



The Effects of Artificial Intelligence on the Working Lives of Women

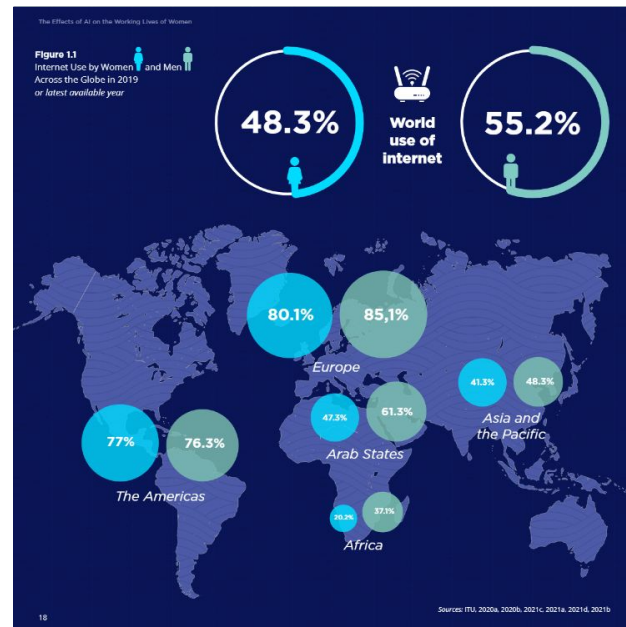
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Context: Inequalities in Access and Connectivity

- Women experience gaps in internet access and digital skills.
 - Lower levels of education, formal education
 - Social / cultural norms
- ITU: women's and men's access to the internet differs around the world.
- **What paths can society take to mitigate the negative impacts of AI for women, and - more than that - how can we create tools and strategies to close existing gaps?**



AI-Driven Changes to Skill Requirements

Automation

- Who are the most exposed? Women or men? It is unclear...
- Women are more likely to work in positions that require interpersonal skills \square lower potential for automation
- Women are under-represented in management, more complex positions \square greater risk for automation

Figure 2.1 Risk of automation by gender in select LAC countries



Source: Bustelo et al., 2019.

Note: Proportion of worker whose automation risk is greater than 70%. For the estimates, the samples of urban employed persons between 18 and 60 years, excluding the agricultural, forestry, fisheries and mining sectors, is taken into account. The difference between men and women is statistically significant at 5% or less. Calculations based on STEP 2012 and 2013 (Bolivia, Colombia and El Salvador) and PIAAC 2014 survey (Chile). Source et al. (2019b)

Changes in Job Skills in Demand



- **Digital skills** to maintain and manage AI systems
 - UNESCO 2019: On average, women are 25% less likely to know how to use ICT for basic purposes
- **AI skills** to create, develop, and interact with AI systems
 - Women are less than 1/3 of those registered for ICT studies at the university level (UNESCO, 2019a)
 - Women are at risk of being excluded from the benefits of technological innovation (Bustelo et al, 2019)
- **Unique human abilities** to work on tasks at which AI is less effective

AI Impacts on Job Searches

Advertising of Jobs

- Online platforms: AI to target and advertise specific vacancies
- Challenges
 - **biases** in targeting
 - **access** issues could limit how people find out about open positions
 - gender-biased language

Public Employment Services

- AI can add value: improving matching algorithms or by segmenting applications (to facilitate offers of assistance).
- Can be beneficial for women:
 - Can promote greater inclusion of groups, like women, who face discrimination in the labour market
 - AI allows for the creation of algorithms that address dimensions specific to women applicants
- More common in Europe, public employment services (PES) have limited use in LAC.
 - IDB supports these initiatives, especially through fAIr LAC tools

Hiring Systems

- AI is changing **recruitment practices**
- HR specialists use the systems and automate things like:
 - reviewing CVs, scheduling interviewing, issuing offers, etc. etc
- AI can result in better HR performance
- **Challenge:** data created by humans can carry biases that affect decisions

Impact of AI Use in the Workplace

The Impact of Monitoring on Women

- Women are 49% more likely than men to have concerns related to workplace privacy and being monitored via workplace video surveillance (Stark et al., 2020).
- Algorithmic management techniques and flexibility: allow managers to oversee staff
 - Advantageous for people who need flexibility
 - Cost: can replicate existing gendered stereotypes and patterns □ domestic roles associated with women
 - Women tend to be more concerned about privacy issues related to teleworking from home
 - Telework can partially “invisibilize” women workers, if working from home were penalized in the future
- New tools for monitoring sexual harassment or racism

AI and Gender Stereotypes

- Stereotypes and the way in which women are seen at work:
 - Impacts on their positions and opportunities
- AI systems could reinforce stereotypes
 - Can learn and replicate racist, homophobic, and sexist ideas (Neff y Nagy, 2016).
 - Vincent (2018): Gmail Smart Compose tool
 - Suggests that the phrase “I am meeting an investor next week” should be followed by “Do you want to meet with him?”
- Challenges
 - When data used to train AI algorithms is not representative of society
 - Lower levels of internet access for women
 - Data used to train AI can contain ingrained gender stereotypes
- Gender stereotypes can cause a vicious cycle when they impact women’s interest, opportunities, and confidence to pursue specific occupations

Conclusions and Findings

Reskilling and upskilling
of women workers

Creating incentives for
women in STEM

Considerations for
contextual and cultural
complexity

Leveraging
multi-stakeholder
approaches

How gender stereotypes
are formed

Broaden applied
research

Thank you!

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