Diversity, Equity, and Inclusion in Practice: Responsible AI Use Cases from Latin America and the Caribbean

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Abstract

Public Interest Technology (PIT) offers an opportunity for professionals with different backgrounds and a range of technical and/or core skills to leverage digital technologies to the service of the common good. Among its key features, PIT advocates for a human rights-centered design, development, and deployment of technology, as well as to ground a responsible use of tech in the principles of Diversity, Equity, and Inclusion (DEI). Through a Global South lens, this article provides three examples of how DEI principles have gone from theory to practice in the Latin America and the Caribbean (LAC) region.

la independiente

CENTRO DE CONOCIMIENTO PARA CROWDWORKERS

únete para conocer y aprender con otras trabajadoras digitales

Introduction

As a concept, Public Interest Technology (PIT) offers an opportunity for professionals with different backgrounds and a range of technical and/or core skills to leverage digital technologies to the service of the common good. This is an emerging and growing field of practice, most prevalent in the United States, but with more recent initiatives coming from different corners of the world as far and wide as New Zealand, Australia, Spain, Edinburg, Hungary, Croatia, Australia, Brazil, and Mexico (New America; PIT UN Global Members). Among its key features, PIT advocates for a human rights-centered design, development, and

deployment of technology, as well as to ground a responsible use of tech in the principles of Diversity, Equity and Inclusion (DEI).

Through a Global South lens, this article provides three examples of how DEI principles have gone from theory to practice in the Latin America and the Caribbean (LAC) region. The examples stem from initiatives led by the PIT Policy Lab in close collaboration with different think tanks, local governments, specialized consultancy firms, international organizations, and academic institutions. Although different in scope, these initiatives have been widely recognized as innovative and awarded for their pioneering research contributions, as they have been shaped by their local contexts, showcasing the importance of thinking outside the box and of multidisciplinary and multi-sector partnerships.

Feminist AI: Mainstreaming Gender Perspective in AI Crowd Work

The Feminist Artificial Intelligence (AI) Network, a dynamic ecosystem created by the A+ Alliance for Inclusive Algorithms, advocates for "Pro-social AI, designed with inclusion at the core, creating new opportunities and innovative correction of inequities. Feminist AI focuses on bringing social programs in line with 21st-century research and values, united in finding ways to make AI and emerging technologies gender-transformative: more effective, not merely more 'accurate' and 'efficient.'" ('A+ Alliance, n.d.)

Following this definition and as part of the second cohort of scalable feminist research selected by the Network, *La Independiente* was the result of over two years of work between PIT Policy Lab, UNAM Civic Innovation Lab, Northeastern Civic AI Lab, and Puentech Lab towards deepening the understanding of the current state of AI-related collaborative work in the LAC region, paired with policy recommendations and the creation of smart tools to empower the workforce that underpins the growth of the AI industry.

Crowd workers are completing a broad range of tasks like audio and video transcription, content moderation, data gathering and processing, image identification, transcription, and annotation, as well as translation, contributing to the training and advancement of AI systems. In recent years, partially connected to the socioeconomic and geopolitical context of countries like Venezuela, the LAC workforce has grown. Latin American women make up a sizable portion of these workers, using crowd work as a path to financial independence. Among more than 60 women crowd workers interviewed as part of this initiative, a majority of them shared a desire to learn from the experiences of more seasoned crowd-working women, particularly to help them navigate tasks, develop technical and soft skills, and manage their finances with more ease. Additionally, 75% of the women reported completing crowd work tasks on top of caring for their families, while over 50% confirmed they needed to negotiate their family and care responsibilities in order to pursue crowd work in the first place. The findings were used to inform the development of a powered social connection and recommendation system platform designed to help female workers build a supportive community, together with a personal branding web plug-in and a client communication management web plug-in, to advance their professional careers and improve their digital skills. Moreover, through a two-day Policy Forum, discussions highlighted pay inequality, discrimination on crowd-work platforms, and underrepresentation. Based on these key findings, the public policy recommendations for platforms included conducting salary audits, offering transparency in remuneration, developing effective complaint mechanisms, providing client training with awareness-raising content on equity and respect for all women

workers, establishing mentoring programs to connect workers with successful female mentors in the sector, and providing incentives for employers who hire and promote equitably. For the industry to be gender transformative, there needs to be openness and intentionality to correct existing inequalities. For female workers, the existence of a community is a first step towards self-organization and representation.

Equitable AI: Mitigating Gender Bias in an Early Alert System to Prevent School Dropout

At the beginning of 2022, the U.S. Agency for International Development (USAID) launched the *Equitable AI Challenge* in the form of a global competition to help identify and address gender biases within AI systems, in particular those relevant to global development. Among numerous concept notes received, 28 semifinalists were selected for a co-creation event where participants were encouraged to collaborate on solutions, identify partnerships, and strengthen their proposals. This is how the *Equitable AI: Guanajuato Use Case* consortium was created between PIT Policy Lab, Itad, Athena Infonomics, and Women in Digital Transformation and was selected as one of the five proposals that were awarded a grant. The team worked with the Ministry of Education in Guanajuato, Mexico, towards the identification and mitigation of gender bias in their Early Action System for School Permanence (SATPE), aimed at improving school retention and graduation rates by identifying and then supporting at-risk students. As part of the Use Case, a series of workshops were conducted to build local capacity at the intersection of gender, human rights, and technology. Using IBM AI Fairness 360, an open-source toolkit to examine, report, and mitigate discrimination and bias in machine learning models throughout the AI application lifecycle, the team was able to identify and mitigate a 4% gender bias that misclassified girls as "not at risk" of dropping out of school. Moreover, the technical team at the Ministry of Education was trained to use this tool so they could test it in different models and different AI-based projects. To enhance ethical practices in AI deployment, the consortium also developed an Ethical Guide and a Self-Assessment Checklist.

The Guide covers AI basics, ethical concerns, and case studies, and it prompts decision-makers to reflect on responsible AI use. The Checklist was created to assist policymakers and technical teams in deploying ethical AI systems, guiding them through various phases and prompting considerations related to regulations, data use, system design, and decision-making. Additionally, actionable policy recommendations derived from the SATPE implementation experience include:

- Self-Assessment and Reflection: Encouraging teams to anticipate potential issues and consult stakeholders in the AI system's design and development phase.
- Standardizing Best Practices: Establishing decision criteria aligned with ethics and human rights for data and AI work.
- Involvement and Transparency: Involving affected populations in AI projects by creating consultation mechanisms.
- Strengthening Existing Instruments: Coordinating efforts to incorporate an ethical perspective into policies regarding AI and personal data.
- Broader Sensitivity: Emphasizing the importance of measuring results, addressing data biases, and incorporating human oversight in AI-based decision-making.

The leadership at the Ministry of Education is currently in the process of using the resources through their project portfolio and is planning to introduce teachers to the ethics of AI and applications of AI systems in the education sector.

AI Centered on Indigenous Populations: Perspectives from LAC

From 2021 to 2023, the PIT Policy Lab worked with UNESCO to draft the first paper in Spanish on AI and Indigenous Populations with a focus on LAC. Highlighting UNESCO's Recommendation on the Ethics of AI, the research underscores the importance of incorporating the perspectives of indigenous peoples worldwide into Artificial Intelligence (AI) development. It emphasizes the need for AI products and services to respect indigenous rights, eliminate bias and discrimination, and align with indigenous needs and worldviews. AI applications are recognized for their potential in preserving indigenous identities, cultural heritage, and language revitalization. However, many AI initiatives related to indigenous communities are predominantly driven by external developers, who lack an understanding of indigenous perspectives and priorities and most often leave their leadership aside from these projects. Based on an extensive literature review, the paper emphasizes the importance of diversifying AI development by incorporating non-hegemonic knowledge, regional perspectives, and indigenous value systems to address global issues. Highlighting use cases from Latin America, it stresses the importance of democratizing AI and addressing gaps in access, usage, and digital literacy faced by indigenous communities. Furthermore, it advocates for the active involvement of indigenous communities in shaping ethical frameworks for AI focused on their needs. Ultimately, the report asserts that the conversation surrounding ethical AI must expand to include indigenous communities themselves, empowering them to lead and shape the development of AI that respects their cultures, knowledge, and fundamental freedoms. The vision is for AI to evolve into "Artificial

Wisdom," reflecting human experiences, promoting sustainable development, and upholding essential liberties.

As showcased through the previous examples, Public Interest Technology (PIT) allows professionals to use technology for societal good, emphasizing human rights and Diversity, Equity, and Inclusion (DEI). To advance initiatives in this space and follow up with existing use cases and collaborations, organizations led by Global South women and minority or underrepresented groups face the challenge of accessing sources of financing that go beyond seed funding. There are strong partnerships in place and an opportunity to showcase work that mainstreams gender perspective and provides a spotlight for new voices and humanistic leadership in technology.

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