

## **A HOLISTIC APPROACH TO DIGITAL TRADE: CLOSING THE DIGITAL GENDER DIVIDE**

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### Digital Trade & The Economic Empowerment of Women

Recognition of the opportunities that digital trade can provide for the economic empowerment of women, has increasingly received attention from policymakers and trade practitioners worldwide. Despite comprising half of the global population, women often stand on the side-lines of the economy and remain under-represented in international trade. Findings estimate that overall, women generate just 37% of global GDP and own only one-third of SMEs (WTO, 2017). In developing countries, female participation in the economy is below average, with female business ownership registering as low as between 3-6% in some countries (WTO, 2017). As it relates to trade specifically, a survey from the International Trade Centre<sup>1</sup>, revealed that, “only one in five exporting firms are led by female entrepreneurs and that women-owned or managed exporting firms are less likely to engage in imports compared to their male counterparts” (ITC, 2015). Overall, findings suggest that far fewer women are engaged in international trade than men.

Although further research is required to understand the causality between factors such as female firm ownership, productivity, firm size, sectors of activity and international trade (ITC, 2015), some barriers are evident. For example, in more than 155 countries, there is at least one law hampering economic opportunities for women (WTO, 2017). Additionally, women encounter greater difficulties in complying with regulatory and procedural requirements, have poorer access to finance, information and markets, suffer exclusion from male-dominated distribution networks, face higher risk of abuse through corruption and harassment at the border, and struggle with mobility and time constraints (Gonzalez, 2017).

That said, many view digital trade<sup>2</sup>, as a potential avenue for overcoming some of these barriers and thereby empowering women. The Internet, e-commerce and digital financial services provide new opportunities for women to increase their participation in global trade and to boost their financial independence. The digitalization of output, especially for trade in services, combined with online supply, affords women the opportunity to work even in cultures where they are confined to the domestic space and in industries where they lack men’s professional networks and resources (OECD, 2018). In fact, women-led businesses now generate 35% of online revenue compared to 15% in offline retail (McKinsey & Company, 2018), and Uber attracts a higher female employment rate (15%) than the traditional taxi industry (8%) in the USA (OECD, 2018). Additionally, predictions suggest that if Internet access is enabled for 150 million women, their

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<sup>1</sup> The International Trade Centre (ITC) conducted a survey in 2015 across 20 countries in five regions of the world.

<sup>2</sup> Digital trade is understood in this context as, “digitally enabled transactions of trade in goods and services that can be either digitally or physically delivered” (OECD, 2019).

contribution to the annual GDP of 144 developing countries would be around USD 13-18 billion (WTO, 2019). Thus, there is no doubt the potential digital trade holds for the economic empowerment of women.

### Understanding The Digital Gender Divide

While the digital era holds promise for women's economic empowerment, this has not yet happened. Instead, what has been observed is a "digital gender divide", which perpetuates the existing disparities between men and women's access to opportunities presented in international trade. The "digital gender divide" refers to "the gender differences in resources and capabilities to access and effectively utilise ICTs within and between countries, regions, sectors & socio-economic groups" (UN Women, 2005).

Presently, the proportion of women using the Internet is 12% lower than men, a gap that widens to 33% in least developed countries (WTO, 2019). In low and middle-income countries, women are on average 10% less likely to own a mobile phone and 26% less likely to use mobile internet than men (Kuroda, 2019). Meanwhile, in developed countries, women are 20% less likely to hold a senior leadership position within the ICT industry than men (Kuroda, 2019). Thus, a substantial digital gender divide exists at a global level, although its manifestations differ across countries and regions. Moreover, quite ironically, and in spite of its promise, if not urgently addressed, improvements in digital technology will have the unintended effect of significantly exacerbating gender inequality. This becomes even more pressing, when considering predictions that 60% of global GDP will be digitized by 2020 (Kuroda, 2019). For this reason, closing the digital gender divide is paramount for digital trade to be inclusive; but this can only happen if the "root causes" are addressed.

Amongst the root causes, include **limited access to the Internet and digital technologies by women.** Structural inequalities across several countries particularly in income, have rendered Internet access and digital technologies less affordable for women than men. On average, women earn considerably less than men worldwide in almost every occupation, creating a persistent gender wage gap (IWPR, 2019). According to statistics, females in developed countries earn only 75% of what their male counterparts earn, while in developing countries females earn around 83% of their male counterparts' earnings (ADB, 2018). In both developed and developing countries, this gap is further exacerbated by the fact that women are not afforded the same employment opportunities as men. In fact, over 104 economies have laws that prevent women from working certain jobs, thereby limiting their potential income sources (World Economic Forum, 2018). Affordability not only hinders individuals who are not yet Internet users, but also prevents current users from using the Internet to its full extent, especially when considering that Internet data allowances increase significantly with the quantity of megabits used (Intel and Dalberg, 2012).

Beyond challenges with affordability, cultural barriers also limit female access to the Internet and digital technologies. For example, in India around 12% of women refuse Internet access and use of digital technologies due to negative social perception, while 8% do so because of the lack of acceptance by family members (Intel and Dalberg, 2012). Online harassment, abuse and violence, especially towards women either through petty harassment, trolling, stalking or sexual intimidation, has only worsened cultural perceptions of the Internet and digital technologies in countries like India (Kuroda, 2019).

**Low technological literacy rates among women**, are also a root cause of the digital gender divide. Women not only use the Internet and digital technologies less than men, but do so for less complicated tasks. In some parts of Africa, over 40% of women are unable to effectively utilize digital tools for personal and professional activities (WTO, 2019). This is a by-product of the gender literacy gap and the gender gap in STEM fields (Science, Technology, Engineering and Mathematics), both reflective of the gender gap in the education system. In some regions such as, South Sudan, Central African Republic, Niger, Afghanistan and Chad, female access to education is difficult, even at primary levels, resulting in a substandard female adult literacy rate (77%) compared to men (87%) (UNESCO, 2010). Evidently, low literacy rates amongst women are likely to have negative implications on their full utilisation of the Internet, recognizing that such will require basic reading and numeracy skills.

STEM fields also remain male dominated due to stereotypes, resulting in a significantly lower proportion of women pursuing these studies (OECD, 2018). At the tertiary level, women accounted for only 30% of graduates in these fields across OECD countries (OECD, 2018). It was further found, that even in early stages, 15-year-old girls are two times less likely to pursue STEM studies (OECD, 2018). Additionally, the level of ICT integration necessary for building basic digital literacy remains absent from the education system, and there is no life-long learning approach towards the development of digital skills (Kuroda, 2019). As a result, women are less endowed with the numeracy and STEM-quantitative skills deemed important for digitally intensive sectors (OECD, 2018).

Another root cause stems from the **limited visibility of women in decision-making roles within the tech industry**. To truly empower women through digital trade, access and use of the Internet and digital technologies, is still not sufficient. Rather, “women must also be as involved in the design, development and production of such technologies, as much as men” (Kuroda, 2019). When assessing the involvement of women in software development and use, which remains a key asset in the digital age, more than three-quarters (77%) of the 12,000 R-based software products produced during 2012-2017, were done so by teams of only men, while teams of only women developed a mere 6% of these packages (OECD, 2018). Evidently, women are outnumbered by men at every level within the technology sector, especially at the

top where they account for only 21% of technology executives (Kuroda, 2019). Similarly, even within e-commerce trade negotiations, women are largely invisible, especially in lead negotiator roles.

This limited visibility of women within the tech industry stems from a multiplicity of factors, including, gender stereotypes, a lack of talent pool, unequal pay, in-group favouritism and a working culture that does not support maternity leave policies. Regarding the latter, 85% of women who left the tech industry, identified this as the primary reason (Next Generation, 2018). This is particularly problematic, when considering that increased female visibility in the tech industry, particularly in decision-making roles, is necessary for raising awareness on gender-related issues within the digital era.

Evidently, the digital gender divide is a reflection of much deeper structural problems, stemming notably from (i) limited access to the Internet and digital technologies by women, (ii) low technological literacy rates among women and (iii) limited visibility of women in decision-making roles within the tech industry.

#### [Towards a Holistic Approach to Digital Trade in International Trade Negotiations](#)

Any approach to digital trade considered to be holistic, must address the digital gender divide and its root causes. Failure to do so will result in a similar manifestation observed in traditional forms of international trade, where women are significantly under-represented. Therefore, to avoid such, the inclusion of gender-related provisions in agreements and negotiations related to digital trade, is necessary. Some of the potential possibilities are discussed below.

##### *(i) Improving Access to The Internet and Digital Technologies by Women*

The incorporation of labour provisions in trade agreements, can render access to the Internet and digital technologies more affordable for women if the gender wage gap is addressed. Many RTAs involving the United States, Canada and Chile already have such provisions, aimed at encouraging equal remuneration and non-discriminatory treatment. When considering the precedent set by the Cambodia-United States Bilateral Textiles Agreement (1999-2004), where the inclusion of a labour standards provision significantly reduced the gender wage gap in Cambodia's textiles industry (ILO, 2019), the utility of labour provisions is evident. Thus, greater consideration must be attributed to the role that labour provisions play in ongoing WTO e-commerce plurilateral negotiations.

Addressing negative cultural perceptions which stem from the issue of online harassment, can be done through the incorporation and enforcement of cybersecurity provisions within trade agreements. Consumer protection provisions, protection of personal information and provisions related to unsolicited electronic messages feature prominently in most RTAs with standalone e-commerce chapters. Thus, insight can be

drawn from such RTAs for purposes of addressing this subject matter within ongoing WTO e-commerce plurilateral negotiations.

Additionally, where access is limited by inadequate infrastructure, capacity-building provisions must be incorporated into trade agreements. In North-South RTAs, developed countries may be able to offer technical and financial assistance to developing countries, while at the multilateral level, the WTO-led Aid for Trade initiative offers this type of assistance to least developed and developing countries.

*(ii) Increasing Technological Literacy Rates Among Women*

Although education provisions are not typically included in trade agreements, there is some precedent for including “cooperation provisions”, which tackle challenges identified as worthwhile by trading partners. Through such provisions, digital training and capacity building programmes aimed at women can be included within e-commerce chapters and given consideration at ongoing WTO e-commerce negotiations. Moreover, new institutional frameworks such as digital trade task forces charged with monitoring and improving technological literacy rates among women against pre-established targets, can be considered.

Additionally, initiatives funded by international trade agencies like the WTO and the ITC can support domestic education projects, at the primary to adult levels. Precedents lie in the Ghanaian-based “Tech Needs Girls Project” (UNCTAD, 2019) and the Caribbean “Girls Hack – 2019 Hackathon and Interactive Tech Expo” (Loop News, 2019), both developed to encourage young females to pursue STEM studies. These initiatives not only build awareness of the role for women in ICT but challenge negative stereotypes by normalizing the idea of STEM studies for females. If successful, increased female enrolment in STEM studies will endow women with the skills necessary for efficient navigation of the digital economy.

*(iii) Increasing Visibility of Women in Decision-making Roles within the Tech Industry*

Having females in senior leadership positions and lead negotiator roles, as it relates to tech companies and e-commerce related negotiations, can greatly assist in raising awareness on gender-related issues within the digital era. Thus, inserting performance requirements, which establish a minimum threshold for the employment of women in senior positions, in investment agreements related to digital companies, and encouraging women to lead e-commerce negotiations, are two potential solutions.

Facilitating the participation of women in the development of tech start-ups and ICT-related entrepreneurial activities is also another way to increase female visibility in the Tech Industry. Consider for example, the ‘Wireless Women for Entrepreneurship and Empowerment’ in India, which creates women-driven ICT based micro social enterprises (UNCTAD, 2019). Within these organizations, women occupy senior leadership and decision-making roles. Such initiatives directly increase the visibility of women in the tech

industry and often provide role models from which young females can aspire to pursue ICT-related careers. Additionally, with the increased flexibility afforded by the digital economy, modified working arrangements are likely to be beneficial for supporting the upward mobility of women, once restricted by time and mobility constraints. Thus, incorporating labour provisions which speak to the possibility of flexible working arrangements is also a potential solution, capable of increasing the appeal of the tech industry for females.

Evidently, for digital trade to become inclusive, a holistic approach addressing the root causes of the digital gender divide must be embedded within ongoing trade discussions.

### Concluding Thoughts

Recognizing the potential that digital trade holds for the economic empowerment of women is a step in the right direction. However, unless the digital gender divide is addressed, benefits accruing from digital trade will be unequally distributed to the disadvantage of women. To ensure that gender inequalities are not further exacerbated by advances in digital trade, a holistic approach, capable of addressing the root causes of the digital gender divide, must be incorporated into ongoing trade discussions.

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