th>
<th>Daily use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLOMBIA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td>36%</td>
<td>39%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>72%</td>
<td>51%</td>
<td>48%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td><strong>GHANA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31%</td>
<td>5%</td>
<td>3%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>33%</td>
<td>8%</td>
<td>4%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td><strong>INDONESIA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77%</td>
<td>24%</td>
<td>25%</td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td>76%</td>
<td>29%</td>
<td>26%</td>
<td>67%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Women Rights Online Nationally representative survey data in Colombia, Ghana and Indonesia, 2020."
Section 1: The Gender Gap in ‘Meaningful Connectivity’

Time

Having enough time in the day is a key factor impacting internet use. 25% of participants who are internet users cited a lack of time as limiting more frequent internet use. This was a bigger factor in particular for women in urban areas (26%) in comparison to women in rural areas (18%) (Table 3). While it is a significant issue for both men and women, as highlighted by UN Women, women face the double burden of work as they carry out paid activities and unpaid care work — including childcare, cooking, cleaning and farming — essential for households and economies to function. In our findings looking at activity and employment, we found that 20% of women in urban areas and 16% women in rural areas who cite time (Table 3) as a limitation were homemakers or housewives.

None of the men surveyed who cited time as a limitation reported being home makers. Women spend on average 4.1 hours per day on unpaid care work in contrast to men at 1.7 hours. The imbalance in unpaid care work (and its impact on time-use) highlights that solutions to close the digital gender gap need to take wider societal gendered inequalities into account.

Affordability

Income levels impact internet use for both men and women. Around the world, women still earn less than men, with a 50% income gap overall and a 40% wage gap for men and women in similar positions, according to the World Economic Forum Global Gender Gap Report. In addition, challenges to accessing credit, land or financial products make it more difficult for women — and female-headed households in particular — to afford internet access. The affordability of data plans emerged as a limitation for rural participants, particularly women, impacting their ability to access a quality connection on a daily basis (Table 3). Across Colombia, Ghana and Indonesia, 33% of women in rural areas listed affordability as a limitation to more internet use, compared with 26% of women in urban areas. Looking at non internet users, we find that, regardless of gender and location, affordability of data plans is a barrier.

Table 3: Top factors limiting more frequent use for internet users (% of people)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Rural users</th>
<th>Urban users</th>
</tr>
</thead>
<tbody>
<tr>
<td>I cannot afford the mobile data plan/internet service</td>
<td>25%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>The service is unreliable (no good connection)</td>
<td>19%</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>The service is unavailable (no connection at all)</td>
<td>14%</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>I don’t have time</td>
<td>25%</td>
<td>18%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Women Rights Online Nationally representative survey data in Colombia, Ghana, and Uganda 2020

10. See note on data limitations in the Methodology under the Appendix.
Digital skills

Along with affordability, a lack of digital skills is one of the biggest barriers to internet use. Among those not using the internet, 45% of recipients cited not knowing how to use it as a significant barrier (Table 4). But there is a clear gender gap in digital literacy, particularly in urban areas where 45% of women said they didn’t use the internet because they don’t know how to, compared with 36% of men. The lack of digital skills is more of an issue in Indonesia than in any other country with, on average, 78% of non internet users citing skills as a barrier. There is clearly a need for digital literacy and skills programmes in both rural and urban areas, with a particular focus on women.
Women’s Experiences Using the Internet and Barriers to Participation

“First and foremost, and the key, I use the internet to work. I’m a social media marketer specialised in content marketing and social media management. I use the internet to work; I use it to send e-mails, and I use it for fun as well. I use it for my advocacy stuff that I do, and to reach out to people in Ghana, outside Ghana and all over. Yes, I use it for almost everything; I’m always on my phone or laptop, so I use it for everything.” — Ghana urban female participant, November 2019

The goal of connecting more women and girls to the internet is not an end in itself — and we cannot stop at access. Bridging the digital divide and making sure women have meaningful connectivity is ultimately about expanding rights and opportunities for everyone. And as more women connect, we need to make sure the internet they find is safe, empowering and respects their human rights.

That means examining and understanding the different experiences men and women have online today, so that policymakers, technologists and others take action to ensure the internet is fit for everyone now and in the future — and does not perpetuate the inequalities that exist offline, whether along lines of gender, race or other factors, or create new inequalities. Otherwise we will see an extension and exacerbation of familiar systematic barriers for certain groups to equally participate in economic, political and social life.

This section examines findings that emerge from our research that impact women’s full use of the internet, specifically around accessing information, perceptions of trust, privacy and data protection, and safe online engagement. The findings help shed light on some of the issues that need to be addressed to ensure women are not discouraged from using the internet, and that they can be guaranteed of their rights online.
“As a housewife, internet access is for interacting through social media; internet access is very helpful for children learning. My children are still in primary school. When they have an exam, some students do not have a school book and I as a parent also browse through Google (to assist them).” — Indonesia female rural participant, October 2019

“Now it is very common to find several links that are fake because let’s say when one clicks on those you can tell looking at the type of writing, the way in which the ideas are exposed, you realise that they are not totally reliable sources.” — Colombia female urban participant, January 2020

Finding and verifying information online

At its core, the web is a tool for sharing and finding information. Everyone depends on search engines and social media to navigate the internet and access information for a range of purposes, from health information and entertainment, to agricultural activities, job hunting and business opportunities. One of the biggest worries emerging from our research around accessing information online was the accuracy of content and the growth of misinformation, echoing rising concerns around the spread and damage of misinformation and disinformation in countries around the world — particularly during Covid-19 in relation to health and political misinformation.

Being able to determine the credibility of information is particularly important in Ghana, Indonesia and Uganda where there are laws and regulations that may be used to criminalise the creation or sharing of misinformation and disinformation.12

One of the important ways to verify information is by looking at other, credible online sources, such as public health agency websites or credible news outlets.

While respondents cited misinformation as a major concern, still less than half (47%) of respondents across the four countries said they took steps to verify online information against other sources. Here there was also a gender difference, with 45% of women saying they have verified information, compared with 49% of men. In Colombia this gender divide was greater, with only 47% of women verifying information compared with 57% of men.

There are a number of factors impacting whether people are likely to verify the information they read online, including being able to access content in a language they can understand, their educational background and digital skills, and their ability to afford enough data to browse other sources online.

11. Clarity by authors on context from the focus group discussion
12. Governments should pass regulation designed to limit misinformation and disinformation online, in line with human rights standards. Governments should not use laws intended to curb misinformation as a back door to limiting freedom of expression, of peaceful association and assembly, and the freedom to access information. For more, read our brief on misinformation and free speech in the Covid-19 context.
People need access to content they can understand, and we found that across all four countries we studied, frequent access to local language content resulted in a higher likelihood of participants verifying information\textsuperscript{13}. Many people globally struggle to find a wide range of content in their language because online content is not representative of the language comprehension of all internet users. While 16\% of the world speaks English as a first or second language (native English speakers make up just 5\% of the global population), estimates suggest almost 60\% of websites are English-language. This leaves much of the world with limited content to explore and to validate information they do find.

If women and men of all backgrounds are to use the internet to access and validate relevant content, there needs to be more diversity in languages of content to meet people’s varying needs.

Beyond access to relevant content, we also found that education has a significant positive relationship to whether people verified information online.\textsuperscript{14} Because women in many countries have fewer educational opportunities than men, and because there is a gender gap in digital skills (Table 4), this may impact their ability to verify information.

Finally, data affordability is a factor impacting whether people are likely to verify information online. When the cost of internet packages is restrictive for many people, this limits what they can do online, including verifying information. Women’s lower earning-power throughout the world means many women face additional financial pressure and may not be able to consume as much internet data, if they are online at all. In Ghana, for example, our study found a significant relationship between income levels and the likelihood of individuals verifying online information.\textsuperscript{15} This evidence shows the complex interplay of issues spanning content, education, income and other factors that impact people’s ability to do something as simple as find and validate information online. Our research underscores the importance of understanding the various ways in which inequalities emerge, and tackling them in a holistic way.

\textsuperscript{13} Availability of local language content has a significant positive impact on the probability of verifying information in each country: Colombia - 0.045***; Ghana - 0.102***; Indonesia - 0.075*** and Uganda - 0.062***. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

\textsuperscript{14} Education has a significant positive impact on the probability of verifying information in each country: Colombia - 0.099***; Ghana - 0.053***; Indonesia - 0.044*** and Uganda - 0.096***. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

\textsuperscript{15} Wealth has a positive significant effect on verifying information in Ghana at 0.215***. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

www.webfoundation.org
Privacy, data protection and trust

Trust is an important factor influencing how people use online spaces and digital tools. If people do not trust companies, governments, or others to handle their personal data properly, their desire to participate actively on the internet will be diminished, creating chilling effects that impact their online opportunities.

This survey presents evidence that privacy is a more significant concern for women than men, suggesting that strong data protection guarantees are particularly important to increase trust in online services and to safeguard equality in rights and freedoms for women online.

Our findings show that women are more concerned about the privacy of their personal data in categories such as private messages, personal data of family members, medical records and home addresses (Table 5). And women are concerned about the potential harms they face if this information is misused.

People face a multitude of harms if their personal information is misused, and women are particularly at risk. It is a basic violation of women’s right to privacy when their personal data is shared with individuals and audiences other than those they intended to share it with, or used for purposes other than those they agreed to. Their information could be inappropriately shared by individuals or entities who might be entitled to access it for specific purposes, such as family, friends, doctors, companies or government agencies. In some cases, hackers or other bad actors may access personal information and share it with others.

Table 5: Concerns about personal data privacy (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private message</td>
<td>89%</td>
</tr>
<tr>
<td>Personal data of family members</td>
<td>81%</td>
</tr>
<tr>
<td>Medical records</td>
<td>70%</td>
</tr>
<tr>
<td>Home address</td>
<td>69%</td>
</tr>
</tbody>
</table>

Source: Women Rights Online Nationally representative survey data in Colombia, Ghana, Uganda and Indonesia 2020

“I’m very concerned about my privacy. Because in some cases, if you are not very concerned, you will later find out that what you posted will then be posted elsewhere, and it will go against you.”
— Ghana rural female respondent, November 2019

“Because as a lady I get many stalkers offline. Now imagine what will happen when I put all my personal information online. I feel violated if I keep getting contacted by strangers.”
— Uganda urban female participant, October 2019

16. See note on data limitations under the Methodology in the Appendix.
While online privacy issues affect everyone, women are disproportionately affected by serious privacy violations in some areas, like doxing, the sharing of non-consensual images, cyberstalking, and surveillance via connected devices by abusive partners. Online gender-based violence is a substantial and growing trend and many women are understandably concerned about their online safety, including who can access their information and online profiles. Not only are these harms violations of women’s privacy, but they also impact women’s physical and psychological safety, and can adversely impact women’s freedoms of expression and assembly and their professional, economic, and educational opportunities. Protecting women’s personal data, information and privacy is critical to upholding these other rights and freedoms.

Women on average had lower levels of trust in private companies across the four countries surveyed, with 54% stating they would not allow companies to use any of their data, compared to 47% of men. The gulf between men and women was larger in countries with higher internet use. In Colombia 53% of women surveyed vs 40% of men said they would not allow companies to use their data, and in Indonesia the numbers were 60% of women and 51% of men.

Our survey found that women are more concerned with health data and, although not explored further in our study, sexual health and reproductive data has been identified by researchers as an area of concern.

“Out of the 36 apps we tested, we found that 61% automatically transfer data to Facebook the moment a user opens the app. This happens whether the user has a Facebook account or not, and whether they are logged into Facebook or not. We also found that some of those apps routinely send Facebook incredibly detailed and sometimes sensitive personal data. Again, it didn’t matter if people were logged out of Facebook or didn’t have an account.” — Privacy International, 2019.

Section 2: Women’s Experiences Using the Internet and Barriers to Participation

“Research by Privacy International, for example, highlights concerns with period tracking applications which were found to be sharing women’s personal health data to third parties without their consent, and used for targeted marketing campaigns and other commercial activities.

In our focus groups, the trust participants had in companies to use their data responsibly was related to the degree of control they perceive when agreeing to terms of service for the use of platforms. Yet, individuals tend to have limited options when signing up to online platforms, and some voiced concern about “forced agreement” — the sentiment that companies force users to “take it or leave it” when asking users to agree to terms of service:

To explore this further, the study looked at respondents’ awareness and engagement with terms of service on social media platforms. Most platforms ask users to read and agree to the terms of service before using an application or website. In some cases they are also asked to read and agree to privacy policies. We found that several factors, including smartphone ownership, education level and socio-economic status were significant in determining individuals’ awareness of and likelihood to read terms of service. Again, we found the availability of local language content is also an important factor, positively influencing the likelihood of reading terms of service. 18, 19

18. The awareness regarding Terms of Service is analyzed (OLS regression on the number of social media that the user is aware of the ToS). Similarly, the fact of having read the Terms of Service is also modelled (OLS regression on the number of social media that the user has read the ToS).

Variables influencing probability of awareness of ToS: More education has a positive effect in the awareness of ToS 0.273*** and Being a smartphone owner has, on average, a positive effect of 0.429*** in the awareness of ToS.

Variables influencing probability of reading of ToS: More education has a positive effect in the reading of ToS 0.293***; Higher socioeconomic level has a positive effect in the reading of ToS 0.261***; Being a smartphone owner has, on average, a positive effect of 0.121*** in the reading of ToS.

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1
19. See note on data limitations under the Methodology in the Appendix.

“No one reads it (laughs) yeah... I mean sometimes we have a new cell phone and there’s no applications. If we want to install Facebook, Instagram we could do it in 30 minutes. If there’s 10 applications each has its own terms and conditions which are long and we have to agree first, then... we read it beforehand and it’s too long and the content is legal terms.... And one would need 20 minutes multiplied by 10 to read. That’s already two hours like reading a very thick book if we read everything, all of the terms and conditions!”

— Indonesia, urban male participant, November 2020

“The first thing is that each of the tools has certain types of rules that you have to agree with, but if you don’t agree, you can’t access them. That is a reality because, for example, I don’t like the idea of having to give all my data to a company, but I can’t disagree because otherwise, I can’t enter the platform. Companies put that because law is required, but there is really no regulation, and you are forced to share information you don’t want... Besides that, they’re super long, tedious, and have a very technical language, and if you don’t accept them, you can’t have your account. I think it should be regulated.” — Colombia urban low income female respondent, January 2020
Section 2: Women’s Experiences Using the Internet and Barriers to Participation

The reality is that most social media users, particularly those in lower socio-economic groups, are not aware of terms of service or do not have the time or skills to read and understand them. This raises the question of how meaningful these mechanisms are, when they are intended to provide the basis for informed consent or valid contractual agreements.

Trust and privacy are closely linked. To make sure people are able to use the web safely and freely, they must be protected by robust privacy safeguards. Governments must protect people through effective privacy laws and regulations, and companies must provide users with clear and fair terms of service and privacy notices. This is important for everyone, and particularly for women who face additional online risks and express greater concern over privacy issues.

From content consumption to creation

The original vision of the web was an open space where all people could create and share knowledge to harness talents and enable collaboration on a scale never seen before. And yet, this vision has been held back because the online space is not yet equally open to all. The online gender gap means that women are less likely to participate online both as consumers and producers of content. When women are not able to participate equally online, everyone is denied their talents, skills, perspectives and knowledge.

While both men and women are more often consumers than producers of content, our survey finds a gender gap in publishing content such as blogs, videos, commentary on social issues and selling products or advertising services, with women less likely to be online creators (Table 6).

Table 6: Content generation for men and women internet users %

<table>
<thead>
<tr>
<th>Published a blog post</th>
<th>Total</th>
<th>Female / male users</th>
<th>Gender gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td></td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>22%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Posted a video online</th>
<th>Total</th>
<th>Female / male users</th>
<th>Gender gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>55%</td>
<td></td>
<td>51%</td>
<td>14%</td>
</tr>
<tr>
<td>58%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Posted comments about social, economic and political issues</th>
<th>Total</th>
<th>Female / male users</th>
<th>Gender gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>52%</td>
<td></td>
<td>45%</td>
<td>29%</td>
</tr>
<tr>
<td>58%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sell products or advertise a service</th>
<th>Total</th>
<th>Female / male users</th>
<th>Gender gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td></td>
<td>17%</td>
<td>29%</td>
</tr>
<tr>
<td>22%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Women Rights Online Nationally representative survey data in Colombia, Ghana, Uganda and Indonesia 2020

20. Based on the logit model assessing the probability of generating specific content against different variables. In the four specific types of content analyzed, being a female reduces the probability of generating each of them. The reductions are as follows: 3% for blog posts; 5% for videos; 10% for comments about social, economic, and political issues; and 2% for selling a product or advertised a service.

21. See note on data limitations under the Methodology in the Appendix.
“I think for me I don’t think it is because I’m using social media. I think it has to do more with the society and the cultural thing when it comes to the male and the female, the gender thing. You being online and you being vocal about issues that are really important, and people think you shouldn’t be talking that way. It’s general and because you have a mouth to talk, because you are online. But they don’t know we do it offline as well. So, it’s the heckling and the insult and they will not insult the content but they will insult you as a person. Whereas if it was a man that made the same post, the approach would be totally different.” — Ghana urban female respondent, November 2019.

This is consistent with evidence found elsewhere. Taking Wikipedia as a proxy for content production, it is estimated that women have made up just 9-20% of editors on the platform since it was established. This gender gap reflects one aspect of the skewed representativeness of the internet, which also exists along lines of race, class, geography and, as mentioned above, language, among other factors.

It is important that the internet is a space where women can actively engage online, accessing and creating relevant content, and participating in public discourse. The 29% gender gap in men and women commenting on social and political issues is telling, suggesting that women face barriers in exercising their right of free expression. There are of course various reasons for this, but the numerous accounts from women journalists, politicians and activists who have experienced backlash for speaking out online suggest that misogynistic beliefs that women should not speak out and share their views remain prevalent.

Women in the focus group discussion conducted in Ghana cited that harmful and discriminatory gender norms often limit their online participation.

To close the digital gender divide in content creation, we need more research to better understand the factors that are limiting women’s participation. This means taking into account contextual issues that may limit women’s participation in different communities and in different countries. Clearly all barriers are not universal.

Policymakers and technology companies must consider gendered cultural norms as they work towards making sure women can fully participate in online spaces. This will require engagement from a range of actors that take into account social and cultural contexts, and working with women in designing tech and policy solutions. This is critical to close the digital gender divide and build a web that reflects the strength and diversity of its users.
Digital equality is vital to create fairer societies, healthier citizens and stronger economies. A world where women and girls can safely access the internet and contribute online benefits individuals and society at large.

Covid-19 has made the need to close digital divides more urgent than ever, as billions who remain offline or underconnected are left without access to critical health information, education, and economic opportunities.

The majority of those who are still offline are women. Countries cannot meet targets for universal internet access, digital development or women’s equality without closing the digital gender gap. This means eliminating gender inequalities in basic access and affordability, dismantling barriers to women’s participation and expression, and tackling threats that disproportionately impact women’s psychological, physical, and economic well-being.

This empirical evidence from four countries in three regions of the Global South in this report has highlighted areas where policy action is urgently needed.

Governments and companies must implement gender-responsive information and communication technology (ICT) policies with clear steps to reduce the digital gender gap and move towards a gender-inclusive connected future.

Policy Recommendations

Here are 5 steps for governments and companies to urgently close the digital gender gap in meaningful connectivity, and to put in place strategies to advance women’s rights and participation online:

1 Collect and publish gender data in the technology sector

Decision makers need gender disaggregated data (data taking into account specific experiences of men and women) to create policies that address the specific needs of women and tackle the digital gender divide. However, according to the International Telecommunications Union (ITU), only 50% of countries report data on the percentage of men and women using the internet. Less than a quarter of countries across Africa and Asia publish this data on internet access. Of the four countries studied in this report, only Colombia and Indonesia publish this data. Few countries around the world systematically collect gender data in the technology sector on topics beyond access, as assessed in the Web Foundation’s Digital Gender Gap Audit.

A. Governments must commit to regularly collecting and publishing gender data in the technology sector to inform policies and assess progress towards closing the digital gender gap.

B. The raw data should be published in open and reusable formats so that researchers and others can do further analysis on this data and support new initiatives on women and technology.
Section 3: Policy Action to Close the Digital Gender Gap

C. Gender data should be analysed using a women-centred approach, with women used as the reference group for analysis.

D. Governments should document the methodology of their data collection and analysis, including any changes and the rationale for these changes.

Best practice from Mozambique

In Mozambique the Alliance of Affordable Internet (A4AI) convened stakeholders to advocate for the inclusion of sex-disaggregated ICT data in the national census. Having conducted the census survey in 2017, Mozambique now openly publishes census survey data on ICT access, adoption, and use by women and men (at both the individual and household level), which has been used to inform ICT policy interventions to close the gender gap.

2 Adopt Meaningful Connectivity as the target for internet use

The Alliance for Affordable Internet’s new meaningful connectivity target raises the bar from basic internet access to give a fuller picture of the quality of internet access people have. As this report shows, the current definition used to measure internet use masks the true extent of the digital gender divide.

The meaningful connectivity target can help policymakers design better policies and interventions to close the digital gender gap and connect more people to a useful, empowering internet.

A. Governments should adopt meaningful connectivity as a new target for internet access, adoption and use to inform information and communication technology (ICT) policies and connectivity strategies.

B. Implementation of the meaningful connectivity target should be gender-responsive. This means:

- Gender data and analysis is applied to inform the development of policies, strategies and ICT sector investments.
- Gender advocates and experts are involved in the policy and planning process from the start to ensure women-centric policy development.

Promoting active citizenship and participation through technology

The EQUALS Digital Skills Fund — a partnership between the Web Foundation, the EQUALS Global Partnership and Germany’s Federal Ministry for Economic Cooperation and Development — supports grassroots women’s digital skills initiatives that provide gender-sensitive skills to women and girls across communities in Africa, Asia and Latin America. The fund has invested in women-led initiatives to inspire the next generation of women and girls in tech, providing training on using the internet for social change, entrepreneurship, building social movements and supporting female role models in communities.
Section 3: Policy Action to Close the Digital Gender Gap

“People should not have to settle for being counted but underserved. By setting a target that guarantees enough speed, enough data, with an adequate device, and sufficient regularity for the internet to be an important part of someone’s life, these thresholds ensure that internet access is not just an end in itself.” — Alliance for Affordable Internet (2020)

Policy actions to address the gender gap in meaningful connectivity

- Use Universal Service and Access Funds (USFs) to invest in initiatives that target women’s internet access. USFs are managed by governments and dedicated to expanding telecom and Internet infrastructure to unserved and underserved communities. These funds are typically financed through mandatory contributions by mobile network operators and other telecommunications providers (Alliance for Affordable Internet, 2018). Research has shown that there are over $170 million of unspent funds that could be used to bring approximately 6 million women online, or to provide digital skills training to nearly 16 million women and girls.

- Respond to the affordability barriers faced by women. Women are among those hardest hit by the high cost to connect, a barrier that is further exacerbated by the gender wage gap. Governments should make targeted efforts to tackle affordability barriers faced by women, focusing particularly on those living in rural and remote areas, as well as women from vulnerable groups. Initiatives may include subsidizing data and devices, providing more high-speed public access options in spaces where women gather, and removing consumer-facing internet taxes that raise internet costs and disproportionately impact women.

3 Promote digital skills and ICT education for women and girls

Digital literacy is one of the biggest barriers to access and women and girls are most impacted by a lack of digital skills. This is influenced by factors such as education access, income inequality, access to digital devices, and cultural biases discouraging women and girls from using technology. Promoting digital skills and ICT education is important for encouraging women and girls to use the internet, to create content online and navigate the online world safely, while recognising governments and companies must do more to prioritise measures that make the internet a safer space. Digital literacy is key to translating internet access into empowerment. Governments and companies should:

A. Ensure women and girls have the opportunity to improve their digital skills and information literacy so they can access, use and evaluate information, and use the internet to its full potential.

B. Invest in ICT education and digital literacy by supporting community-led and peer-driven digital skills and empowerment initiatives for women of all ages, focused on problem solving, group mentorship, information and data literacy, content creation, and leadership skills, in addition to technical skills.

C. Partner with schools and community centres to offer safe spaces for women of all ages to participate in information and communication technology educational programmes.

D. Ensure that all ICT education and training programmes are developed considering the needs of women and girls across all educational levels.
“For adult women, informal learning may be the only pathway available to them for developing digital skills. Interventions targeted at adult women should take into account cultural norms as well as women’s domestic responsibilities. For instance, internet cafes and other ICT access hubs are often male dominated spaces that are off-limits to women, or located far from women’s homes or in unsafe areas”. — Equals Global Partnership, 2019

**Costa Rica’s Gender, Science and Technology Policy**

In Costa Rica, Women’s Rights Online partner and A4AI member organization Sula Batsu played a leading role in conducting and using Women’s Rights Online Digital Gender Gap Audit research to develop Costa Rica’s first Gender, Science and Technology Policy (PICCTI), which was approved in 2018 and is currently in its first Action Plan (2019-2021). The policy seeks to eliminate the barriers to women’s participation in the technology sector by addressing gender stereotypes and employment gaps, and providing incentives to educational institutions and companies to achieve gender equality in science and technology.

**4 Support women’s participation in technology development, local content creation and ICT innovation.**

Closing the digital gender gap also means making sure that women are equal creators and producers online. This is a cornerstone of creating a web for a more equal world. Today, women make up less than a third of professionals in the technology sector. As the world goes digital, it is important that the perspectives of women and girls around the world are reflected in the design and development of technology, infrastructure and innovation systems.

If the majority of technology creators are men, then the design of technology, products and services will be built through the eyes of men, and companies will miss out on important perspectives to make better policies, products and services that reach and benefit more people.

A. Governments should create a national strategy to support technology education, innovation and leadership for women of all ages.

B. This strategy — and its investments and programmes — should include time-bound gender equality targets to support early-stage female entrepreneurs, technologists and content creators of all ages to grow and flourish as creators of digital content, infrastructure and systems.
Safeguard the online privacy of women and girls

Women and girls face disproportionate risks to their data rights online, particularly in the form of online abuse, harassment and threats of violence. This means that violation of women’s personal data rights can have an outsized impact on their other human rights, like freedom of expression, assembly, and psychological and physical safety. Both governments and companies have a role to play in helping to keep people safe by protecting the right to privacy — which makes the web safer for women, and for everyone.

Governments must:

- Collect data on women’s experiences and perceptions of privacy, data protection and personal data to inform policy strategies.
- Pass robust privacy and data protection legislation that addresses women’s specific concerns.
- Enforce laws that uphold privacy and personal data protection, ensuring that women’s human rights protected offline are also protected online.

Technology companies must:

- Give people control over their privacy, with clear and meaningful choices to control processes involving their data, as outlined in the Contract for the Web.
- Commit to transparency and accountability by clearly and effectively communicating any changes to privacy policies, as well as changes to products and services.
- Provide clear and understandable privacy notices, including the types of personal data processed, and explain the purposes for which the data will be used. Given evidence that women may be less likely to read or understand Terms of Service, companies should redouble their efforts to clearly communicate data collection and processing using ‘just in time’ privacy notices.

Commit to Principle 6 of the Contract for the Web: ‘Develop technologies that support the best in humanity and challenge the worst’ and establish effective channels for consultation during the development of technologies and after their release, to ensure the rights and interests of all communities — in terms of gender, race, age, ethnicity, and other intersectionalities — are taken into account.

A global plan of action to make our online world safe and empowering for everyone

In November 2019 the Web Foundation launched the Contract for the Web, a global plan of action to achieve a safe, empowering web for everyone. The Contract requires endorsing companies to design gender inclusive strategies to increase internet access and digital literacy by women; consult with a wide group of communities, including along gender lines, in the development of products; and establish policies designed to respect and promote the achievement of the Sustainable Development Goals, particularly those relating to gender equality.
Our approach to understanding gender and women’s rights online is specifically by highlighting issues that men and women face, and more so women. Our previous 2015 study focused on surveys in nine cities. This time we put our focus on nationally-representative surveys in a fewer number of countries in diverse regions — Latin America, South Asia, East and West Africa. Our quantitative and qualitative methodological approach allows us to dive deeper into the findings and comparative trends of women’s internet access and use. This triangulation of methodology allows us to understand the gaps from quantitative perspectives, but also to dive further into the issues faced by men and women in these regions qualitatively, as experiences are not homogenous within or across countries.

Through the survey we capture demographics, including gender and socio-economic indicators influencing internet access and digital equality. The qualitative methods, including focus group discussions and key informant interviews, provide more context-based understanding of the opportunities and challenges women face in accessing and using the internet in the selected countries. This includes analysis of individual understanding of digital rights, safety and security, privacy and data protection, levels of required digital skills, affordability, and the availability and creation of relevant content.

National Survey Design

The development of the questionnaire included a consultative process with selected Women’s Rights Online network partners and the country research partners. A uniform survey questionnaire tool was applied across the regions and translated into the local languages when necessary. The surveys were then conducted between September 2019 and February 2020 in four countries representing three geographical locations — Colombia, Ghana, Indonesia and Uganda. These countries were selected on the basis of their regional diversity, covering Latin America, Africa and Southeast Asia. Each country also has unique characteristics: Colombia where the gender gap in basic internet access has been closed; Ghana, a regional leader for internet uptake; and Indonesia where a complex geography has special challenges for internet access. Finally Uganda, together with consideration for low internet use, was included in the study as part of a partnership with the Uganda Communications Commission that has chosen to prioritise gender issues in addressing ICT development. The surveys were complemented by qualitative focus groups and key informant interviews in those countries. In each case a stratified random sampling approach was used with a maximum sampling error of 3 percentage points. The sample results are as follows:

Table 7: Total number of individuals surveyed in the study

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOMBIA</td>
<td>723</td>
<td>827</td>
<td>1550</td>
</tr>
<tr>
<td>GHANA</td>
<td>1114</td>
<td>1186</td>
<td>2300</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>1022</td>
<td>1018</td>
<td>2040</td>
</tr>
<tr>
<td>UGANDA</td>
<td>1804</td>
<td>1832</td>
<td>3636</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4663</td>
<td>4863</td>
<td>9526</td>
</tr>
</tbody>
</table>

Source: Women’s Rights Online Nationally representative survey Colombia, Ghana, Indonesia and Uganda 2019/2020
These surveys were carried out by the Alliance for Affordable Internet (A4AI) / Web Foundation (as part of its Women’s Rights Online programme) in partnership with the Instituto de Estudios Peruanos (IEP), the University of Ghana, the University of Indonesia and the Uganda Communications Commission.

Focus group design

In each country we conducted four focus groups and three key informant interviews —16 focus groups and 12 key informant interviews in total. Our approach focused on ensuring context is nuanced at a country level and consent to participate is well informed. We worked with selected research partners in each of the countries with an understanding of gender dynamics in each of the countries.

The focus groups were stratified according to locations and income with one mixed high-income group and one female low-income urban group, one mixed low-income rural and one female only low-income group per country.

In Ghana the urban high income group was women only due to a challenge in logistics, however it still provided meaningful insight. All 131 participants were internet users above the age of 15. Our focus was to document women’s insights and gain comparative perspectives on men’s insights. The discussion and the key informant interview guides used were similar across the regions.

Data limitations

As part of our regular quality assurance process, a number of verifications were run once the surveys were completed in order to check for data integrity, consistency, completeness and accuracy. This quality control revealed some issues in the survey data including some problems with logical inconsistencies, sample errors, missing values and other codification problems. As a result, we excluded some of the data from our analysis. The following indicators were removed:

- Meaningful connectivity data for Uganda.
- Data about barriers to more frequent use of the internet for internet users in Indonesia.
- Indicators “personal data of family members” and “home address” on concerns about personal data privacy in Indonesia.
- Data about awareness and engagement with terms of services on social media platforms for Indonesia.
- Indicator “sell products or advertise a service” on content generation for internet users in Indonesia.

Samples for other indicators were also adapted, although the differences were typically under the 1% threshold and not affecting the sample representativeness or significance levels.

Table 8: Total number of Focus group participants and distribution across the four countries

<table>
<thead>
<tr>
<th>Country</th>
<th>FGD 1 (High Income)</th>
<th>FGD 2 Urban (Low income)</th>
<th>FGD 3 (Mixed Rural)</th>
<th>FGD 4 (Female Rural)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOMBIA</td>
<td>6       4</td>
<td>7</td>
<td>5       5</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>GHANA</td>
<td>7</td>
<td>4       3</td>
<td>5       5</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>4       4</td>
<td>8</td>
<td>4       4</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>UGANDA</td>
<td>5       3</td>
<td>8</td>
<td>4       4</td>
<td>8</td>
<td>32</td>
</tr>
</tbody>
</table>