



## AI for Indigenous Communities

# Why AI matters?



At first glance, artificial intelligence (AI) and Indigenous communities may seem worlds apart, one rooted in cutting-edge algorithms, the other in ancestral knowledge and tradition. Yet as digital technologies rapidly reshape economies, governance, and daily life, their effects are reaching even the most remote and historically marginalized populations.

During a recent global forum I attended as a delegate — the World Bank Youth Summit — I was struck by how rarely Indigenous voices feature in conversations about AI. And yet, the decisions we make today about how AI is designed, deployed, and regulated will profoundly shape the rights, cultures, and futures of Indigenous peoples across the world.

## For Indigenous People

This brief offers a snapshot of both the risks and opportunities that AI and digitalization present for Indigenous communities in Latin America. Drawing on regional case studies and global policy debates, it explores how traditional knowledge and technological innovation interact.

This reflection is born from that realization — it's not just about what's going wrong, but also about what could go right if we center the voices that have too often been ignored.

*Cintya Huairo*



# The hidden cost of innovation:

*The risks we can't ignore*

## Losing traditional livelihoods

AI-generated designs are displacing Indigenous artisans. Sacred textile patterns have been copied by global brands, devaluing traditional crafts and **leading younger generations to abandon ancestral trades in look for a more stable income** (Reuters, 2022).



Losing Livelihoods



Cultural Appropriation



Digital Divide & Bias

## Cultural appropriation

AI systems can mimic Indigenous art, music, and knowledge without consent. This raises **intellectual property concerns** and undermines community ownership. Efforts like Mexico's cultural expression law and calls for Indigenous Data Sovereignty aim to address this (Mexico News D. & UNESCO 2023).

## Digital divide & bias

**Only ~40% of Indigenous populations in LAC have basic digital skills** (UNESCO, 2023). Many communities lack access or are misrepresented by biased algorithms, risking further exclusion in the digital age.

# Turning the tide:

*Opportunities of AI for Indigenous inclusion & resilience*

## Climate resilience

AI tools like Google's Flood Hub **provide early warnings in remote areas**, helping Indigenous communities prepare for floods (Lambert, 2024). In Mexico, drones assess post-disaster needs and optimize aid delivery (Borgonovo, 2025).

## Ancestral knowledge +AI

In the Amazon, Indigenous leaders and scientists **co-monitor forests using AI to detect wildfires, logging, and pollution**. These collaborations protect both land and culture (Emblin, 2024).

## Inclusive access

**A Quechua-speaking AI avatar in Peru** promotes language revitalization and digital literacy (López et al., 2024). AI is also used to guide healthcare and agriculture solutions in remote Indigenous areas (UNESCO, 2023)

