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Statement submitted by Women@TheTable, a non-governmental organization in consultative status with the Economic and Social Council*

The Secretary-General has received the following statement, which is being circulated in accordance with paragraphs 36 and 37 of Economic and Social Council resolution 1996/31.

^{*} The present statement is issued without formal editing.





Statement

The Beijing Declaration and Platform for Action envisioned gender equality in all dimensions of life – yet at the 25 year mark no country has achieved this agenda in the economy, in institutional or national mechanisms, or women's full participation in decision-making processes and access to power to name 3 of the 12 critical areas of concern. We still face many of the same challenges with the Beijing Declaration and Platform for Action's visionary aspirations left mostly unfulfilled. 25 years after the Beijing Declaration and Platform for Action was penned the world has forged on although cultural and institutional bias remains largely the same. However, we face newly significant and additional global challenges. The Fourth Industrial Revolution, artificial intelligence and automated decision-making in machine learning offer new opportunities but also profoundly threaten women's full participation and human rights, if left unchecked, unaccountable and uncorrected.

We must seize the momentum on the 25th anniversary of the Beijing Declaration and Platform for Action and utilize the largest untapped intellectual resource on the planet – women and girls. We must continue to galvanise women's influence and reshape our society's systems.

The fact is that women have remained largely under-represented and excluded from the technology sector and in particular in artificial intelligence and automated decision-making leadership. The World Economic Forum reports a significant gender gap among artificial intelligence professionals: 22 per cent of artificial intelligence professionals globally are female, compared to 78 per cent male. Only 12 per cent of researchers who contributed to the three leading machine learning conferences in 2017 were women. This gender gap is replicated at large technology firms like Facebook and Google – where only 15 per cent and 10 per cent respectively of their artificial intelligence research staff are women. The situation is worse for black people, only 2.5 per cent of Google's workforce is black while Facebook and Microsoft are each at 4 per cent, 3.6 per cent of Google's workforce is Latinx, Microsoft's is 6 per cent and Facebook reported 5 per cent Hispanic workers. All of this has resulted in gender biases, that are slowly being removed from the analog world, being baked into new digital automated decision-making with old stereotypical conceptions and associations of gender, race and class.

There is mounting evidence that gender bias and sexism is pervasive in automated decision-making. From inherent bias in hiring; selection bias and stereotypes in the delivery of ads to women; and entrenched implicit stereotypes and unconscious bias translated into explicit misogyny through feminised machines like Alexa – women continue to be excluded and left behind.

The entrenched divides so ingrained in us that they are unconscious, are not only being passed onto the next generation, but they're becoming intractable as machines begin to learn from one another.

We are at a critical turning point –particularly urgent given the scale at which automated decision-making systems are being deployed around the world in private and public sector systems.

The solution is straightforward: include the women who have been consciously or unconsciously excluded throughout the automated decision-making product life cycle of funding, design, and adoption. Gender equality in automated decision-making, what we call affirmative action for algorithms, is needed in order to correct real life bias and barriers that prevent women from achieving full participation and rights in the present, and in the future we invent.

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In order that the implementation of the Beijing Declaration and Platform for Action's commitments with regards to women in power and decision-making can be made a reality in the twenty-first century, Women@theTable makes the following recommendations.

Specifically, we need to ensure an intersectional variety and equal number of women and girls in positions of power and decision-making in the creation, design and coding of automated decision-making so that machine learning does not embed an already gender biased system into all our futures.

We recommend:

- Gender balance in artificial intelligence decision-making put on the official agenda of all involved with the funding, design, adoption and evaluation of automated decision-making.
- Gender balance in design teams —employment of a robust range of intersectional feminists in the design of automated decision-making systems to trigger and assist greater innovation and creativity, as well detect and mitigate bias and harmful effects on women, girls and the traditionally excluded.
- Require companies to proactively disclose and report on gender balance targets in design teams. Incentivize companies with balanced teams.
- Require universities and start-ups to proactively disclose and report on gender balance targets in research and design teams, including upstream when applying for grants. Incentivize teams that are balanced and multi-disciplinary.
- Create research funds to explore the impacts of gender and artificial intelligence, machine learning, bias and fairness, with a multi-disciplinary approach beyond the computer science and engineering lens to include new ways of embedding digital literacy, and study the economic, political and social effects of automated decision making on the lives of women and those traditionally excluded from rules making and decision-taking.
- A United Nations agencies-wide review of the application of existing international human rights law and standards for automated decision making and gender. This can guide and provoke the creative thinking for an approach grounded in human rights fit for purpose in the fast-changing digital age.
- Development of a set of metrics for digital inclusiveness urgently agreed, measured worldwide and detailed with sex-disaggregated data in the annual reports of institutions such as the United Nations, the International Monetary Fund, the International Telecommunication Union, the World Bank, the multilateral development banks and the Organisation for Economic Co-operation and Development.
- Public institutions to pilot and lead affirmative action for algorithms deployed when public institutions pilot automated decision-making. Base pilots on longstanding and new social science research that allocate social incentives, subsidies, or scholarships where women have traditionally been left behind by prior systems. This is a positive agenda to advance values of equality we have long embraced, to correct for the visibility, quality and influence of women proportionate to the population.
- Public and private sector uptake of algorithmic impact assessments: a self-assessment framework designed to respect the public's right to know the artificial intelligence systems that impact their lives in terms of principles of accountability and fairness. Rigorous testing across the lifecycle of artificial intelligence systems: testing should account for the origins and use of training

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data, test data, models, application program interfaces and other components over a product life cycle. Testing should cover pre-release trials, independent auditing, certification and ongoing monitoring to test for bias and other harms. Automated decision-making should improve the quality of, not control, the human experience.

- Strong legal frameworks to promote accountability including potential expansion of powers for sector specific agencies, or creation of new terms of reference to oversee, audit and monitor automated decision-making systems for regulatory oversight and legal liability on the private and public sector.
- Gender-responsive procurement guidelines for organizations and at all levels of government to develop automated decision-making gender equality procurement guidelines with hard targets; and outline roles and responsibilities of those organisations required to apply these principles.
- Improve datasets: Actively produce open gender-disaggregated datasets; this better enables an understanding of the sources of bias in artificial intelligence to ultimately improve the performance of machine learning systems. Invest in controls to oversee data collection processes and human-in-the-loop verification, so data is not collected at the expense of women and other traditionally excluded groups. Engage in more inclusive data collection processes that focus not only on quantity but also on the quality of datasets.
- The time to act is now we are delighted to share that Women@theTable based in Geneva is leading a global alliance for gender equality in automated decision-making with Ciudadania Inteligente, based in Santiago and Rio de Janeiro. The A+ Alliance is comprised of concerned technology leaders, civil society organizations, cities and academics committed to addressing gender inequality in automated decision-making while it's still possible.
- It is crystal clear that an urgent and profound shift is needed. To fully realise the Beijing Declaration and Platform for Action gender equality in automated decision making is critical to guaranteeing women's human rights and full participation. Reiterating the 2030 Agenda for Sustainable Development, gender equality is a fundamental human right and a driver of progress across all development goals.
- Women must have a seat at the decision-making table as we invent the future then everyone can thrive and ensure no one is left behind.

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