

**IT for Change's Anita Gurumurthy at an  
Interactive Expert Panel on**

**Innovation and Technological Change, and Education  
in the Digital Age for Achieving Gender Equality and  
the Empowerment of All Women and Girls**

**UN CSW67**

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## **Interactive Expert Panel**

### **Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls**

**Tuesday, 14 March 2022, 3.00–6.00 PM ET**

**CSW67**

#### **Accountability and Data Science**

**Anita Gurumurthy, IT for Change**

Respected delegates and colleagues,

For many of us from the global South, this CSW and its focus on innovation and technology is a moment of nervous trepidation. We see the promise of the network-data age for gender justice. We also see the long road ahead to bridge many gaps. We worry about how things will go in a world (re)ordered by algorithms as the fallibility of artificial intelligence (AI) models confirms the fallacies of techno-fascination.

So, what is emerging research telling us?

Political economy analyses of data markets and their expedient gender morals reveal how the global innovation superstructure rests on indiscriminate data mining, dehumanizing AI value chains, and unaccountable data practices; taking away the agency of women at the most tenuous intersections of social hierarchy. Findings from research reflect three significant strands:

- 1) The need to recognize whose rights are implicated,
- 2) the representativity of training data, and
- 3) the question of how benefits from data innovation are distributed.

The recognition axis reminds us that AI system development often fails to account for differentiation produced by the intersectional operations of gender power. This could mean lower quality of services for women and non-binary individuals – arising from AI tools trained on unrepresentative gender data. For example, voice-recognition systems, increasingly used in the automotive and healthcare industries, often perform worse for women. This could also imply discrimination against women candidates in

automated hiring and recruitment systems, and most egregiously, not just the replication of bias, but its amplification owing to recommendation algorithms.

The representation axis shows how AI applications in healthcare are infamous for ignoring diversity – in gender, race, sexual orientation, and ethnicity. Commercial actors or platforms also tend to under-invest in the crucial work of good-quality data collection and annotation, and such apathy tends to perpetuate biases. Public agencies in the South may lack the resources for high-quality data generation and tend to fall back on easily available datasets from mobile devices and such; expedient options that further accentuate the innovation divide.

The distribution axis implores closer attention to the exclusive control by a few global platform companies over datasets and its pernicious consequences for public and social innovation in the global South. Femtech app providers often exploit legal loopholes in the South, mislabeling their services as “wellness advisories” to escape health and medical devices regulation, also taking advantage of the lack of robust data protection regulation in these countries to engage in illegal data collection and data sharing practices.

The geographies of inequality in the AI ecosystem also arise in the painstaking, mind-numbing, and deskilling annotation work performed by young people in the South for Northern corporations. And in sectors like agriculture, smart farming brings corporate regimes of data governance that divest local communities of their traditional control over knowledge.

So, how can we make data science gender-just?

Feminist epistemology plays an important role in data science, critically unpacking its assumptions and objectives. What it tells us is that mainstream data science reflects a gaping accountability deficit; a neglect of corporeality, social experience, and public reason on the one hand, and an active gaming of public cognition – the shared sense of society that is created in the interaction between individuals and institutions, on the other. Also, a fundamental reorganization of the data economy is at the heart of feminist critique. The data value chain – from collection, processing, and generation of digital intelligence and the reuse of data and intelligence in various aftermarkets – needs to be recalibrated with the objective of dismantling rentier capitalism and socializing data value.

Rather than being respectful of socio-historical experience, mainstream data science today instrumentalizes subject location as a disciplinary tool (with its racial, sexist, and casteist biases). Its techno-institutional design promotes an uncritical agency that is devastating to public reason, democracy, and social harmony. Its extractive and colonial impetus has deepened global inequality.

We need a paradigm shift in the ethics of data science. Both in terms of a) data innovation systems – the norms and practices to achieve inclusion, diversity, and representativity in the (endogenous) computing environment, and b) data institutional ecosystems – the norms and rules constituting the (exogenous) legal-institutional regime for just and equitable data societies.

This paradigm shift is predicated on a new rights regime for data – a regime that steers clear of ethics-washing so common in the tech industry.

Our shared data futures need a new class of data rights that straddle individual and collective aspects. From the right to access one's data, to the right to be protected from data harms, the right to appropriate representation in data, including a right to not provide data or to withdraw one's data, and the right to participate in the governance of data infrastructures.

Collective autonomy in the data age must also further the spirit of self-determination imbued in the right to development so that all people everywhere can build their data future, in a manner that enables social and ecological interdependencies to flourish.

Machine intelligence will not save us; nor should machine stupidity be allowed to destroy us. Data science must negotiate the huge complexity of our times through humane wisdom and a diversity of methodologies that can negotiate the tensions between scale and specificity, macro and micro, general and particular. The task for policy is to restore the knowledge resource of data back to the people, to democratize it, to stop its reification as truth, and to ensure that at the heart of its practice, data science carries a deeply feminist public morality.