

# Encoding Inequality: A Feminist Analysis of G20 AI Policies

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## Executive Summary

This policy report critically analyses G20 AI policies through a gendered lens. The significance of AI has been steadily rising within the G20, with its potential advantages being promoted as opportunities for all. Since 2019, the G20 has engaged in formal discussions regarding AI each year, with member countries developing and implementing AI models to address healthcare, education, and economic challenges. However, the application of AI across these sectors is likely to have distinctly gendered effects. The potential for AI to perpetuate existing social biases, the gender data gap, the digital gender divide, and the risks of job displacement due to automation may particularly disadvantage women in the AI revolution. Regrettably, the Brazilian G20 failed to address or discuss AI's gendered implications adequately. Moreover, Brazil

has indicated that the increased integration of AI in public policy is imminent and unavoidable. In light of this emerging reality, it is crucial for the G20 to seriously consider the impact on women.

## The G20's Interactions with AI and Women: Where are the Women?

From the outset, Lula da Silva made it clear that AI would be a priority for Brazil's G20 presidency. In July, Brazil announced its ambitious US\$4 million [AI for the Good of All plan](#), consolidating guidelines for developing relevant public policies. Crafted by experts, the document aims to guide Brazil's international efforts in technology regulation, emphasising the promotion of inclusive and sustainable development, while ensuring that the Global South is not left behind in AI-related advancements. Lula sees the plan as [a 'milestone' for Brazil](#), with the possibility of transforming

sectors including health, education, environment, agriculture, trade, and investment. However, this envisioned public transformation does not address how it will ensure that women benefit from this plan. Can a plan that stands to risk half the population for increased public efficiency be for the good of all? Brazil's approach offers an objective case study of the immense possibilities for AI in public policy while highlighting the persistent gender blind spots in such frameworks.

### **Discussions of AI and Gender in the G20 Leaders Summit**

At the 2024 G20 Leaders' Summit, AI and women were addressed in predictably vague terms, with [leaders committing to](#) 'promote responsible AI for improving education and health outcomes as well as women's empowerment' and reiterating their pledge to close the digital gender divide by 2030. Yet, similar commitments made at the 2023 India Summit [failed to prevent the gender digital divide from deepening last year](#) in low- and middle-income countries, casting doubt on the sincerity and effectiveness of these declarations.

These vague and non-binding statements follow a pattern of women and AI discussion at the G20. AI first formally appeared on the G20 agenda at the 2019 Summit in Osaka, Japan. Here, the leaders heralded AI's potential as a driving force

behind the Sustainable Development Goals (SDGs) and a tool to create a sustainable and inclusive society. The leaders [promoted a human-centred approach](#) to AI and introduced the non-binding G20 AI Principles, drawn from the Organization for Economic Cooperation and Development (OECD) Recommendation on AI. These recommendations explicitly state that AI should achieve beneficial outcomes for people and enhance the inclusion of underrepresented populations, reducing gender inequalities. However, there has been little concrete action to mitigate the potential gendered problems with AI, let alone use it to reduce gender inequality.

At the [2020 Riyadh Summit](#), AI was framed as a critical tool for economic resilience and sustainable development, especially in light of the pandemic's disruptions. Building on the previous year's AI Principles, the leader's statement reaffirmed the importance of a human-centred approach to AI. However, women were explicitly absent from the AI section of the leader's statement.

Similarly, in the [Rome 2021 summit](#), discussions around AI centred on post-pandemic recovery and sustainable development. Continued emphasis was placed on the need for ethical, human-centric AI and bridging the global digital divide. The Italian presidency produced initiatives for women's technological empowerment, emphasising the

importance of increasing women's participation in digital spaces and advocating for policies that support their inclusion in tech-driven economic growth. The first-ever G20 conference dedicated exclusively to women's empowerment also arose, and the [B20 advocated for](#) the inclusion of women in the design and development of new technologies. They advocated for companies and governments to be sensitive to how recruitment screeners and AI algorithms may discriminate against female applicants, underscoring how AI could disadvantage women without proper supervision. While this may indicate an increased interest in the interplay between AI and gender inequality, it was quickly brushed aside.

At the [2022 Indonesia summit](#), themes of economy, healthcare, agriculture and achieving Sustainable Development Goals were central to AI discussions, focusing on equitable global recovery. Initiatives focused on ensuring no one was left behind in the 'effort to digitally transform' society, including 'women'. By the time we reached the [2023 India G20](#), 'harnessing artificial intelligence (AI) responsibly for good and for all' was a priority, and they accepted the Framework for Systems of Digital Public Infrastructure, a voluntary and suggested framework for the development, deployment and governance of DPI. They also committed to halving the gender digital divide by 2030 by identifying and eliminating all potential risks girls and

women could encounter from increased digitalisation. However, as mentioned, this was ineffective. They also welcomed initiatives to support women's empowerment in the digital economy. The importance of Digital Public Infrastructure also surfaced with India placing itself as a model for DPI technology in the Global South. The integration of DPI, something [the Lula plan gives a concrete roadmap](#) for, will bring AI closer to people's lives, highlighting the urgent need to address its gendered impacts and ensure that women and marginalised groups are protected and empowered in the digital age.

Whilst the commitments at this summit sounded optimistic, women were not explicitly mentioned in the AI section of the report, and the operative word for the accepted framework was voluntary. With the promotion of DPI technology, the lack of binding rules to ensure that women are not harmed is increasingly concerning. For instance, the use of AI in healthcare risks women's health, with diagnostic tools trained on data which already excludes women, leading to [worse diagnostic outcomes](#). The use of AI in translation and writing tools also risks reproducing gender stereotypes in government forums. Using AI to make economic decisions, such as loans and credit scores, poses similar challenges. It is a threat to women and a disappointment to the G20. While G20 countries are prepared to integrate DPI technology, they must still address the

gendered winners and losers, especially given their purported desire for AI for All. However, this desire may be worded vaguely.

Since 2019, the G20 has recognised the gendered impact of AI, especially the impact of the digital gender divide. However, while discussions have evolved in various working and engagement groups, concrete actions remain limited, focusing on promoting general inclusivity rather than addressing data bias and gender equality within AI. Countries' commitment to ethical principles has remained limited, and without the backing of any laws, the prospect of an AI revolution that genuinely works for women seems unlikely.

### **Discussions of AI and Gender in the G20 Engagement and Working Groups**

AI has been a significant topic of discussion in the engagement and working groups of this G20. However, these discussions, perhaps indicating increased interest, were not enough to make gendered AI issues part of the leaders' statement and do not push countries to act.

For instance, The Civil 20 (C20), Labor 20 (L20), Think 20 (T20), and Women 20 (W20) groups [collaborated to reinforce](#) the importance of responsible practices related to AI. As part of this, the W20 did highlight

the increased gender-based violence women and girls face as a result of AI. However, this is a symptom of the gender-based biases inherent to our AI models rather than the root problem. They also spoke of the need for a collaborative stance on data governance and representative data sets, which promote cultural and linguistic diversity and ensure workers can be retrained.

The W20 has also [advocated for reducing](#) gender gaps in technology and AI. They have emphasised the importance of developing gender-sensitive digital tools, promoting women's leadership in STEM, and addressing the gender divide in AI. One key proposal is to support lifelong learning opportunities for women in AI and ensure that funding for emerging technologies actively benefits women and girls. [The W20 has also called for AI research funding](#) that ensures equitable development of AI systems free from gender biases. However, research has [highlighted significant gaps](#) in alignment between the G20, W20, and G20 EMPOWER on closing the digital gender gap.

Additionally, the [G20's work on economic empowerment](#), including implementing gender-sensitive policies in digital finance and entrepreneurship, has intersected with AI discussions, particularly regarding technology accessibility for women. However, despite these discussions and proposals, concrete action, such as binding

commitments or large-scale reforms, has been slow.

AI has also been central to many discussions within the Digital Economy working group. Notably, [they acknowledged](#) that whilst several tools already exist that can help monitor and evaluate AI in the public sector, most countries still need a government body responsible for developing and monitoring the implementation of their national AI strategy for the public sector. They advocated that coherence and coordination across different departments and agencies should remain limited until a coordinating or centralised effort to drive and monitor the implementation of AI strategies can be developed. However, countries seem unwilling to wait for these strategies to be developed, with countries' plans to integrate AI into public services underway.

The G20 countries' AI policies raise the same question that feminist scholars have long posed regarding International Relations since their engagement with the subject began: [Where are the women?](#) A more radical feminist approach—one that addresses the consequences of AI for women and solves the root causes of AI gender bias—is critical to ensuring that AI benefits are indeed equally shared.

## **Towards a Feminist AI Policy: 4 Areas of Improvement**

To move towards a feminist AI policy that would ensure women are not the losers of the AI revolution, G20 countries must consider 4 areas of concern in their future discussions on AI. Firstly and potentially most difficult is how to ensure AI does not learn from and reproduce the biases of our world. Secondly, addressing the lack of gender disaggregated data to inform AI. Thirdly, ensuring that the digital gender divide allows women access to the technology and skills needed to participate in AI services. Finally countries must find policies to mitigate the effects of job loss and automation.

### **Knowledge and Biases Reproduction**

Engaging with feminist constructivist theory reveals a significant problem in today's AI technology, which the G20 has seemingly overlooked. As Berger and Luckmann describe, ['Society is a human product. Society is an objective reality. Man is a social product.'](#) This perspective highlights the mutual construction of knowledge and society: the knowledge we hold shapes our social world and vice versa. When combined with feminist critiques, this insight exposes how AI is both informed by and reinforces patriarchal structures. [AI systems are shaped by the biases of the societies](#) that create them. In turn, they reproduce and perpetuate these biases,

including gender inequality, racial prejudice, and other forms of discrimination.

Addressing these systemic issues would require profound societal change. Yet, initiatives like [Brazil's AI plan](#) and the [Indian G20's push for Digital Public Infrastructure \(DPI\)](#) suggest that the immediate pursuit of AI efficiency is taking precedence over addressing these profoundly ingrained biases. While the economic benefits of AI integration are recognised globally, the G20 appears unwilling to delay its implementation until societal inequities are resolved, which raises concerns about the long-term implications for marginalised groups, particularly women.

Gender bias is particularly evident in AI translation programs—an area Brazil plans to adopt as part of its AI strategy—and in generative AI systems. A [UNESCO study](#) revealed alarming evidence of regressive gender stereotypes within large language models. Women were described as working in domestic roles far more often than men - four times as usual by one model - and were frequently associated with words like 'home,' 'family,' and 'children.' At the same time, male names were linked to 'business,' 'executive,' 'salary,' and 'career'. These biases mirror and amplify existing societal norms, embedding stereotypes further into professional and social structures. A [study](#)

[analysing over 5,000 images](#) created with Stable Diffusion revealed stark gender and racial biases, revealing that these systems perform worse than human stereotypes in specific contexts. Technical solutions need to be more comprehensive to address these biases. But what is really required is a broader societal transformation, addressing the root causes of these biases in both the data and the systems that drive them.

AI can exhibit biases in hiring, which raises concerns about women's economic status globally. A notable example is Amazon, which developed an application to hire software engineers. Because the existing pool of Amazon software engineers was predominantly male, the new software was trained on data from those engineers' resumes, leading it to conclude that men were better suited for the roles. This bias manifested in several ways: the tool disadvantaged candidates who attended certain women's colleges, which were likely not represented in the existing workforce; penalised resumes that mentioned the word 'women's,' as in 'women's rugby team'; and the software favoured resumes that included action verbs typically used by men, such as 'executed' and 'captured.'

These problems are compounded for women of colour, potentially leaving an already very vulnerable group as the victims of AI. As women and people of colour the data of white males as the

standard simply does not serve these women. For instance, facial recognition software, used in biometrics at airports and on phones, already performs better on lighter skin tones. [The study found that these algorithm](#), from Microsoft, IBM and Face++ performed the worst on darker skin-toned females.

While Brazil's AI plan and the G20's push for DPI offer opportunities for technological innovation, they do not appear to prioritise gender equity in their design and deployment. Instead, the focus remains on leveraging AI for its efficiency and economic benefits. This approach risks reinforcing the very inequalities that AI could help address. Since the G20 countries are full steam ahead in the AI revolution, steps must be taken to mitigate damage. To ensure AI contributes to a more inclusive future, the following intentional gender-sensitive policies must be prioritised: closing the gender data gap, addressing the gender digital divide and planning for job automation.

### **Gender Disaggregated Data Gaps**

AI systems can only learn from the data available to them. Because much of the world's data has [historically been biased](#) towards a white male standard, this creates significant gaps that can perpetuate inequalities. For example, crash test dummies are often modelled after male bodies, leading to higher car crash fatality rates for women. Similarly, women's heart

attack symptoms differ from men's, but medical data largely ignores this, risking worse health outcomes for women.

As AI learns from this biased data, it risks amplifying these inequalities. Studies already show that AI diagnostic tools often work better for men, another area that da Silva's plan mentions. For instance, [a UCL study](#) found that a liver disease prediction model was twice as likely to miss the disease in women than men. With consistent mentions of AI's capabilities for healthcare in the leader's statements, including in this year's statements, and hopes of using AI for diagnostics in da Silva's AI plan, this persistent data gap is an apparent concern.

Some countries have made progress. For instance, [Canada has implemented a framework called GBA+](#), a tool for assessing the impact of policies, programs, and initiatives from a gender-based perspective. It emphasises collecting gender-disaggregated data and understanding how different factors (such as race, income, and disability) intersect with gender. The European Institute for Gender Equality (EIGE) [plays a central role](#) in collecting and disseminating gender-disaggregated data across EU member states. The EU also has policies addressing gender data gaps, particularly in employment, political participation, and economic inequality. However, despite some national policies, addressing this

data gap requires a global effort to gather diverse data across industries, regions, and races, focusing on women. Currently, [only 48% of the data](#) needed to track progress on gender equality (SDG 5) is available. The current data collection rate will take 22 years to gather the necessary data, meaning the UN's 2030 goal will likely be missed. Closing these gaps seems likely with a binding framework for data collection.

The absence of binding frameworks to collect and integrate gender-disaggregated data means that filling these gaps remains an uphill battle. While some progress has been made, the gender data gap will likely persist without enforceable commitments to fill these gaps. For AI to benefit everyone, diverse and inclusive data must be integrated into its development. Without these fundamental changes, the promise of AI for achieving gender equality risks remaining just that—a promise without real-world impact.

## **The Digital Gender Divide**

The digital gender divide exacerbates the data gap in technology, particularly in artificial intelligence (AI). Fewer women have access to, use, or create digital technologies, including AI, leading to a situation where the technology is 'half-blind'—lacking critical input from a significant portion of the population. This

divide limits the creation of technology that reflects diverse perspectives and hinders the ability to collect inclusive and representative data.

Research shows that 259 million fewer women than men [access the internet via mobile phones](#), which skews the data available for AI development. This disparity reduces women's digital literacy and AI competency, leaving them further behind in a world increasingly driven by technology. To address this, policies that improve women's access to technology, provide digital literacy education and ensure equitable access to the Internet are essential for closing this gap.

The underrepresentation of women in AI and other tech fields further perpetuates this imbalance. [With women comprising only 22% of the AI workforce](#), the lack of gender diversity in STEM fields significantly contributes to biased technologies. Increasing the number of women in these sectors is not just a matter of equality; it is crucial for creating fair, unbiased AI systems that address all people's needs.

Closing the digital gender divide is arguably the area the G20 has been most active in. However, progress has not been linear. Countries, especially those in the Global South, such as Ghana and India, have policies to close the digital gender gap by increasing internet access in underserved areas and providing digital literacy support to women in rural areas. However, while



these policies are positive, they need to move faster. Despite commitments made at the 2023 India Summit to reduce the gender digital divide, these promises have largely fallen short, particularly in low- and middle-income countries. The gap continues to widen, raising doubts about the sincerity and effectiveness of these declarations. A T20 policy brief this year argued that '[there is a need for more concerted efforts explicitly targeting the intersection of gender and socioeconomic factors that lead to digital exclusion](#)'. If tangible progress is to be made, it will require more than just rhetoric—it demands concrete, sustained action and investment in policies prioritising women's access to and participation in digital technologies.

### **Job Loss and Automation**

The rise of automation [poses significant challenges](#), especially for women (disproportionately employed in sectors vulnerable to technological displacement). In particular, [the automation of care tasks, a part of Lula's plan](#), has raised concerns. Some fear automating these traditionally feminine roles could further devalue care work, undermine the importance of human relationships in caregiving, and lead to widespread job losses.

Care work, traditionally undervalued and [primarily performed by women](#), remains underpaid and underappreciated economically and politically. Often confined

to the private domain, caregiving has been viewed as a duty rather than a vital societal function. [The rise of automation in care sectors threatens to commodify these tasks further](#), prioritising profit over intrinsic value. This shift risks intensifying gender inequalities and widening economic divides as women, who dominate low-wage, precarious roles, [face heightened displacement by automated systems](#).

This challenge is further reflected in the experiences of women engaged in platform or gig work, a sector proliferating with the integration of algorithmic management. For instance, 28 million Europeans have participated in gig work, which includes food delivery and ride-hailing services like Uber. [Research from EIGE](#) reveals that many gig workers are young, highly educated, and often care for children, particularly women. Over a third of women in this sector reported choosing gig work for its flexibility to balance family commitments and housework. However, this flexibility is undermined by algorithmic scheduling, which monitors productivity and deducts 'low productivity time' from paid work. This form of digital wage theft mainly affects women caring for small children, as a quarter of women platform workers struggle with fixed schedules and predictable work hours. Such software perpetuates existing gender inequalities, leaving women in precarious employment vulnerable to exploitation.

Automating care tasks could also be part of a broader trend toward marketising care services. AI-driven systems replace human workers in tasks that rely heavily on emotional labour, empathy, and personal connection. Fraser [critiques this](#) marketisation, pointing out that it could further dehumanise caregiving and exacerbate the exploitation of workers, who are often women of colour or from low-income backgrounds. The ethical implications are profound as questions about privacy, consent, and the human touch in caregiving emerge. A feminist understanding of care should be considered to mitigate these risks.

In addition to these broader societal impacts, the rise of AI assistants and robots designed to resemble women [has raised concerns](#) about reinforcing harmful stereotypes of female subservience and dependency. These technologies may inadvertently reinforce traditional gender roles, casting women as caregivers and service providers rather than equal participants in a technologically advanced society. To address these challenges, it is crucial to reshape societal perceptions of care work, challenge gender stereotypes, and implement policies that support women adapting to the changing labour market.

The automation challenges, particularly for women in vulnerable sectors, highlight the urgent need for comprehensive gender

equality measures. [As evidenced by Finland's success in the AI labour market](#) gender balance, overall gender equality—supported by policies addressing education, employment, and workplace discrimination—plays a crucial role. Countries should adopt broad strategies to promote gender parity, including reskilling initiatives and efforts to dismantle stereotypes, ensuring women can adapt to and thrive in the evolving labour market. These policies to achieve gender equality would coincide with those needed to resolve the biases. A feminist constructivist points out that fixing our social world would give AI a better model from which to learn.

Moreover, [policies for retraining women displaced by AI are essential to prevent the widening of the digital divide](#). The new jobs created by AI may not be equally accessible to women, especially those from marginalised communities. Some G20 countries have implemented national policies to help reskill female workers. For instance, the U.S. federal National AI Initiative emphasises workforce retraining and includes efforts to encourage more women to enter AI and STEM fields. Although automation will create new employment opportunities, women may need targeted support. Ensuring that women have the necessary skills, resources, and access to new job markets will be critical in mitigating the negative impacts of automation on their economic security.

## **Moving Forward: Decoding Inequalities**

The AI revolution is well underway and can potentially transform public life. However, this new era of AI also risks increasing gender inequality. Discussions in engagement and working groups are not sufficient to address these risks. The G20 must take the potential impacts of AI on women seriously by discussing them among leaders, explicitly including these issues in the leaders' statements, and applying pressure on countries to take action.

While some countries have established national policies, evidence suggests that these measures alone are inadequate to mitigate the risks. AI learns from our biased society and can reproduce these biases, perpetuating the inequities it initially learned from. A possible solution could be

for the G20 to slow down the AI revolution until it approaches its gender equality goals, but this seems unlikely to occur now.

Therefore, addressing the gender data gap is crucial. This requires clear and mandatory frameworks to ensure diverse data collection. Additionally, increasing women's access to the Internet, particularly in low- and middle-income countries, is essential. It is also important that the automation of female-dominated fields, such as caregiving, is approached through a feminist lens and includes opportunities for reskilling.

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