



Learning Lab Series

The PROSPECTS for workers powering AI

PROSPECTS programme and International Training Centre - ILO

Learning Memo

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Digital Divide in the era of AI

While Artificial Intelligence (AI) development, especially in the realm of generative AI, is still in its early stages, digital divides in the use of AI have already been observed in the following areas:

- ▶ **Accessibility driven by market forces:** AI projects predominantly target the global north, responding to market demands, which poses a challenge for those in other regions. Language accessibility further compounds the issue, given the dominance of Internet content in a handful of languages, such as English, Mandarin, Spanish, and Arabic. While translation transcription models, like Google's Seamless M4T, hold the potential to unlock significant opportunities, it is crucial to acknowledge that these tools are still in their infancy and require careful moderation and localization efforts.
- ▶ **High-speed connectivity:** The digital divide extends beyond physical access to the Internet to the availability of reliable, high-speed connectivity. Generative AI tools, despite offering limited offline functionality, depend heavily on bandwidth.
- ▶ **Usability:** The utilization of generative AI tools, like ChatGPT, demands advanced critical thinking and problem-solving abilities. Nevertheless, there is a substantial gap in the education sector, particularly in the global south and within refugee settings where access to education remains limited.

AI has emerged as a source of employment for individuals affected by conflicts and displacement. However, this positive trend is accompanied by certain divides in access to work:

- ▶ **Country contextual divide:** Cultural norms prevailing in specific regions can significantly impede women's access to work. These norms may impose restrictions on women's ability to engage in professional activities, exacerbating the existing gender divide in employment opportunities.
- ▶ **Rising demand for specialized skills:** While there remains a demand for data collection work that typically requires lower skills, there is a noticeable shift in the job market. The emergence of generative AI tools has brought about a growing need for individuals with specialized skills in diverse verticals such as healthcare, finance, accounting, and legal domains. These specialized skills are crucial for effectively moderating and evaluating the content generated by advanced AI tools, reflecting a new dimension of the skill divide in the workforce.

Work in the AI industry: Humans in the Loop

[Humans in the Loop](#) (HITL) operates as a hybrid social enterprise comprising a for-profit company providing employment and a non-profit foundation offering training programs for beneficiaries. Established seven years ago, it operates in six locations: Bulgaria, Iraq, Afghanistan, Syria, Lebanon, and Turkey. In the AI sector, the organization specializes in annotation services, involving the labeling of pictures or videos to enable computer models to recognize them independently. To date, HITL have employed and trained over a thousand people affected by conflict, disbursing over 1.2 million euros in earnings, and collaborated with more than 90 AI clients.

Practices to ensure decent work:

- ▶ **Fair compensation:** HITL consistently ensures that annotators receive payments above the minimum wage, taking into account the economic standards of the country where the workers are located.
- ▶ **Mindful work selection:** HITL exercises careful consideration when selecting tasks, avoiding assignments that could potentially harm the mental well-being of annotators.
- ▶ **Stringent client criteria:** HITL maintains stringent parameters for selecting clients, even in an environment where certain annotation service providers engage in practices aimed at driving down costs unethically. Despite market pressures, HITL upholds its commitment to ethical practices and refuses to compromise on its values.
- ▶ **Alignment of values with clients:** HITL actively seeks clients who share a commitment to social impact and ethical employment practices, placing importance on human rights and workers' rights.

Practices to promote inclusive work:

- ▶ **Proactive refugee recruitment:** HITL actively recruits refugees as part of its mission to offer sustainable income generation opportunities to those displaced by conflicts, addressing the challenge of limited local employment opportunities.
- ▶ **Providing paid training:** Through partnerships with local NGOs such as Learning Lions in Kenya, HITL is committed to providing paid training for individuals displaced by conflicts, irrespective of their prior digital skills, to become proficient data annotators. They view annotation work as a crucial step in building their online career portfolio.
- ▶ **Specialized initiative for medical professionals:** HITL's "Doctors in the Loop" project is a tailored initiative designed to collaborate with displaced medical professionals, delivering high-quality image annotation specifically for medical applications.

Work in the AI industry: Appen

[Appen](#) is a global leader in providing human-annotated data for machine learning and AI applications. With roots in linguistics, the company, founded 25 years ago, has evolved to focus on search, social media relevance, and data collection. Currently pushing the boundaries, Appen actively integrates human input into the training and evaluation of large language models like ChatGPT and Bard. With over a million gig workers globally, Appen engages in diverse projects, from data annotation to complex assignments. The

company is committed to fostering diversity, ensuring an ethical AI supply chain, and providing fair working conditions and pay for its workforce.

Practices to ensure decent work:

- ▶ **Code of ethics:** Appen places a strong emphasis on ethical practices, as reflected in its longstanding code of ethics. A key commitment involves ensuring that workers are paid above the minimum wage whenever possible.
- ▶ **Continuous improvement:** The company actively collaborates with [Fairwork](#) to assess and enhance working conditions, contracts, and communication with its crowd.
- ▶ **Industry-wide collaboration:** Appen recognizes the importance of viewing the industry as a supply chain and advocates for collaboration among tech companies, intermediaries and workers. The goal is to learn from other industries, incorporate worker voices, and implement practices that prioritize fairness and ethical treatment.

Practices to promote inclusive work:

- ▶ **Inclusive onboarding in multiple countries:** Appen is proactively expanding its presence in countries like Ethiopia, Kenya, and Turkey, where it traditionally wouldn't have projects to onboard refugees to their workforce.
- ▶ **Comprehensive support system:** Appen offers refugees a comprehensive onboarding support system, which encompasses access to laptops, mentoring, and financial assistance via its NGO partners. Additionally, the company assists refugees address issues such as lack of identification and payment challenges. The goal is to ease their entry into the online work sphere.
- ▶ **Portfolio career development:** Appen considers engagement in annotation work as an integral part of the broader portfolio career development for refugees. Through training and support, the company aids them in constructing an online career portfolio, using annotation as a stepping stone for their education, job search, or the pursuit of full-time employment.
- ▶ **Recognition of diverse talents:** Appen recognizes and values the diverse talents of refugees, highlighting their language proficiency and other essential skills. The company aims to leverage these skills, including critical thinking and problem-solving abilities, to create meaningful opportunities.
- ▶ **Scalable and future expansion:** The existing program, commencing with more than 100 refugee participants in diverse locations, is considered a pilot, with potential to be expanded, given the considerable talent pool within the refugee community.

Key resources

Business, CNN. "Technology Is Replacing Jobs. Are You Ready?" *YouTube*, September 1, 2016. <https://www.youtube.com/watch?v=opdc8hQN0ew>.

C L Valente, Jonas, and Mark Graham. "Fairwork Cloudwork Ratings 2023 | Fairwork Cloudwork Ratings 2023 WORK in the PLANETARY LABOUR MARKET," 2023. <https://fair.work/wp-content/uploads/sites/17/2023/07/Fairwork-Cloudwork-Ratings-2023-Red.pdf>.

- Foundation, Thomson Reuters. "New Pact Offers Innovative Solutions to Climate Displacement." news.trust.org, February 28, 2020. <https://news.trust.org/item/20200228175003-4k8dq>.
- Hui, Xiang, Oren Reshef, and Luofeng Zhou. "The Short-Term Effects of Generative Artificial Intelligence on Employment: Evidence from an Online Labor Market." Social Science Research Network. Rochester, NY, 2023. <https://doi.org/10.2139/ssrn.4544582>.
- International Labour Organization. "Artificial Intelligence and the World of Work – Should We Be Scared? | the Future of Work Podcast." ILO Voices, April 28, 2023. <https://voices.ilo.org/podcast/artificial-intelligence-and-the-world-of-work--should-we-be-scared>.
- . "Does Artificial Intelligence Threaten Decent Work? | the Future of Work Podcast." ILO Voices, July 19, 2023. <https://voices.ilo.org/podcast/does-artificial-intelligence-threaten-decent-work>.
- Madigan, Suzy. "How to 'Do Good' with AI and Avoid Doing Harm... 7 Actions for Big Tech, Governments and Civil...." The Machine Race - Medium, September 1, 2023. <https://medium.com/@themachinerace/how-to-do-good-and-avoid-doing-harm-with-ai-7-actions-for-tech-companies-governments-and-civil-757c4069aa9d>.
- Ngene, Gituku. "What Does the Advent of Cryptocurrency Mean for the Thousands of Kenyans Completing Digital Work? | Jobtech Alliance." Jobtech Alliance, April 5, 2022. <https://jobtechalliance.com/what-does-the-advent-of-cryptocurrency-mean-for-the-thousands-of-kenyans-completing-digital-work/>.
- Partnership on AI. "Responsible Data Enrichment Sourcing Library." Accessed December 4, 2023. <https://partnershiponai.org/responsible-sourcing-library/>.
- Raza, Muhammad. "Somalia Signs IGAD Protocol on Free Movement." The Diplomatic Insight, March 6, 2023. <https://thediplomaticinsight.com/somalia-signs-igad-protocol-on-free-movement/>.
- Rush, Nayla. "Global Compact for Refugees Adopted Today." CIS.org, December 17, 2018. <https://cis.org/Rush/Global-Compact-Refugees-Adopted-Today>.
- Verhoeven, Bert, and Vishal Rana. "Can AI Help Us Discover Meaningful Work?" LSE Business Review, June 19, 2023. <https://blogs.lse.ac.uk/businessreview/2023/06/19/can-ai-help-us-discover-meaningful-work/>.