



# **Women in the Tech-Sector in Mauritania**

## **Position Paper for the Multi-Stakeholder Dialogue in Mauritania**

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# Women in the Tech-Sector in Mauritania

CHALLENGES AND OPPORTUNITIES FOR AN INCLUSIVE TECHNOLOGY SECTOR IN MAURITANIA

Learnings from a Multi-Stakeholder Dialogue in Nouakchott, Mauritania.

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# 1. Introduction and Background

In the ever-evolving realm of technology, where innovation drives societies forward, it is essential to examine the role of and challenges faced by women in the tech sector. This position paper centres on the multi-stakeholder dialogue held in Nouakchott, Mauritania, on 4 November 2023, addressing the pressing issue of the inclusion of women into the tech-sector. As we embark on this discourse, it is important to delve into the complex system of difficulties that these women confront on a daily basis. Located on the border between North and West Africa, Mauritania is witnessing a growing fascination with technological progress. Despite the enthusiasm for technological advancements, there are notable gender disparities, limited access to digital tools, and a lack of education within the country as well as the country's tech sector. These challenges reflect a global issue, highlighting the need for a thorough examination of the daily obstacles faced by women navigating this intricate landscape.

To acknowledge and address the hardships faced by Mauritanian women (not only) in the tech sector, the Alexander von Humboldt Institute for Internet and Society (HIIG) and the Digital Transformation Center (DTC) in Mauritania, implemented by Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ), on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) organised a multi-stakeholder dialogue (MSD) for the first anniversary of the Digital Transformation Center in Nouakchott, Mauritania. The dialogue focused on how to create a more diverse tech sector, with a special focus on women in rural areas and refugee women from different countries in Africa, such as Mali and Central Africa, who face limited access to digital infrastructure, digital education and devices, and the necessary skills to use them. The aim of the dialogue was to achieve a shared understanding of the perspectives, opportunities and challenges that women face in this field. Furthermore, strategies and measures were discussed to address these obstacles and promote equality and equity in Mauritania's technology sector as well as to connect different stakeholders in the field with each other.

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

## 2. Findings

The multi-stakeholder dialogue in Mauritania brought together 42 representatives from academia, business, civil society, government, and NGOs on 4 November 2023, in Nouakchott. The event started with welcoming remarks from Matchyane Bakar Soueid Ahmed, advisor from the Ministry of Digitalisation as well as from Hamza Ould Bakar, head of the Digital Transformation Center in Mauritania. The co-organisers of the event, HIIG and DTC Mauritania, also introduced their work and projects during the event. Following the introductions, the dialogue featured an insightful presentation from Dr. Theresa Züger, head of the AI & Society Lab at HIIG, as well as an impressive contribution from Moueny Abdul Wahat, a refugee woman from Mali and entrepreneur in Mauritania, living in Mauritania since 2011.

During the discussion groups the participants focussed on the promises, perils, and challenges associated with a more diverse perspective on the tech sector. As the dialogue and the discussions concluded, the groups summarised their insights, resulting in the emergence of the following key themes.

### **2.1 Education as a Foundation for Empowerment and Tech Readiness**

During the multi-stakeholder dialogue on women in the technology sector in Mauritania, the central role of compulsory education for all children was highlighted, with a focus on empowering girls and women. This should also include the physical and psychological safety of girls and women, which is still under threat.

Participants stressed the need to expand opportunities for women to engage in education, recognising it not only as a basic right but also as the cornerstone for their empowerment in a rapidly evolving technological landscape. The dialogue delved into the importance of mandatory education, shedding light on how it can act as a catalyst for breaking down gender barriers. Education was identified as the foundation upon which women can build skills, knowledge, and the confidence necessary to thrive in the dynamic field of technology.

In addition to the importance of education, there was also a consensus that English as a foreign language must be more strongly prioritised. This emphasis was not merely linguistic but rooted in the pragmatic recognition that proficiency in English opens doors to higher education and diverse learning opportunities beyond national boundaries. The ability to navigate English-language resources was considered indispensable for women aspiring to excel in the globalised tech arena.

One of the primary obstacles faced by Mauritanian women in the tech sector is the limited access to quality education in the technological fields. Societal expectations often steer girls

away from pursuing STEM fields, perpetuating the stereotype that these domains are reserved for men. The lack of educational resources, especially in rural areas, further adds to this problem and prevents the development of a diverse and skilled workforce. Participants recognised that achieving gender parity in technology requires a profound and general change in society to recognise women's fundamental rights to equality. Only then can a strategic focus on skills development and women's empowerment be successful, taking into account the specific challenges they face.

## **2.2 Empowering Women Through Literacy, Workshops and Financial Support**

The dialogue shed light on empowering women in the tech sector through digital literacy, targeted workshops and robust financial support. In explaining the need for targeted workshops, stakeholders articulated that generic training programmes often fall short in addressing the specific pitfalls women encounter in the tech sector. Tailored workshops, focussing not only on technical skills but also a legal background about the women's rights in a work relation, were identified as a solution to provide women with industry-specific skills, fostering a supportive network, and nurturing a sense of belonging. This approach should aim at not only providing technical skills but also to build confidence and resilience, essential attributes for navigating a historically male-dominated field.

Moreover, the dialogue highlighted the critical role of financial support in empowering women. Participants acknowledged that addressing the gender gap in technology requires investment, not only in skill development but also in the economic empowerment of women. The support of female entrepreneurs is still at its very beginning. Financial support and inclusion such as access to microcredit was identified as a key enabler, offering women the resources necessary to pursue education, participate in training programmes, and even venture into entrepreneurial endeavours in the tech sector.

## **2.3 Improving Work Conditions**

As women in the discussion reported, the decision to work in tech is anything but incentivised. They criticised not only discrimination in the hiring processes, but rather basic problems like safe transportation to work and having a safe work environment. Additionally, the dialogue highlighted a collective call for transformative changes in work conditions, with a specific focus on serving the needs of women. The discussion groups urged the need of creating a working environment that is not only supportive but also inclusive, recognising that such changes are fundamental to promoting gender equality and equity in the technology sector, for example in relation to working hours and overtime, which currently affects more women than men. Part of the problem are gender stereotypes, that lead to care work being a women's additional duty, which does not allow women to balance private and work related responsibilities. Women often

don't have the time to fill demanding positions since they are expected to commit to care. In result, women often decide against a career path even though they have degrees of higher education. It is therefore essential to address the existing systemic prejudices and gender stereotypes in society. The participants expressed disappointment in the lack of commitment to actions to improve gender equality in their society. Rather they emphasise a status of absence of female decision makers in industries and politics. Even for those women who manage to break through educational barriers and cultural stereotypes, the professional landscape in Mauritania's tech sector offers huge challenges. Systemic biases, leading to unequal pay, limited career opportunities, and workplace discrimination, persist. These problems not only impede the professional growth of women in technology but also perpetuate a cycle of underrepresentation.

Delving into the nuances of this discussion, the dialogue highlighted the multifaceted challenges faced by women in the workplace. Participants emphasised the need for a revision of work conditions to address gender-specific concerns, acknowledging that a one-size-fits-all approach is inadequate in promoting inclusivity. The stakeholders recognised that adapting working conditions to the specific needs and challenges of women in Mauritania, taking into account the specificities of Mauritanian society and understanding the different perspectives of Mauritanian women on their role in society, is not only an ethical mandate, but also a strategic step to harness the full potential of a diverse and skilled workforce.

A crucial aspect of the dialogue focused on training sessions on women's rights at work. Recognising that knowledge is a powerful tool for empowerment, stakeholders advocated for targeted sessions covering various aspects of workplace rights. This discussion centred on details such as contract agreements, working hours, parental leave and general conditions in the workplace. These workshops also should empower women by providing them with the knowledge and tools necessary to navigate the complexities of the professional area. This ensures women to be prepared to advocate for their rights and contribute confidently to the tech sector. The discussion focused on fostering a culture of mutual respect and understanding in the workplace by raising awareness of rights and creating opportunities for open discussion. This approach goes beyond addressing immediate challenges and should serve as a proactive step toward dismantling systemic barriers and stigmatisation that undermine women's full participation in the sector.

## **2.4 Addressing Gender Inequalities in Rural Areas and for Refugee Women**

During the discussion groups, participants collectively acknowledged widespread gender inequalities in rural areas, particularly highlighting the additional challenges faced by refugee women. The dialogue drew attention to a range of issues, including limited employment opportunities, educational disparities, and the prevalence of early marriages, highlighting the need for urgent and reasonable solutions. Participants also drew attention to the problem of job access between men and women in rural settings, identifying a lack of employment

opportunities for women as a significant barrier to economic independence and professional growth. Additionally, educational disparities were recognised as a contributing factor, posing challenges for women in accessing educational resources and opportunities, thereby limiting their potential for climbing the tech sector.

Traditional norms and societal expectations furthermore stop women from aspiring to enter the tech sector. Traditional gender roles often limit women to certain professions, and the tech industry is frequently seen as unconventional or unsuitable for them. Overcoming these fixed perceptions requires a joint effort to challenge stereotypes and promote inclusivity, fostering an environment where women feel empowered to pursue careers in technology.

The dialogue emphasised the impact of early marriages as a substantial obstacle faced by women in rural areas, including refugees. The prevalence of early marriages and early motherhood, whether due to cultural norms or circumstances, was recognised as a barrier to women's educational pursuits and professional aspirations. Addressing this complex challenge requires a nuanced approach considering both cultural sensitivities and the empowerment of women to make their own choices about their education and career paths.

## **2.5 Infrastructure and Access to Digital Tools in Mauritania**

In Mauritania, the tech sector's engagement with women faces a crucial challenge due to insufficient network development. Independent network providers' fragmented nature worsens the situation, disproportionately limiting women's access to digital tools especially in rural areas.

The discussion also highlighted a need for legislation and collaboration of network providers to address infrastructure gaps that are critical to improving inclusivity and accessibility in the technology sector. Urgent collaborative efforts are needed to improve network infrastructure, in line with the overarching goal of creating an environment conducive to gender equality and empowerment. In particular, internet access needs to be improved in remote areas, where remote learning and working remain almost impossible due to the lack of infrastructure. Digital services and platforms are available in principle, but the inability to utilise these online resources due to lack of sufficient available connectivity creates de facto barriers to both learning and networking, which is critical to using technology to overcome systemic disadvantages.

The discussion on access to digital tools and devices, which was raised during the multi-stakeholder dialogue, highlighted the following challenges. The limited availability of tools, especially laptops, poses obstacles to educational progress, particularly for women, affecting their readiness for a technology-driven future. Furthermore, women face the additional challenge of overcoming the misconception that they lack an understanding of digital

skills and the maths behind them, perpetuating a difficult stereotype and imposter syndrome, even if they are among the best in their class or department.

Moreover, the society's prevailing negative perception of technology often obscures its true significance, hindering women's progress in this field. Overcoming these obstacles is crucial for promoting gender equality and empowering women in Mauritania's tech landscape.

Additionally, the high cost of imported hardware creates a significant economic barrier. In response, the dialogue strongly advocated for a proactive approach, urging increased access to technological devices from an early age. Early access is pivotal for bridging educational gaps, fostering digital literacy, and building confidence for future engagement in the tech sector.



# 3. Conclusion

The multi-stakeholder dialogue on women in Mauritania's tech sector marked a pivotal moment in the pursuit of equality and empowerment. With diverse representation, the event offered valuable insights and identified potential solutions for the multifaceted challenges faced by women in the country's tech landscape. Recognising the intertwined nature of these challenges with societal norms, economic structures, and cultural dynamics, stakeholders addressed issues such as education, access to digital tools, targeted workshops, and inclusive workplaces as interconnected elements influencing women's participation in technology. The lack of gender-specific studies and the lack of research on the status of women in Mauritania underline the need for more research to fill this knowledge gap.

Addressing these challenges demands an intersectional approach where mandatory education aligns with financial support, workplace changes, and overall better infrastructure for women and marginalised groups. The dialogue emphasised the transformative force of education in breaking down gender barriers and societal norms. Stakeholders advocated for proactive measures, calling for increased early access to laptops to foster digital literacy. Empowering women through targeted workshops and financial support emerged as a focal point, with tailored interventions recognised as essential for women in rural areas hosting refugees.

The interactive discussion highlighted the importance of changing work conditions, recognising the urgency of creating an inclusive work environment. Training sessions on women's rights at work were identified as crucial for navigating the professional sphere confidently. The findings are a collective call to action, urging collaboration for an empowered future for women in Mauritania's technology sector.

In conclusion, the multi-stakeholder dialogue has unveiled a unified vision for an inclusive and equitable future in Mauritania's tech sector. The findings form a roadmap for collaborative efforts, focusing on transforming the tech sector into a more inclusive space for women in both urban and rural areas, including refugee women.

As Mauritania is making efforts to progress towards a more balanced and empowered tech landscape, these insights serve as a guiding light for stakeholders, propelling them to break down systemic barriers and establish an environment where the potential of every woman can flourish in the continually evolving world of technology.

# 4. Key Action Points

Key calls for action from the multi-stakeholder dialogue:

## 1. Compulsory Education Catalyst:

- a. **Implementing Comprehensive Education Programmes:** Develop and implement education programmes that go beyond mandates, emphasising the transformative power of education for girls and women in the tech sector.
- b. **Integrate Language Skills:** Actively integrate language skills, with a focus on English proficiency, into educational programmes to broaden opportunities for women beyond national boundaries.
- c. **Prioritise Technological Education:** Integrate technological education into mandatory education, including primary schools, emphasising its importance as a fundamental solution to bridge the gender divide in rural areas.
- d. **Expand E-Learning Initiatives:** Invest in e-learning infrastructure, enabling remote access to higher education for women in remote areas..
- e. **Conduct Awareness Campaigns:** Initiate awareness campaigns with inspiring female leaders to inspire and motivate girls to pursue careers in the tech sector, coupled with efforts to gain societal support and challenge existing gender norms.
- f. **Promote Mobile Security Initiatives:** Implement initiatives to enhance security for girls during long-distance walks to school, leveraging mobile technology for communication and emergency response.

## 2. Empowerment Through Workshops and Financial Support:

- a. **Develop Industry-Specific Workshops:** Establish industry-specific workshops to address the unique challenges faced by women in the tech sector, focusing on skill development, fostering a supportive network, and promoting confidence.
- b. **Enhance Financial Support Programmes:** Strengthen financial support programmes to empower women economically, enabling them to pursue education, participate in training programmes, and venture into entrepreneurial activities in the tech sector.

## 3. Gender-Inclusive Workplaces Advocacy:

- a. **Implement Comprehensive Workplace Reforms:** Advocate for and implement comprehensive workplace reforms to create gender-inclusive environments, recognising the unique needs of women in the tech sector.

- b. **Conduct Training Sessions on Women's Rights:** Organise training sessions on women's rights at work, covering aspects such as contractual agreements, work hours, and overall workplace conditions to empower women and foster a healthier work environment.
- c. **Reform Legal Framework:** Work towards creating a more inclusive legal framework that protects the rights of women in the tech sector. Additionally, focus on educating women about their rights to empower them in navigating the professional landscape.
- d. **Establish Online Job Platforms:** Develop and promote online job platforms tailored for women in rural areas, ensuring access to a broader job market and breaking down geographical barriers.
- e. **Support Digital Entrepreneurship:** Foster a supportive ecosystem for digital entrepreneurship, providing resources and training for women to start and run businesses online, promoting economic independence and innovation. Improving the financial inclusion of disadvantaged groups so that they have access to finance and credit to set up businesses and become self-employed

#### 4. Holistic Solutions for Rural Inequalities:

- a. **Tailored Interventions for Rural Women:** Develop tailored interventions addressing the specific challenges faced by women in rural areas, focusing on limited job access, educational disparities, and early marriages.
- b. **Inclusive Programmes for Refugee Women:** Design inclusive programmes acknowledging and addressing the unique circumstances of refugee women, ensuring comprehensive solutions that reflect a commitment to inclusivity and equity.
- c. **Bridge the Digital Divide:** Invest in infrastructure development to overcome challenges related to inadequate infrastructure, limited coverage, and low bandwidth in rural areas, ensuring equitable access to technology.

#### 5. Access to Digital Tools:

- a. **Promoting Early Access Initiatives:** Proactively promote initiatives that provide early access to digital tools, such as laptops, to bridge educational gaps and enhance digital literacy among women.
- b. **Enhance Affordability:** Implement measures to improve the affordability of internet services, addressing financial barriers and ensuring that lower-income individuals in rural areas can access technology.
- c. **Utilise Social Media for Awareness:** Leverage social media platforms to showcase success stories of local women in the tech sector.

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## **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 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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