Committee: Youth Assembly 1 **Issue:** The gender digital divide

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The Gender Digital Divide

ICTs for the SDGs:

The International Telecommunication Union is a UN organization whose mission is to standardize, harmonize and regulate the development of information and communication technologies (ICTs) in the world. One of its goals is to promote inclusiveness and universal access to these technologies. ITU is also collaborating with other UN organizations to effectively use ICTs to their full potential in order to achieve the Sustainable Development Goals (SDGs).

1. Introduction

In recent decades, our society has faced the issue of an undeniably present digital divide. Interactions between members of society and technology have vastly increased in a phenomenon known as the "digital revolution". Access to Information and Communication Technologies (ICTs) has become an essential part of our lives, and a fundamental aspect of our world on all levels, including political, economic, and social. Unfortunately, not everyone has access to this technology; this is where the term "digital divide" comes in. There is indeed a perpetually growing access and use gap between the members of our community, due to social class, age category and geographical factors. However, the main factor we will be looking at is gender, and how it constructs an indisputable digital divide.

Gender inequality is an issue that has existed for thousands of years. Gender equality is not only a basic human right, it is also the keystone of a prosperous and modern economy which offers sustainable, inclusive growth. Gender equality is essential to ensure that both men and women can contribute fully to the betterment of society and the economy in general. The segregation of the two genders prevents us from reaching inclusive prosperity and equality, and this especially true of the gender digital divide. According to UN Women, "The internet user gap between the sexes has increased to 12% in 2016. In the developing world the figure is even larger with a reported 31% difference" (UN Women, 2016). The fact that many females are denied access to ICTs means that they are also denied the potential for change and achievement which these technologies bring with them. Indeed, it is crucial for women, especially those in developing countries, to have access to ICTs, which will contribute to them gaining agency on a global level. Additionally, ICTs can be of great value to women, especially in isolated situations where it may be difficult to create meaningful change.

a. Key Terms

- The gender digital divide: the gap or inequalities present between women and men regarding their access to and use of ICTs.
- ICTs: Information and Communication Technologies
- **OECD**: the Organisation for Economic Co-operation and Development, an intergovernmental economic organisation with 36 member countries, founded in 1961 to stimulate economic progress and world trade
- **STEM**: term used to refer to the fields of Science, Technology, Engineering, and Mathematics collectively
- ECOWAS: Economic Community of West African States
- LDC: Less Developed Countries
- **Digital Fluency:** proficiency in the use of digital tools and technologies

2. Overview of the issue

During the last decade, there has been a rapid proliferation of Information and Communication Technologies (ICT) around the world. Today, these technologies play a decisive role in various aspects of political, economic and social life. As a result, there are striking inequalities between those who have access to these technologies and benefit from their positive externalities, and those who do not.

The digital divide between men and women is systemic discrimination against women, and can pose an unacceptable obstacle to their participation in society everywhere in the world. It is also a drag on the growth of the global economy. Today, 68% of men, compared to 62% of women, regularly use a personal computer and the internet, 33% of men and 18% of women regularly install software on their devices, and 47% of men and 35% of women use online banking. What's more, although women account for more than half of the total number of graduates in the world, women continue to be underrepresented in the science and ICT sectors. Of the total workforce, with percentages varying according to the type of employment, they represent only 8% of people working in the software industry. The

purpose of our work is to make recommendations and proposals to eliminate these imbalances, for instance in the education system and the labour market.

People living in highly developed countries are very often unaware of the gender digital divide, especially in developing countries.

In developing countries, girls and women struggle to obtain technology and internet access. In addition, socialisation patterns, stereotypes around technology being 'for boys', and fear of discrimination may stop girls from using digital tools.

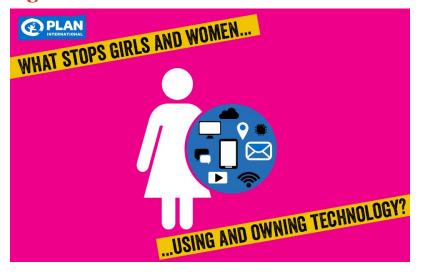
a. What is the impact of the gender digital divide?

The digital gap between men and women is not a purely technological problem, but also a complex economic, social and cultural issue, fundamentally linked to the problem of gender inequality at its roots.

Without equal access to ICTs, girls and women cannot participate fully in our increasingly digital societies. Limitations imposed on girls and women in this area affect every aspect of their lives, including their ability to express themselves and initiate change on issues that affect them.

Moreover, if girls and women do not participate in the creation of ICTs and online content, these apparently innovative tools risk exacerbating existing inequalities.

b. Main factors related to the issue of the gender digital divide



i. Economic dependence

One of the most significant barriers preventing women's access to ICTs is the economic disadvantages which they experience, including the gender wage gap that exists on a global level. In many countries, women continue to be economically dependent on their

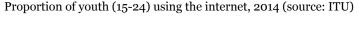
spouses and other male relatives. They often have less control over shared finances than men do and, as a result of the unequal division of paid and unpaid work, fewer women have independent income from their labour. With 60% of women according to the United Nations being unpaid family workers there is indeed a major barrier preventing these women from having decent access to ICTs.

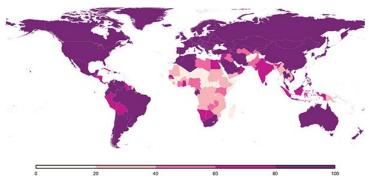
ii. Social factors

A large number of women in both highly developed and developing countries suffer from gender-based discrimation, which significantly impacts the accessibility of ICTs for women. Because of the social norms and roles constructed for these women, they often end up confined in traditional, stereotypical roles within their families and lack the essential digital literacy skills necessary to access the full potential of ICTs. Due to the constraints and limitations of the social roles imposed upon them, women often end up discouraged from pursuing their needs, growth, and personal goals. This heavily limited social role is accountable for many cases in which women don't make full use of technology. According to Vinitha Johnson, in Southern India, a woman's existence is defined according to the idea that her main purpose is to support her family and maintain their well being (Dugdale, 2006). A similar situation exists in Ghana where there is a firm correlation between gender and access to ICTs.

Reports also show that in Ebonyi, a state located in the southeast of Nigeria, across all age groups, the percentage of women with access to the internet was much lower compared to the percentage of men with access to the internet. However, there was an exception: women who were well educated used the internet just as much as men and in ways that may have even been considered more efficient. Given the appropriate education and opportunities, the same women who consistently fell behind in terms of internet access were able to make use of the internet on a level equivalent to men. This disproves the idea that women do not use the internet due to a lack of innate ability.

iii. Geographical location





It is undeniable that the country in which a person is located in affects their access to ICTs. Most studies have concluded that women located in developing countries are significantly less likely to use the internet compared to men. It was estimated that women

make up only 25% of internet users in Africa, 38% in Latin America, and 22% in Asia (Clauss, 2013). In countries where education is easily accessible to women this divide is significantly reduced. Furthermore, it has been noticed that the digital divide between the genders varies based on the urban or rural location of population groups. Rural areas tend to have a limited degree of access to the internet compared to other areas.

iv. Women's human rights

ICTs and human rights have become inextricably intertwined. With the transformative potential of ICTs and big data, their impact on human rights, both positive and negative, has become increasingly apparent.

Inequalities in access to and use of the internet and associated technologies have the potential to undermine the opportunities for defending human rights and attaining the Sustainable Development Goals (SDGs), as ICTs can function as a gateway to the realisation of these objectives.

For example, the Internet enables access to education by allowing online learning resources to be shared. It similarly furthers the right to take part in cultural life and to enjoy the benefits of scientific progress and its application. Facilitating access to health information and services also positively affects the right to the highest attainable standard of physical and mental health and well-being.

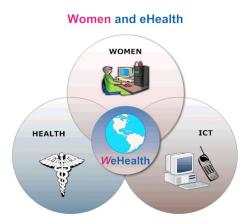
Limitations to the access and use of ICTs by certain groups, including women, have been shown to interfere with the rights to access to information as well as freedom of expression, religion and association, also impacting the right to take part in the conduct of public affairs. These inequalities also impinge upon the right to work and to an adequate standard of living by limiting access to goods and services as well as employment and business opportunities in a world increasingly dependent upon these technologies.

At the same time, ICTs and big data can and should be utilised to further women's human rights. For example, big data analytics can assist in the identification of otherwise invisible forms of marginalisation, or provide substantive and precise evidence of known issues, and thus inform more effective policy decisions.

C. Importance of bridging the gender digital gap

Bridging the digital gap can have significant effects, not only on women but also on the communities they live in and the economy as a whole.

1) Economic independence: Equal access to ICTs will help bypass the current male dominated market structures, giving women economic independence. Access to ICTs will also allow women to expand their businesses and economic activities through direct outreach to the global market. 2) Health: by giving women the opportunity to use ICTs, we allow them to expand their knowledge regarding health, thus bringing health facilities and the community closer together. This can help improve access to quality health care services. Additionally, a great benefit that comes with the access of ICTs is the development of eHealth technologies, which can be extremely beneficial and could lead to great improvements in public health. These technologies are predicted to be most useful in remote or low-resource areas or among marginalised population groups, who may struggle to gain access to traditional healthcare.



- 3) Education: ICTs open doors to many possibilities for education, both formal and informal, for women. ICT-based education resources could help women continue their learning journey throughout their lives. ICTs could be a major starting step for women in regards to education as many do not have adequate access to educational spaces and school.
- 4) Women's empowerment: ICTs can also be used to promote women's empowerment. For many years, ICTs have been used by women and feminist organisations to empower women in difficult situations of oppression, by sharing information, creating networks, and organising movements or campaigns. ICTs can serve as a platform for women's self expression, especially for women whose marginalised situation prevents them from finding an audience elsewhere. The international connections made possible by ICTs may also be instrumental in empowering women worldwide and creating significant social change.

D. Discrimination against women

i. On the internet

Internet use has experienced unprecedented growth since the development of the World Wide Web in 1990. Broadband infrastructures are now installed in more than 104 countries worldwide, and more than 80% of the youth population are active Internet users.

However, Internet growth has been uneven and has resulted in a digital gender divide in two-thirds of countries worldwide, as well as regional and intergenerational digital divides. In the case of women, the global Internet penetration rate is around 45%, compared to around 51% for men. That's 250 million fewer women than men online (ITU, 2017).

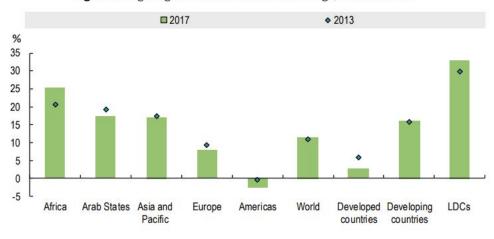


Figure 1. Digital gender divide in Internet usage, 2013 and 2017

Between 2013 and 2017, the gap has generally narrowed in the developed economies, including Europe, as well as in the Arab States. In the Americas, the balance even turned towards women, moving from a situation in 2013 where men and women used the internet at an equal rate, to one in which women surpassed men by about 2 percentage points in 2017. Inversely, the gap has consistently widened in some LDCs, most notably in Africa.

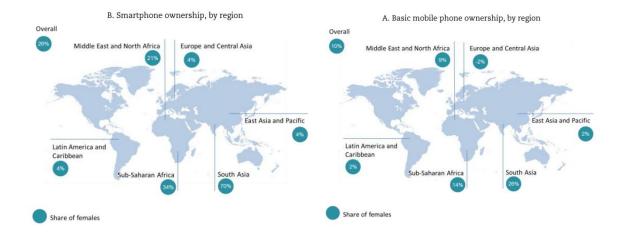
While the global digital gender divide in Internet use has remained virtually unchanged in the past 5 years, the trends observed are worrying because they indicate an increase in inequalities in the use of the internet between developed and developing countries, indicating that ICTs may be a source of increased global inequality.

If women face more difficulties online, it is also because of a higher likelihood of cyber-harassment, which affects 51% of women, compared to 42% of men.

ii. Mobile phones

Barriers to using smartphones do not differ from the ones hindering women from using a basic mobile phone. In particular, the high prices of mobile phones, which are even higher for smartphones, make the purchase and ownership of such devices difficult or impossible for many.

However, the cost of mobile phones and smartphones for consumers has been decreasing. In the case of smartphones, awareness seems to play an important role too, with women in Africa and Asia tending to show little awareness about the possible benefits that having a smartphone may bring them.

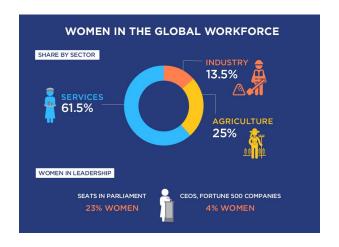


These graphics show the gender gap in smartphone and basic mobile phone ownership in low and middle income countries. On average, women are 10% less likely to own a basic mobile phone and 26% less likely to own a smartphone, although the gap differs between regions and appears most pronounced in South Asia and Sub-Saharan Africa.

iii. Labour market

The ICT market has changed significantly and presents many opportunities for growth through the development of software products for a variety of purposes, the expansion of social media and other large corporate platforms, the development of new goods and services, and the evolution of artificial intelligence.

Globalisation has led to the creation of new employment opportunities for women; but some of these "opportunities" actually reinforce traditional roles, and tend to be low-skilled and low-paid. The deeper causes of gender inequality are mainly linked with unequal or insufficient education, especially in developing countries.



iv. Education

To participate actively in the information society, women obviously require much more than computer equipment. Indeed, the ability to access, understand, evaluate, and use information from a variety of sources involves communication, critical thinking, and problem-solving skills. Education is seen as a crucial factor in the uptake of ICTs as more educated individuals are better able to understand the increasing complexity of technological tools, while also generally being more exposed to ICTs in their personal and professional life.

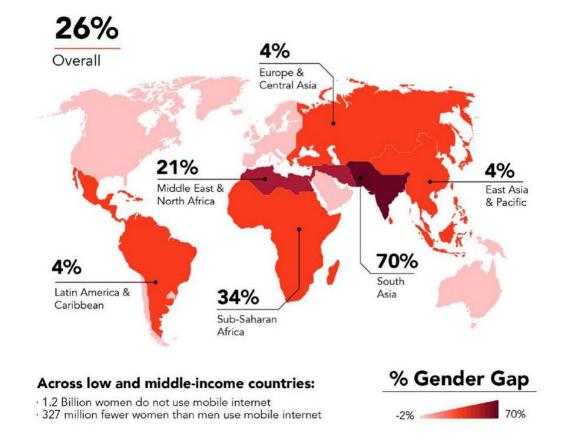
The ability to acquire, process, and communicate digital information is influenced by socio-cultural background, including background environment, cultural capital and academic orientation; these factors explain some differences in digital skills among students.

It is clear from our data that women in many countries are already better educated than men, and that women's digital fluency is helping to drive the economies in these places. Digital fluency has also had a more positive impact on the education of women in developing countries than in developed ones: more than two-thirds (68 percent) of women in developing countries, versus less than half (44 percent) of women in developed countries, say that the internet was important to their education.

3. Case study

The gender digital divide in developing countries

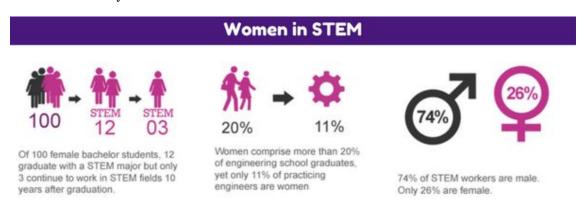
Women in the developing world have significantly lower technology use rates than men, at least partly as a result of deeply entrenched socio-cultural attitudes about the role of women in society. However, as studies are beginning to show, when those women are able to engage with Internet technology, a wide range of personal, family and community benefits become possible. The key to these benefits is on-line education, the access to which sets up a positive feedback loop. This review gives an overview of the digital divide, before focusing specifically on the challenges women in developing countries face in accessing the Internet.



4. Possible solutions

a. Encouraging women in STEM

Digital skills and STEM qualifications are among the most highly demanded on the employment market, especially in urban areas where more and more of the population is concentrated. Job opportunities in the fields of computer science, technology and engineering will continue to grow. Encouraging the education of girls in STEM from an early age and teaching digital literacy to women and girls are the first steps to bridging the gender gap that exists in these fields. It is also necessary to create the systems and cultures that help women and girls to stay and thrive in these areas. For instance, in many countries and especially in STEM and other male-dominated fields, it is very difficult for a woman to stay in or return to her work if she wants to raise children, and women therefore have to choose between their family life and their careers.



b. Fix the problem of stereotypes in AI

Algorithms which rely on available data, especially machine learning systems, can perpetuate gender stereotypes and prejudices. Some developers of these technologies have taken note and are working to eliminate the prejudices in algorithms used, for instance, for recruitment and promotion. When used with an awareness of the possibility of bias, AI can be also used to highlight prejudices in recruitment and promotion. For example, some automated screening systems emphasize grammatical structures which imply the subject is male, making it more difficult for women to apply for management positions.

If these artificial intelligence (AI) systems reproduce the sexist biases of society, it's simply because they can do no better than the humans who programmed them. Indeed, the biggest problem is that the humans who programme them do not realize that so many sexist biases persist in society. And therefore reproduce them unconsciously. That is why we have to correct the bias in AI. The unconsciousness of people about stereotypes between genders bring us to another difficulty in bridging the gender digital divide.

c. Free distribution of ICT Devices

Free or more accessible distribution of ICT devices could be considered as a possible form of social policy to be applied by governments. As the digital revolution impacts the labour market, individuals have a more and more pressing need to obtain access to ICTs including computers and mobile phones. A lack of access to the internet or to ICTs is a serious socioeconomic handicap.

d. Encouraging democratic governance

The internet can be considered a facet of the democratic right to freedom of expression, and attempting to control what citizens can or cannot view is in contradiction to democratic principles. Recently, situations in Iran and China have denied people the ability to access certain websites and share information, or even cut off internet access in certain regions for prolonged periods of time.

The internet can be a powerful tool for women to make their voices heard in situations where it is difficult for them to find an audience otherwise. A democratic attitude towards the internet as a tool for free expression and association is essential to benefit from its full potential as an equalising factor between men and women.

e. Encouraging women education

As demonstrated throughout this report, education is a key factor in bridging the gender digital divide. Investing in women's education and in particular in digital skills education can be seen as profitable to a state, overall and in the long term, since the women

trained in these education systems can contribute significantly more to the economy than they could have done otherwise. One might take as a model the countries in which ICT usage and the increase in productivity that follows is equally shared between men and women, or even skewed towards women, since this can be a sign of a successful education system.

f. Women in the labour market

Facilitating the participation of women in the labour market, while monitoring and ensuring the quality of jobs, and providing support services to enable women to work and pursue a career while being a mother or having a family, could solve a significant part of the problem. It is also important to combine activities related to labour market participation with corresponding activities promoting a better distribution of unpaid childcare and housework, and directing investment towards more targeted lifelong learning programmes.

5. Main international actors:

a. Plan International

Plan International is an NGO active in over 70 countries. It strives to create a just world with development and equity for all. They work to raise awareness and attempt to solve certain issues on a global level, including the digital gender divide. Plan International's global strategy states that "we must harness the power of technology and use innovative solutions to extend our reach and impact. We must focus on the rights of girls, who are most vulnerable to being left behind as the world around us changes. Plan International has been working to ensure that girls and women are granted equal access to learning technologically useful skills such as digital literacy and general technical skills. They also provide training programs so women could further develop the needed skills to utilize ICTs and revolutionize its industry. They are also known for their global campaign "Girls Get Equal" in favour of the creation of a society where girls and young women have the power, freedom and representation they need to become leaders at all levels, and to make a difference without living in fear and doubt.

b. OECD

The OECD (Organisation for Economic Cooperation and Development) has proposed a number of means by which to overcome the issue of the gender digital divide. They have been building on discussions and collaborating with a number of countries and organizations in order to provide policy insights for women's empowerment in the current digital age. Furthermore, the Organisation has been attempting to provide governments with possible solutions and rational efforts they should consider pursuing to achieve their goals in the area of gender equality.

c. European Union

The European Union has undertaken several strategies in order to improve the situation and advocate for a digital union between the genders. It has shown great support for the developmental advantages of ICTs, especially relevant to newer EU member States or to countries preparing to join the EU. The EU has already provided significant financial support to ICT projects aiming to bridge the gender digital divide in various member States. The EU has consistently encouraged IT development through numerous policies, norms, and investments.

d. SIDA

The Swedish International Development Association has shown strong motives to achieve gender equality and provide equal opportunities for both genders including in the field of ICTs. SIDA's work is mostly based in countries in Eastern Europe including Albania, Russia, Ukraine, Moldova, and Serbia, where the digital gap between genders is more serious than in most Western European countries.

e. CIDA

The Canadian International Development Agency has been identified as a potential partner for future gender ICT initiatives because of their interest in promoting equality for the genders as well in the development of ICTs.

f. Microsoft

Microsoft, a major multinational technology company, has been striving for employee diversity for many years. However, since the percentage of female employees is still low, they have more recently participated in the 'Women Create Opportunities in ICT' project, funded by the EU.

g. CISCO

CISCO's learning program has been recognised as one of the most viable programs in terms of improving the gender balance in ICT use. Aside from the specialized training for women which they offer, they also produce studies which reflect the situation of women in the IT sector. CISCO states that, in order to bridge the gender digital gap, innovative approaches must be taken, especially in the areas of labour and education. In relation to the labour market, CISCO has been aiming to educate employers on the advantages that come with a gender-balanced workforce, specifically in the IT field.

6. Guidelines for research:

- What are the main problems created by the gender digital divide?
- What seems to be the cause of women's lack of access to ICTs in certain areas?
- To what extent does the labour contribute to the widening of the digital divide between the two genders?
- Why is it important to bridge the gender digital gap?
- How can we ensure that women in LCDs are receiving equal access to ICTs?
- What role do governments and NGOs play when it comes to bridging this gap?
- To what extent is this gap visible in your country or community? How does it impact others around you, including young people? Do you have any examples?
- What is being done about the issue in your country or community? Are there any NGOs or government programmes which take it into account?
- What is the general opinion about this issue in your country or community? Is this attitude the same among youth as among other age groups?
- How can youth in your country take action to bridge this gap locally, nationally, or even globally?

7. Bibliography:

- 1) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1761894/
- An article about E-health from the National Center for Biotechnology Information website, suggesting the importance of women having access to ICTs for health purposes.
- 2) http://www.oecd.org/internet/bridging-the-digital-gender-divide.pdf
- Report released by the OECD (Organization for Economic Cooperation and Development) which discusses the journey to bridging the gender digital gap using a multitude of sources, evidence, suggestions etc.
- 3) https://www.iiste.org/Journals/index.php/CEIS/article/view/37325/38405

- Article published on IISTE, discusses possible solutions to the divide and focuses on the nature of the issue in African countries.
- 4) http://www.europarl.europa.eu/RegData/etudes/STUD/2018/604940/IPOL STU(2 018)604940 EN.pdf
- Published by the European Parliament, report discussing the issue specifically in the European region.
- 5) http://wpmu.mah.se/nmict181group1/gender-digital-divide/
- Article discussing evidence that supports the fact that the gender digital divide really does exist. Looks at various statistics/examples as well as the advantages that come with overcoming this issue.
- 6) https://plan-international.org/education/bridging-the-digital-divide
- Page dedicated to bridging the digital divide on the website of the NGO Plan International.
- 7) https://www.itu.int/en/itunews/Documents/2016-04/2016 ITUNews04-fr.pdf
- French report discussing all aspects of the issue as well as possible solutions and suggestions.
- 8) https://news.un.org/fr/story/2018/03/1008392
- Official UN news website, gives insight on the United Nations' concern about the issue and the measures which may be considered in order to solve it.