VOICE KEY HIGHLIGHTS

ARTIFICIAL INTELLIGENCE: DISRUPTION OR OPPORTUNITY FOR HUMANITARIAN AID?

BRUSSELS

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INTRODUCTION

This paper is a summary of the main ideas discussed during the event and does not necessarily reflect the speakers' or the VOICE network's opinions.

The integration of Artificial Intelligence (AI) into humanitarian action marks a significant turning point in the field, blending cutting-edge technology with the mission to alleviate suffering and save lives. The emergence of AI as a tool in humanitarian efforts reflects a broader trend towards digital transformation in various sectors. AI's potential to revolutionise areas such as disaster risk reduction and response, resource allocation, education in emergencies, and food assistance is enormous, potentially offering opportunities to enhance efficiency, productivity, and impact. However, this advancement also brings a plethora of challenges and ethical dilemmas.

Using AI in contexts involving vulnerable populations raises critical questions about equity, bias, data privacy, and the potential for unintended consequences. The balance between harnessing AI's capabilities for good and navigating its complexities is a delicate one, necessitating a nuanced understanding of both its power and limitations. This report delves into these pivotal themes, drawing insights from the panel of experts who convened at the VOICE event 'Artificial Intelligence: disruption or opportunity for humanitarian aid?' to explore how AI can be both a threat and an opportunity in the field of humanitarian aid. It aims to shed light on the multifaceted nature of AI in this context, underscoring the need for thoughtful implementation and a fundamental commitment to humanitarian principles.

Opening remarks:

- Michael Köhler, Deputy Director-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO)
- Charlotte Schneider, VOICE Board member and Global Operations and Programs Director at Action Against Hunger France

Panel speakers:

- Sarah Spencer, independent consultant and multi-domain expert working at the intersection of Artificial Intelligence, humanitarian action, conflict, and foreign policy
- Monica Nthiga, Regional Director of Eastern and Southern Africa at Humanitarian OpenStreetMap Team (HOT)
- Atish Gonsalves, Global EdTech Innovation & Product Director at International Rescue Committee (IRC) and Founder of Gamoteca
- Fredrick Lee-Ohlsson, Director of the World Food Programme's (WFP) office in Brussels

Closing remarks:

- Dominic Crowley, VOICE President and Emergency Director at Concern Worldwide

Moderator:

- Maria Groenewald, VOICE Director

What can Artificial Intelligence achieve in humanitarian response?

In a world increasingly shaped by rapid technological changes, AI stands at the forefront of innovation, also in the field of humanitarian efforts. At the VOICE event in Brussels, panellists highlighted various dynamic ways in which AI is being applied to address critical humanitarian challenges, from enhancing disaster risk reduction through mapping and revolutionising educational outcomes in crisis situations to transforming approaches to food security and hunger.

At the forefront of this transformation is the integration of AI into disaster management and risk reduction. Monica Nthiga (HOT) illustrated this through their innovative use of AI in mapping projects. In disaster-prone areas or regions striving for sustainable development, the accuracy and speed of mapping are critical. HOT leverages AI to process vast amounts of data rapidly, integrating this with local knowledge to produce maps that are not only detailed but also contextually relevant. This approach revolutionises how information is gathered and used in planning and response, making it a vital tool in disaster preparedness and response.

The sphere of education in emergencies is another area where AI has substantial potential. Atish Gonsalves (IRC) shared insights into their AI-driven educational platforms. In environments where traditional educational structures are disrupted, AI provides a lifeline. Platforms like 'aprendIA' offer personalised learning experiences to displaced children and adults, adapting to learning needs and environments. This use of AI goes beyond maintaining educational standards. It offers a pathway to continuous learning amidst adversity, ensuring that education remains accessible even in the most challenging scenarios while alleviating the burdens on teachers and school systems stretched thin by crises.

What can Artificial Intelligence achieve in humanitarian response?

Fredrick Lee-Ohlsson (WFP) highlighted how AI is transforming food assistance in a moment in which progress in the fight against hunger remains largely at a standstill worldwide. With initiatives like Hunger Map LIVE and advanced climate observation tools, the WFP has employed AI to predict food security trends and anticipate climate-related disasters. This predictive capability is crucial in mobilising resources effectively and ensuring timely aid delivery. AI's role in enhancing the WFP's operational efficiency exemplifies its potential to not only respond to crises but to anticipate and prepare for them, thereby amplifying the efficiency and impact of humanitarian aid.

These examples underscore AI's growing role in humanitarian action. From mapping and education to food security, AI is proving to be an invaluable asset, enabling humanitarian actors to respond more effectively to humanitarian needs. Its ability to process and analyse large volumes of data swiftly, provide personalised solutions, and predict future trends is reshaping the landscape of humanitarian aid, making it more responsive, efficient, and impactful.

Yet, alongside these significant advancements, a complex web of ethical considerations, potential biases, and challenges unique to AI's application in humanitarian efforts emerge. Navigating this landscape requires a careful balance, ensuring that the power of AI is exploited responsibly and in alignment with humanitarian principles.

What are the risks of Artificial Intelligence in humanitarian action?

While AI offers groundbreaking opportunities in humanitarian aid, it introduces a spectrum of risks and challenges that require careful consideration. Sarah Spencer initiated the discussion on this critical aspect, shedding light on the complex interplay between AI's potential benefits and its inherent dangers in humanitarian contexts.

Spencer emphasised the ethical dimensions of deploying AI among the world's most vulnerable populations. She underscored the dangers of experimenting with new, largely untested technologies in volatile environments where the stakes are high and include life-and-death decisions. In addition, she encouraged aid actors to remember that the financial interests linked to AI and AI firms drive some of their decisions around 'AI for Good' and may potentially pose challenges to humanitarian principles, particularly impartiality and neutrality.

Another major area of concern raised by Spencer is algorithmic reliability. The risk of AI systems failing or 'hallucinating' – particularly in high-pressure scenarios – poses significant challenges to ensuring that AI aids rather than hinders humanitarian efforts. This risk is compounded by data quality issues and the possibility of external manipulation, such as data poisoning, which can guide AI systems toward biased or incorrect outcomes.

She discussed the often-overlooked issue of data ownership and privacy, particularly in sensitive domains like gender-based violence and child protection. The lack of clarity on data usage and individuals' rights to control linked or linkable information, along with uncertainties about if or how this information comes into contact with AI systems, raises serious privacy and ethical concerns.

What are the risks of Artificial Intelligence in humanitarian action?

Echoing Spencer's concerns, other panellists shared their perspectives on navigating these challenges within their organisations. Monica Nthiga (HOT) spoke about the practical challenges in the field. She stressed the difficulties of using AI in areas with complex or poor-quality data, where AI's efficiency can be significantly reduced, necessitating extensive human intervention and validation for effective mapping results. Nthiga underscored the importance of contextual understanding and the need for robust data systems to support effective AI deployment in humanitarian mapping.

Building on these insights, Atish Gonsalves (IRC) brought to light the inherent biases in AI, especially when applied to educational programs in humanitarian settings. He pointed out the significant issue of AI tools being predominantly 'trained' using data from the Global North. This results in a skewed perspective that may not accurately reflect the realities and needs of crisis-affected regions, potentially exacerbating existing educational disparities. Gonsalves emphasised the critical need for recognising these biases and actively seeking ways to address them, ensuring that AI tools in education are equitable and inclusive.

Complementing these points of view, Fredrick Lee-Ohlsson (WFP) detailed their cautious approach to piloting AI in operations. He highlighted the organisation's focus on maintaining a human touch and ensuring transparency in data usage. Fredrick elaborated on WFP's efforts to create a controlled, explorative environment for AI, allowing for the testing and validation of initiatives while managing the associated risks. This approach underlines the importance of balancing innovation with responsibility and ethical considerations.

The collective insights from these experts paint a picture of the nuanced complexities inherent in AI's application in humanitarian aid. While acknowledging AI's transformative potential, they unanimously advocated for a mindful approach that addresses ethical concerns, data integrity, algorithmic reliability, and the impact on vulnerable populations.

The future of Artificial Intelligence in humanitarian action

The main takeaway from the event is the recognition of AI's potential to significantly enhance humanitarian efforts yet tempered with an understanding of its associated risks and ethical complexities. The panellists collectively stressed the importance of adopting a balanced approach – one that leverages AI's strengths and potential while conscientiously addressing its challenges.

The implementation of AI requires cautious navigation, particularly given the delicate contexts in which humanitarian organisations operate. Central to this approach is the need to consider the ethical implications of deploying AI, especially in vulnerable communities. It is imperative to ensure that applications of AI are grounded in the humanitarian principles and, at a minimum, adopt a 'do no harm' approach.

The panel dialogue underscored several lessons learned in the realm of AI application in humanitarian aid. A foremost lesson is the critical importance of human involvement and accountability in AI-driven processes. The presence of human oversight is paramount to ensure that AI tools are used in a manner that is responsible and ethical. Another vital aspect is the need for transparency in data usage and a comprehensive understanding of AI systems. Building trust through transparency and knowledge is crucial for the effective implementation of AI solutions in humanitarian contexts. Furthermore, a significant challenge is the bias present in AI tools, particularly those developed by using data mainly from the Global North. Addressing these biases is essential to create equitable and effective solutions to respect the diverse needs of crisis-affected populations.

KEY RECOMMENDATIONS

1. Prioritise ethical and cautious implementation of AI: Embrace a principled approach to AI in humanitarian action, prioritising ethics, data privacy, and minimal harm. This involves cautious exploration, thorough testing, and adherence to humanitarian principles and establishing, at the outset, an agency-specific approach to AI governance.

2. Strengthen human-centric approaches to AI: Ensure human oversight and involvement in AI processes to maintain responsibility and ethical decision-making, particularly in crisis-affected communities. This includes understanding AI's limitations and avoiding over-reliance on AI for problem-solving.

3. Foster collaboration and transparency: Encourage cooperation over competition among humanitarian agencies in AI implementation. Promote transparency in AI successes and challenges and work towards cross-sector standards for ethical AI use in humanitarian contexts.

4. Enhance understanding and bias mitigation: Invest in education and capacity building to deepen understanding of AI among humanitarian staff and stakeholders. Actively address biases in AI, particularly those stemming from data predominantly from the Global North, to ensure equitable and effective solutions.

5. Evaluate efficiency gains and impact: Critically assess the implications of AI-driven efficiency, considering who benefits from these advancements and where. Ensure that AI applications do not inadvertently shift resources away from the Global South or reduce the number of local staff in favour of technological solutions.

This event was organised by VOICE, the network of 89 European humanitarian NGOs

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