

# A Gender Perspective on Technology in Ecuador

CHALLENGES AND OPPORTUNITIES FOR AN INCLUSIVE TECHNOLOGY SECTOR IN ECUADOR

Learnings from a multi-stakeholder dialogue in Quito, Ecuador

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## 1 Introduction and Background

Women<sup>1</sup> in the tech sector in Ecuador have made significant progress to create a more inclusive tech sector in recent years, contributing with collective efforts to the country's growing digital landscape: They created initiatives promoting gender diversity and inclusion and have provided opportunities for more women to be part of the industry. This includes skill development, mentorship, and networking programs that have empowered women to pursue careers in various tech fields such as software development, data science, cybersecurity, and digital entrepreneurship. Despite these advancements, gender disparities still persist, highlighting the need for ongoing advocacy and support. The contributions of women in the tech sector have fueled innovation and inspired future generations of women to explore and excel in this industry.

To address the inclusion of women in the tech sector in Ecuador, the Alexander von Humboldt Institute for Internet and Society (HIIG) and the programmes Ecuador SinCero and Cadenas Sostenibles of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) organised a multi-stakeholder dialogue (MSD) in Quito, Ecuador. The dialogue focused on an intersectional gender perspective to secure equality and equity within the tech sector, particularly for women and marginalised groups in rural areas of Ecuador who face limited access to digital infrastructure and digital education, devices, and the necessary skills. The aim of the dialogue was to achieve a shared understanding of the perspectives, opportunities, and challenges that marginalised communities encounter in this field. Furthermore, strategies and measures were developed to address these challenges and promote equality and equity in Ecuador's technology sector.

The event was organised as part of the Women\* in Tech project implemented by HIIG and funded by the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development.

<sup>&</sup>lt;sup>1</sup> By the term women we mean all people who identify with the term woman.

## 2 Findings

The multi-stakeholder dialogue in Ecuador brought together 58 representatives from academia, business, civil society, government, and NGOs on 7 June, 2023, in Quito, Ecuador. The event started with a welcome note from the co-organisers as well as an introduction of the HIIG, GIZ and the upcoming established Digital Transformation Center Ecuador, followed by impulse presentations from Pamela Renata Castro Salvador, Director of Innovative Agricultural Knowledge-Transfer Management of the Ministry of Agriculture, Alexandra Ulcuango, Representative of MEGA Mujeres, Mónica Molina B., Social Entrepreneurship and Innovation Manager at CEPAM Guayaquil, and Susana Cadena, Director of Technology and Investigation at the Fundación Datalat. Afterwards, the participants were divided into two interactive discussion groups, focussing on inclusion in the technology sector, especially in rural areas, as well as on education and digital skills as necessary conditions for equality. Additionally, the participants could brainstorm on initiatives and best practices as well as next steps to educate and empower women in the technology sector.

During the discussion groups the participants focussed on the promises, perils, and challenges associated with a gender perspective on the tech sector in Ecuador. Towards the end of the dialogue, the groups summarised their findings. The following key themes emerged from the discussions:

#### 2.1 Training for the Rapid Technological Advancement

The rapid advancement of technologies contributes to a growing gender gap. Women face the challenge of balancing responsibilities and societal expectations while staying updated with ongoing learning and technological developments. Some participants of the stakeholder dialogue expressed initial reservations and fears associated with technology.

The gender gap in technological advancement in rural areas of Ecuador is a complex issue influenced by the diverse characteristics of each region. It is crucial to engage directly with the local population to determine suitable strategies for bridging this gap. During the group discussions, participants explored the potential of establishing technology centres across the country to provide women with digital training and workshops and further education on utilising digital technologies in their daily lives and entrepreneurial pursuits. Recognising the importance of comprehensive approaches and digital literacy, these centres should also extend their support to girls and young women, fostering an understanding that being a woman can go beyond the traditional domestic role which is still dominant in the rural areas of Ecuador.

Financial programs, financial independence through bank accounts, and programs like targeted microcredits as well as digital skills play a significant role in narrowing gender gaps and empowering women.

#### 2.2 Preventing Digital Harassment

During the discussion, participants highlighted the alarming prevalence of digital harassment and mistreatment experienced by women and the LGBTIQA+ community in the online realm, emphasising the unique nature of this form of harassment. The anonymity provided by various platforms and social networks enables individuals to freely comment and launch attacks without consequences. Unfortunately, the freedom to express opinions online has given rise to misogynistic behaviour, discrimination, racism, and unwarranted attacks. Women oftentimes encounter additional barriers when accessing and embracing these technologies such as fear and scepticism towards technology due to a lack of understanding of its utility. To underline the impact, participants of the MSD shared their personal experiences of being targeted based on their gender as well as political or professional positions, or for sharing personal photos within their social circles. These instances shed light on the urgent need to establish protocols that can effectively address digital harassment and recognise its profound psychological impact on women.

#### 2.3 Changing Gender Stereotypes

During the stakeholder dialogue, participants recognised the crucial importance of challenging and changing gender stereotypes in the tech sector in Ecuador. The significant gender imbalance within the tech industry, with women being underrepresented in technical roles, results in the absence of female perspectives and experiences in every aspect of the field. This lack of diversity not only limits innovation but also stifles creativity. The prevailing gender stereotypes contribute to a hostile and unwelcoming environment for women, discouraging their participation and advancement in the tech sector. These stereotypes reinforce the belief that technology is exclusively a male-dominated field, perpetuating gender biases and excluding talented individuals from fully contributing. Furthermore, existing barriers and biases in recruitment and promotion processes further impede women's progress, depriving the industry of their valuable skills and contributions.

To address these issues, it is crucial to undertake awareness campaigns that promote gender equality in STEM (science, technology, engineering and mathematics) careers. By dismantling preconceived notions and challenging gender stereotypes associated with technology, women can be encouraged and empowered to pursue careers in the tech sector.

#### 2.4 Recommendations to Strengthen Education and Access to Technology Initiatives

The dialogue emphasised the significance of addressing diffusion, accessibility, and usage of technology to promote inclusivity and gender equality in the STEM sector. Breaking down the

initial barrier to access is crucial in ensuring that women have equal opportunities in the tech field. The participants put forth three main recommendations to achieve this objective.

Their first recommendation emphasises the urgent need for improvement in the education system of public schools in Ecuador, specifically highlighting the significance of incorporating English and technology-related subjects into the school curriculum. By integrating these subjects early on, students have the opportunity to develop the necessary language and technical skills that are vital in the rapidly evolving digital world.

Secondly, there is also a need to develop an education ecosystem that actively encourages and supports women's participation in STEM fields. This entails providing equitable opportunities and connecting technology careers to their educational backgrounds. To accomplish this, it is crucial to implement inclusive educational programs and mentorship initiatives that foster a supportive environment for women in STEM.

Their third and last recommendation is to cultivate more female role models and representatives within the technology sector. These role models can serve as inspiration and motivation for young women, showcasing that successful careers in tech are attainable. By demonstrating diverse female leaders in STEM, women can envision themselves in similar positions and overcome any barriers or doubts they may face.

### **3 Conclusion**

In conclusion, the multi-stakeholder dialogue in Ecuador on a gender perspective in the technology sector has provided valuable insights into the challenges and opportunities for women in the industry. The findings highlight the urgent need to address issues such as digital harassment, the gender gap in technological advancement, the pressing need to change gender stereotypes, and the urgent access to education and technology. The dialogue emphasised the importance of comprehensive approaches, including establishing technology centres, implementing financial programs, promoting awareness campaigns, cultivating female representatives and role models, and improving the education system.

Education and access to technology were identified as powerful tools for women's empowerment, and it is crucial to address accessibility, and positive utility to ensure that technology is a means of overcoming existing challenges rather than a source of further inequality. Bridging the digital divide, providing training and workshop opportunities, challenging societal norms, promoting gender equality, fostering collaborations, improving infrastructure, and addressing workplace barriers are key steps towards creating an inclusive and equitable tech sector for all.

The engagement and commitment demonstrated by diverse stakeholders from academia, business, civil society, government, and NGOs reflect the collective determination to achieve gender equality and equity in Ecuador's technology landscape. It is essential to translate the insights and recommendations from the dialogue into concrete actions, fostering continued collaboration and coordination among stakeholders. By implementing the suggested measures, Ecuador can make significant strides towards building an inclusive tech ecosystem that benefits all its citizens.

The Alexander von Humboldt Institute for Internet and Society (HIIG) and the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ), along with the co-organizers and participants, remain committed to supporting and advancing gender diversity and inclusion in the tech sector. By working together, we can create a future where women and marginalised groups in Ecuador have equal opportunities to participate, contribute, and thrive in the technology-driven world.

## 4 Key Action Points

Key calls for action from the Multi-Stakeholder Dialogue:

- **Invest in STEM education**: Increase investments in science, technology, engineering, and mathematics (STEM) education at all levels, with a particular focus on promoting girls' interest and participation in STEM fields.
- **Support research and data collection**: Invest in research and data collection efforts to understand the specific challenges faced by women in the tech sector and develop targeted solutions.
- Address unconscious bias: Implement training programmes to raise awareness of unconscious bias in the tech sector and create a more inclusive and respectful work environment.
- Advocate for gender equality in tech policy: Advocate for policies that promote gender equality in the tech sector, including equal pay, fair hiring practices, and anti-discrimination measures.
- **Promote entrepreneurship**: Encourage and support women in starting their tech-related businesses by providing financial assistance, mentorship, and networking opportunities.
- **Promote gender diversity in leadership**: Encourage more women to pursue leadership roles in the tech industry and support their advancement through mentorship and leadership development programs.
- **Promote networking and mentoring**: Facilitate networking and mentoring opportunities for women in the tech sector to help them build connections and gain insights from experienced professionals.
- **Promote workplace policies that support work-life balance**: Implement policies such as parental leave, childcare support, and flexible working hours to support women in balancing their professional and personal responsibilities.
- **Flexible work arrangements**: Offer flexible work options and remote work opportunities to accommodate the needs of women with caregiving responsibilities.
- **Incentivise diversity and inclusion**: Establish incentives for companies and organisations in the tech sector to prioritise diversity and inclusion, such as recognition programmes or government incentives.
- **Engage men as allies:** Encourage men to actively support gender equality initiatives in the tech sector and become allies in promoting diversity and inclusion.
- Create awareness campaigns: Launch public awareness campaigns to challenge stereotypes and biases related to women's participation in the tech sector and highlight the importance of gender diversity.

For questions regarding this report please contact Sarah Spitz (sarah.spitz@hiiq.de).

**About the Project** 

Funded by the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Women\* in Tech knowledge transfer project aims to strengthen the equal rights of women\* worldwide through networking and expertise, as well as to create new spaces of opportunity and co-design. During the entire transfer process, there will be a continuous exchange with respective local and international stakeholders. The results are prepared in such a way that they

can be used by a broad target group and are available in the long term.

**About the Institute** 

The Alexander von Humboldt Institute for Internet and Society (HIIG) is the first institute in Germany that studies the development of the Internet from a social perspective. Aiming at better understanding the digitalisation of all spheres of life, the HIIG has established an understanding that emphasises the integration of digital innovations into social processes.

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