CHA Policy Brief

The digital capacity of German humanitarian action: Moving from aspiration to reality

About humanitarian action and digital technologies

Today's humanitarian crises are marked by violent conflicts and natural disasters, which exacerbate socio-economic vulnerabilities and compel individuals to either leave their homes or endure protracted situations of insecurity and fragility. As a result, the number of people affected by crises and requiring humanitarian assistance is steadily growing. Paradoxically, despite the escalating demand, humanitarian funds are consistently shrinking.

While German humanitarian action remains generally needs-driven and principled in nature (Hövelmann and Südhoff 2023), the shrinking budget for 2024 fuels long-standing discussions about more efficient and effective humanitarian action. To deliver greater efficiency, policymakers and global donors are advocating the use of evidence-based data to substantiate the impact on humanitarian performance. This directive is pushing humanitarian practitioners to embrace digital innovation and engage in data collection (Komuhangi et al. 2023; ALNAP 2022; Madianou 2021; 2019; GFFO 2019).

Germany's forthcoming humanitarian strategy provides an apt opportunity to set strategic priorities for Germany's digital humanitarian capacity and future role in navigating the digital humanitarian ecosystem. A future-proof humanitarian strategy cannot avoid taking digital trends with new and emerging technologies into account. The growing prominence of cash interventions

A future-proof humanitarian strategy cannot avoid taking digital trends with new technologies into account

will reshape discussions among humanitarians, placing emphasis on topics such as digital payments, identity management, data sharing, and interoperability. The increasing prevalence of cyberattacks and fake news will further influence the way humanitarians work and protect affected people and their data from harm. Emerging technologies like Artificial Intelligence (AI) offer new choices, influence decision-making, and continue shaping the digital era of humanitarian action. The existence of numerous unanswered questions and uncertainties offer opportunities for more interdisciplinary and cross-functional exchange, sector-wide and cross-sector governance fostering principled approaches (BMDV 2023; 2022; Egle and Hess 2022; Voelsen 2022; VENRO 2019).

This policy brief serves as a condensed version of CHA's research paper, exploring digital capacities within German humanitarian efforts and advocating for the integration of digital technologies in Germany's forthcoming humanitarian strategy. The policy brief outlines potential actions for German policy and operational actors, offering guidance on how to translate aspirations into tangible outcomes and actively contribute to the digital transformation of the humanitarian system.

Navigating a complex, digital humanitarian ecosystem

The opportunities and challenges stemming from the application of digital technology in the humanitarian sector are not confined to a specific sector. Most, if not all, sectors if not all struggle with ethical questions around AI, data protection and cybersecurity. In recent years, humanitarian actors have moved from *techno-solutionism*[1] to a more nuanced approach aimed at the purposeful utilisation of digital technologies in a highly complex digital humanitarian ecosystem.

Germany's digital transformation and an invisible humanitarian action

While Germany's present humanitarian strategy acknowledges technological development as a great opportunity for humanitarian action and identifies the protection of sensitive data as an important strategic focus (GFFO 2019), the upcoming strategy holds the promise of strengthening German humanitarian capacity to respond to new and emerging technology trends and act as a "purposeful player" (Hövelmann and Südhoff 2023) in the future digital humanitarian ecosystem.

Germany is seen as having the potential to emerge as a future leader to drive an "eco-systemic leadership approach" (Lay 2023), thereby fostering a complex, digital humanitarian ecosystem informed by Germany's principled approach. The expectation is that Germany can support humanitarian practitioners by incorporating digital considerations into its humanitarian diplomacy with tech companies and across various sectors, coupled with field-oriented policies. This is all contingent on a strong political willingness to act as an honest and neutral broker. Germany's humble approach and attitude to humanitarian digitalisation are perceived as strengths that can be further developed, provided Germany is willing to learn and strategically leverage its limited resources.

Germany could be a future leader thriving a complex, digital humanitarian ecosystem by a principled approach

Germany's ability to digitally transform humanitarian action is closely interlinked with its national priorities and the overall digital transformation process. In 2021, the German Federal Foreign Office (GFFO), with a mandate in humanitarian action, launched its Digitalisation Strategy. Subsequently, Germany unveiled its Digital Strategy in 2022 and Data Strategy in 2023 published, by the Federal Ministry for Digital and Transport. While these strategies predominantly focus on domestic concerns, encompassing foreign and international cooperation, the specific nuances of humanitarian needs are conspicuously absent in any of these strategies (BMDV 2023; 2022; GFFO 2021).

From a humanitarian perspective, the operationalisation of Germany's or GFFO's digital priorities lack clarity. Thus far, GFFO has not embedded "data and innovation"[2] across humanitarian operations but has instead funded siloed innovation and technology initiatives that cater to a limited selection of humanitarian stakeholders. This approach poses the risk of making one-off investments into isolated projects or funding pilots after pilots without fostering system-wide learning and impacts. Embedding digital approaches in a principled and structured manner, in turn, has the potential to benefit more stakeholders, if not the whole system. At the same, German grant proposals and compliance processes predominantly emphasise data protection. Preliminary research indicates that German NGOs often feel compelled by donor pressure to digitalise its processes while complying with strong data protection regulations. As a result, most NGOs focus on project-based technologies and data protection. Digital initiatives typically rely on earmarked funding, resulting in project-centric approaches that are not integrated across programmes, departments, functions, or the humanitarian system. For example, WFP's Innovation Accelerator, based in Germany and often cited as one of Germany's flagship projects, plays an important role in innovating new technologies that serve selected humanitarian stakeholders. However, its linkages into the German humanitarian community are limited, barely contributing to creating digital public goods[3] based on common standards and principled governance frameworks that serve the broader humanitarian system. The risk of investing in isolated projects, funding pilots over pilots without system-wide learning and impacts, diminishes the relevance of principled approaches and limits the ability to initiate long-term change. German humanitarian NGOs also reported resource constraints and a lack of digital capacity, hindering inclusive design processes for introducing sustainable innovation and bridging humanitarian and development programmes through technology. Even if German humanitarian NGOs decide to strategically increase their digital footprint, they would encounter national barriers since Germany's key donors (i.e., GFFO, BMZ) lack the relevant digital capacities for providing strategic guidance and prioritisation (Düchting 2023; VENRO 2019).

Digital initiatives typically rely on earmarked funding, resulting in project-centric approaches that are not integrated across programmes, departments, functions, or the humanitarian system

This situation also reflects operational realities that are increasingly interdisciplinary in nature. For example, discussions around the integration or interoperability of humanitarian data and social protection schemes often involve different stakeholders. This is particularly evident in conversations about identity management, the sharing of financial data and humanitarian outcomes, and compliance data (e.g., related to counter-terrorism claims, fraud, or corruption). In practice, humanitarian data systems and accountability mechanisms are managed across sectors, as demonstrated by recent experiences in Ukraine.[4] However, this example also underscores a lack of strategic guidance and prioritisation by key donors who, representing the same government in part, moved in different directions. This challenge has made it difficult for humanitarian actors to contribute to a unified response (Calp Network 2023; 2022; Deutscher Ethikrat 2023; Worthington and Düchting 2023; Fast 2022).
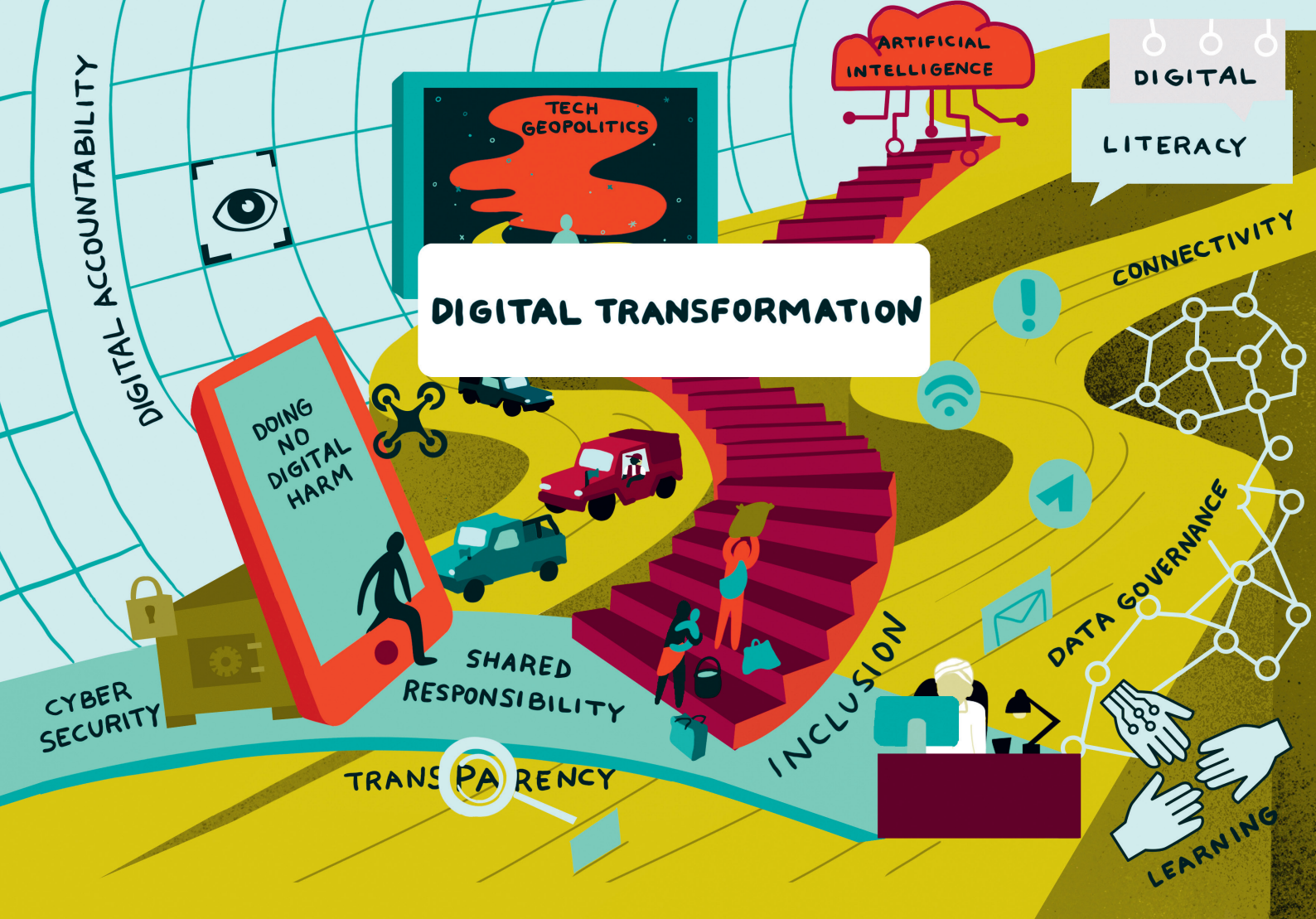
Illustration: Recognise the complexity and different layers of digital transformation in the humanitarian system

In summary, Germany's digital landscape at both policy and operational levels offers numerous opportunities for humanitarian actors to leverage. However, humanitarian considerations are rarely integrated into German digital policies, and digital considerations are rarely reflected in German humanitarian strategies. While humanitarian decision-making is generally principled, this does not extend to the responsible use of digital technologies. Digital innovation is often managed in isolation, without due consideration for system-wide impacts. This raises fundamental question about Germany's digital capacity to actively shape the digital humanitarian ecosystem.

Germany's digital landscape at both policy and operational levels offers numerous opportunities for humanitarian actors to leverage

Digital trends and developments to not shy away from

The trajectory of digital trends will ultimately determine whether Germany's digital capacity is future-proof. The rapid technological development of new and emerging technologies, such as Artificial Intelligence (AI), proves challenging for many individuals, leading to a sense of being overwhelmed and an impression of being unable to influence constant changes. Humanitarians often adopt a binary approach to digitalisation, with some overemphasising the potential of digital technologies while others oversimplify its use by solely focusing on threats and risks (Devidal 2023). The dichotomy within the humanitarian sector easily divides players into those with sufficient strategic and foresight capacities and those lagging behind, remaining stuck in the good old way of doing things, with generative AI functioning as a "gamechanger" (Bergtora Sandvik 2023) for the humanitarian system.

Despite the significant opportunities arising from AI for new and innovative humanitarian approaches, little is known about potential implications caused by the creation of technological dependences. There is a tendency for individuals to blindly follow suggested results when using technology, particularly AI, for decision-making, a phenomenon known as automation bias (Deutscher Ethikrat 2023). Additionally, there is also lack of representative humanitarian (data) language that accurately reflects affected people's contexts, capacities, and needs. For example, "AI tools don't work when data in a particular language is scarce" (Schacht 2023). This is

particularly true for individuals in humanitarian crises who speak languages that are not well reflected in AI training data. There is a widespread absence of a humanitarian taxonomy, and achieving data accuracy and quality during times of crisis is often challenging. Furthermore, there is a lack of system-wide support or direction to guide humanitarian actors in how to approach this new technology. They find themselves in limbo between waiting for such guidance and facing pressure to deliver more impact with less funding by leveraging technology.

The expectations surrounding new and emerging technologies are high, but there is much at stake if they are not used wisely

The expectations surrounding new and emerging technologies are high, but there is much at stake if they are not used wisely. Digital threats have the potential to pose diverse risks to affected people and vulnerable individuals. These risks include, but are not limited to: (1) protection risks resulting from doing digital harm, (2) accountability risks caused by lack of transparency and power imbalances, (3) privacy risks resulting from increased privacy incidents, hacking and data leaks, (4) design and exclusion risks resulting from lack of participation and representation.

To future-proof a digital humanitarian ecosystem, Germany's humanitarian actors must be aware of trends and developments, considering opportunities, limitations, and implications

Whether we like it or not, there is no escaping new and emerging technologies. However, humanitarian actors appear to be hesitant to embrace AI on a large scale. To future-proof a digital humanitarian ecosystem, Germany's humanitarian actors must be aware of trends and developments, considering opportunities, limitations, and implications. Decision-makers should be cautious about potential threats when making data- and technology-related decisions. This also necessitates engaging in a public debate about the specificities of humanitarian concepts with national policies. Moreover, there is a need to embrace technologies across humanitarian programmes, strengthening transparency and accountability among all stakeholders and, last but not least, adhere to a principled approach to data and digitisation.

Methods in brief

The policy brief is published as part of a comprehensive research paper with the same title. It draws from a literature review, an analysis of selected grant proposals, and six semi-structured interviews conducted with experts currently engaged in various aspects of the humanitarian system's digital transformation process. The interviews included representatives from four different multi-stakeholder networks, two representatives of an international organisation and one independent expert. The peer review was performed by CHA and an independent expert.

The paper was informed by CHA's project on data and digitalisation, which builds on previous research about digital accountability, past debates and CHA events. Notably, the content is enriched by the discussions held during the conference on "Tackling power imbalances in humanitarian action – with technology and locally led management?!" (Centre for Humanitarian Action 2023; Centre for Humanitarian Action, CALP Network, and Ground Truth Solutions 2023; Düchting 2023).

---

1 Technosolutionism refers to decision-makers' willingness to utilise digital technologies to solve complex societal problems which require more than solely technical solutions (Beduschi 2019; Duffield 2016).

2 In one of its earlier versions of the new humanitarian strategy shared for review with the German humanitarian community earlier in 2023, GFFO intended to focus on "data and innovation".

3 The UN Roadmap for Digital Cooperation considers digital public goods as "essential in unlocking the full potential of digital technologies and data to attain the SDGs, in particular for low- and middle-income countries" (United Nations 2020, 6).

4 Ukraine's digital environment had prompted many actors to build on the existing digital infrastructure and pushing for the integration of humanitarian data into the national e-governance and social protection scheme Diia introduced in early 2023.

From aspiration to reality: Potential actions for future-proofing Germany's humanitarian digital capacity

Germany's forthcoming humanitarian strategy presents a great opportunity to strengthen its digital humanitarian capacity and promote a principled approach to digital technologies. The aim is to integrate these approaches across humanitarian programmes, potentially contributing to (digitally) transforming the humanitarian system. The actions outlined below reflect only a subset of potential actions to strengthen Germany's digital humanitarian capacities, targeting both policy and operational levels. Specifically, these recommendations are directed at ministerial decision-makers within GFFO at the policy level and practitioners within German humanitarian NGOs at the operational level. For more detailed recommendations, please refer to the full research paper.

Apply a principled approach for doing no digital harm

For ministerial decision-makers

- Advocate for humanitarian principles in digital strategies and policies at national and international levels.
- Avoid isolated flagship innovations while promoting digital common goods.
- Foster doing no digital harm and context-specific decision-making (e.g., case books).
- Redefine humanitarian diplomacy embedding digital consideration and tech geopolitics.
- Give humanitarians a voice by getting humanitarians involved in tech geopolitics discussions.

For humanitarian practitioners

- Start with a human-related problem statement describing the humanitarian contexts and people's realities.
- Use existing frameworks and guidance while fostering doing no digital harm.
- Consider digital rights and data access for local actors and affected people.
- Push back and stick to humanitarian principles when asked to share sensitive data for unspecific or unrelated purposes. Do not compromise affected people's wellbeing and security.

Build safe, secure and transparent data systems

For ministerial decision-makers

- Set-up integrated data systems to track humanitarian funding and outcomes.
- Track data sources and data flows to explain decision-making.
- Use AI to support but not replace human decision-making.
- Allocate flexible funding (e.g., inception phases, proof of concept, security, change ma-nagement, human resources).

For humanitarian practitioners

- Invest in integrated data systems and data governance models.
- Decouple data governance from programming.
- Build agile and constructive working cultures dealing with data incidents.
- Be transparent about algorithm use and its possible effect (i.e., targeting).

Create digital capacity by building digital literacy

For decision-makers and practitioners at policy and operational levels

- Continue building and diversifying digital literacy across functions and profiles.
- Invest in capacity building and strengthening, learning and knowledge sharing.
- Support inter-sectoral collaboration, exchange and research.

Design inclusively and responsibly

For ministerial decision-makers

- Invest in digital infrastructure and connectivity.
- Define principled guardrails and red lines for the use of technologies in specific contexts (e.g., field missi-ons).
- Allocate funding for operationalising data protection at all levels.
- Integrate digital issues in accountability mechanisms (e.g., doing no digital harm).

For humanitarian practitioners

- Apply a rigorous approach to define a people-centric problem statement.
- Consider non-humanitarian pathways to innovation (e.g., theories of change).
- Co-create with local partners, tech activists, and affected people.
- Involve diverse people impacted by and depending on technology.

Engage across sectors and systems

For decision-makers and practitioners at policy and operational levels

- Partner with likeminded stakeholders and get actively involved and shape international discussions across sectors and systems (e.g., UN SG Summit of the Future in September 2024).
- Protect the humanitarian space from tech companies.

Finally, emphasise a systemic approach when designing and deploying digital technologies. New and emerging technologies will inevitably shape the future humanitarian system and should not be considered in isolation.

Humanitarian actors must play a pivotal role in determining how these technologies are employed to foster the digital transformation of the humanitarian system.

References

ALNAP. 2022. 'The State of the Humanitarian System'. ALNAP Study. London: ALNAP/ODI. sohs.alnap.org.

Bergtora Sandvik, Kristin. 2023. 'Taking Stock: Generative AI, Humanitarian Action, and the Aid Worker'. Global Policy Journal. GP Opinion (blog). 28 July 2023. https://www.globalpolicyjournal.com/blog/28/07/2023/taking-stock-generative-ai-humanitarian-action-and-aid-worker

BMDV. 2022. 'Digitalstrategie: Gemeinsam digitale Werte schöpfen'. Berlin. https://bmdv.bund.de/SharedDocs/DE/Anlage/K/presse/063-digitalstrategie.pdf?__blob=publicationFile

———. 2023. 'Fortschritt durch Datennutzung: Strategie für mehr und bessere Daten für neue, effektive und zukunftsweisende Datennutzung'. Berlin. https://bmdv.bund.de/SharedDocs/DE/Pressemitteilungen/2023/083-neue-datenstrategie-der-bundesregierung.html

Calp Network. 2022. 'Registration, Targeting and Deduplication: Emergency Response inside Ukraine'. Thematic Paper. https://reliefweb.int/report/ukraine/registration-targeting-and-deduplication-emergency-response-inside-ukraine-thematic-paper

———. 2023. 'The State of the World's Cash 2023'. Calp Network. https://www.calpnetwork.org/collection/the-state-of-the-worlds-cash-2023-report/

Centre for Humanitarian Action, dir. 2023. Tackling Power Imbalances in Humanitarian Action - with Technology and Locally-Led Management?! Conference. Berlin. https://www.chaberlin.org/en/news/cha23-conference-review/

Centre for Humanitarian Action, CALP Network, and Ground Truth Solutions, dirs. 2023. New Tech, Old Problems — Can Digital Accountability in Cash and Voucher Assistance Help Us Get the Basics Right? Webinar. https://www.chaberlin.org/en/event/webinar-digital-accountability-in-cash-and-voucher-assistance/

Deutscher Ethikrat. 2023. 'Mensch und Maschine - Herausforderungen durch Künstliche Intelligenz.' Stellungnahme. Berlin: Deutscher Ethikrat. https://www.ethikrat.org/mitteilungen/mitteilungen/2023/ethikrat-kuenstliche-intelligenz-darf-menschliche-entfaltung-nicht-vermindern/

Devidal, Pierrick. 2023. '"Back to Basics" with a Digital Twist: Humanitarian Principles and Dilemmas in the Digital Age'. ICRC Humanitarian Law & Policy (blog). 2 February 2023. https://blogs.icrc.org/law-and-policy/2023/02/02/back-to-basics-digital-twist-humanitarian-principles/

Düchting, Andrea. 2023. 'Digital Accountability: The Untapped Potential of Participation When Using Digital Technology in Humanitarian Action'. Working Paper. Berlin: Centre for Humanitarian Action. https://www.chaberlin.org/en/publications/digital-accountability-2/

Egle, Christoph, and Thomas Hess. 2022. 'Die neue Digitalstrategie der Bundesregierung: Das Entscheidende fehlt noch'. 25 October 2022. https://www.bidt.digital/die-neue-digitalstrategie-der-bundesregierung-das-entscheidende-fehlt-noch/

Fast, Larissa. 2022. 'Data Sharing between Humanitarian Organisations and Donors: Toward Understanding and Articulating Responsible Practice'. NCHS Paper. https://www.humanitarian-studies.no/wp-content/uploads/NCHS-paper-06-April-2022-Data-sharing-between-humanitarian-organisations-and-donors.pdf

GFFO 2019. 'Strategie des Auswärtigen Amts zur humanitären Hilfe im Ausland'. Berlin: Auswärtiges Amt. https://www.auswaertiges-amt.de/blob/238812/145d15cc91bec5d173b87d75302b67e7/aa-strategie-humanitaere-hilfe-data.pdf

———. 2021. 'Digitalisierung im Auswärtigen Amt. Unsere Strategie bis 2027. Bessere Außenpolitik durch digitale Unterstützung'. Auswärtiges Amt. https://www.auswaertiges-amt.de/blob/2504934/b3c1bcb0e194ae750edcdc90ae4497e9/digitalisierungsstrategie-data.pdf

Hövelmann, Sonja, and Ralf Südhoff. 2023. 'Principled Payer, but Purposeful Player? Internationale Wahrnehmungen deutscher humanitärer Hilfe und die Folgen für Deutschlands Strategiefähigkeit'. Berlin: Centre for Humanitarian Action. https://www.chaberlin.org/wp-content/uploads/dlm_uploads/2023/10/payer-player-de-web.pdf

Komuhangi, Catherine, Hazel Mugo, Lydia Tanner, and Ian Gray. 2023. 'Assessing the Promise of Innovation for Improving Humanitarian Performance: A 10-Year Review for the State of the Humanitarian System Report.' London: ALNAP/ODI. https://www.alnap.org/help-library/assessing-the-promise-of-innovation-for-improving-humanitarian-performance-a-10-year

Lay, Thomas. 2023. 'The Humanitarian Leader: It's Time for INGOs to Stop Living with Their Parents'. Working Paper 036. Centre for Humanitarian Leadership. https://ojs.deakin.edu.au/index.php/thl/article/view/1808/1566

Madianou, Mirca. 2019. 'Technocolonialism: Digital Innovation and Data Practices in the Humanitarian Response to Refugee Crises'. Social Media + Society 5 (3): 205630511986314. https://doi.org/10.1177/2056305119863146

———. 2021. 'Nonhuman Humanitarianism: When "AI for Good" Can Be Harmful'. Information, Communication & Society 24 (6): 850–68. https://doi.org/10.1080/1369118X.2021.1909100

Schacht, Kira. 2023. 'Bridging the AI Language Gap in Africa and Bezond'. Deutsche Welle - Technology - Africa. 29 July 2023. https://amp-dw-com.cdn.ampproject.org/c/s/amp.dw.com/en/bridging-the-ai-language-gap-in-africa-and-beyond/a-66331763

VENRO. 2019. 'Tech for Good: The Possibilities and Limits of Using Digital Instruments in Intenrational Development Projects of Non-Governmental Organisations'. NGO-Report. VENRO. https://venro.org/fileadmin/user_upload/Dateien/Daten/Publikationen/Dokumentationen/NRO-Report_TechForGood_EN.pdf

Voelsen, Daniel. 2022. 'Deutschlands Erste Strategie Zur Internationalen Digitalpolitik: Ein Vorschlag Zur Thematischen Ausrichtung'. https://doi.org/10.18449/2022A79

Worthington, Rob, and Andrea Düchting. 2023. 'Enabling Dignified Humanitarian Assistance through Safe Data Sharing. A Landscape Mapping'. IFRC. https://interoperability.ifrc.org/

Please find the complete list of references in the research paper.

Imprint

About the author: Andrea Düchting is a Non-resident Fellow at the Centre for Humanitarian Action (CHA) where she manages the research project "Digitalisation and innovation of German humanitarian aid". She has a background in food security and nutrition, participation, accountability, and data protection.

CHA CENTRE FOR HUMANITARIAN ACTION