Humanitarian Topics explained:

Digitalisation in humanitarian action

to go

Andrea Düchting
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Introduction

Today, humanitarian action is increasingly digital, marked by the widespread adoption of digital technologies. This expansion brings with it a massive increase in the volume of data to be processed and the speed at which information travels. While more people around the world are digitally connected, their identities are also digitally recorded. At the same time, funding cuts in humanitarian action and rising needs are leading to questions of efficiency and effectiveness. Evidence-based programmes, improved coordination, and greater transparency and accountability are needed. Digital tools have become indispensable in this context. Meanwhile, principled humanitarian action blends with economic interests and profit maximisation. Tech companies are increasingly assuming roles as humanitarian actors, while humanitarian organisations are taking on responsibilities as IT service providers. This trend raises concerns about heightened risks such as data leaks and cyber-attacks, alongside the growing influence of fake news and misinformation regarding humanitarian action. Nevertheless, the inevitability of a digital future for the humanitarian sector persists despite these challenges. The "new normal" includes cross-sectoral and cross-system integrated approaches, promoting a digital transformation that prioritises increased participation, equal opportunities and responsible use of digital technologies and sensitive data concerning vulnerable population groups.

Content

1. How digitalised is humanitarian action?

Digital technologies can be found in the most diverse areas of humanitarian action: from human resources and finance to the procurement and logistics of aid supplies, to communication, project and knowledge management. Mobile phones and tablets have long since replaced paper-based surveys, and satellite-based geoinformation is used to support disaster preparedness and management. While weather warnings used to be communicated verbally, forecasts are now determined more accurately with the help of satellites and linked to early warning systems. Satellite images are also used to create maps to coordinate reconstruction efforts or organise the transport of aid supplies to crisis areas. Radio, SMS, messenger services, social media, and other digital technologies are used to warn affected people and inform them about humanitarian assistance. The data collected is, in turn, used with the help of artificial intelligence (AI) for forecasting and early detection of natural disasters and hostilities, to determine migration routes and identify aid recipients or to monitor and analyse the distribution of aid supplies.

Technological and digital applications have been used for decades for a wide variety of humanitarian purposes

Technological and digital applications have been used for decades for a wide variety of humanitarian purposes, primarily to act faster and more proactively and to respond more cost-efficiently and effectively. The Covid-19 pandemic gave an enormous boost to digitalisation. The lockdowns and travel restrictions imposed worldwide during the pandemic forced many humanitarian actors to resort to new technologies to continue working and communicating with their teams and partner organisations on the ground. Numerous work processes have now been digitalised, which in turn has led to an exponential increase in the amount of data to be processed.

However, the real driver of the digitalisation debate is cash assistance, known as Cash and Voucher Assistance (CVA), which is provided in close cooperation with FinTech companies. Cash is prioritised over food and other assistance in most humanitarian crises, not only because it is usually the preferred form of support for those affected,

The real driver of the digitalisation debate is cash assistance

but also because it can benefit the local economy and boost reconstruction efforts. The distribution of cash is organised via mobile payment service providers such as the online payment service M-Pesa in Kenya or with the help of vouchers that function as a type of debit card or with a QR code.

With the provision of cash, however, humanitarian organisations were forced to adapt their processes to international standards and introduce more robust mechanisms. Since then, digital technologies such as biometrics, blockchain, AI and others have become integral to the CVA context, accompanied by numerous innovations developed or tested in close collaboration with well-known tech and FinTech companies. To prevent money laundering and combat the financing of terrorism, verifying the identity of bank customers is also common practice in the financial sector. In many countries of the Global South, the lack of foundational identity has made the need for and risks of digital identities a recurring topic of discussion in humanitarian action. Large UN organisations often bridge the gap by recording biometric data such as fingerprints or iris scans, while others use proxies—substitute variables like name and date of birth or age. All humanitarian actors, from large to small organisations, face similar challenges: responsibly using new technologies and handling data. Data protection, data security, data standards, accountability and data rights are just some of the challenges that must be addressed.

In addition to skills in dealing with data and new technologies, a functioning digital infrastructure for mobile communications, broadband and the internet serves as the foundation for the humanitarian system's digital transformation. The expansion and stability of the mobile network are particularly important in the Global South, where Asia and Africa experience the highest growth rates. The level of digitalisation varies greatly depending on the resources and capacities of individual countries and organisations. While some countries are expanding and digitalising their national security systems with international support, others in politically unstable contexts frequently employ internet shutdowns as a means of exerting political pressure. Humanitarian actors primarily focus on digitisation by converting analogue information and documents into digital formats, such as transferring paper lists into MS Excel or similar software. More resource-intensive organisations such as the United Nations (UN) take it a step further by integrating digital technologies into entire work processes. For example, project management platforms with planning and reporting functions are being implemented for individual programmes or across the entire organisation. However, the majority of humanitarian organisations are only digitising individual activities. This often means translating traditional work methods directly into digital platforms without reevaluating them for optimisation potential or counteracting possible risks. This lack of comprehensive digital transformation hampers improved cross-divisional and cross-functional cooperation and the critical examination and adaptation of digitalised

working methods to integrate cross-system standards. As a result, there is minimal debate about a principled approach to digital technologies that considers local circumstances and prioritises the interests and well-being of the people affected by crisis. Humanitarian action primarily revolves around technological expertise and socio-technical skills aimed at minimising potential dangers and risks for vulnerable groups—often referred to as doing no digital harm. Technology should serve as a means to an end rather than being indiscriminately mandated across all humanitarian contexts. Ultimately, the humanitarian purpose must dictate its benefits.

New actors and new ways of working

Cooperation between humanitarian action and technology actors is nothing new in itself. Humanitarian organisations have been working with technology service providers for decades and have been using software programmes for accounting, logistics and procurement for decades. With increasing digitalisation, the working methods in the humanitarian sector are changing and new players are emerging. For example, the geopolitical tension characterised by Western and Eastern tech companies is reflected in the cooperation between the Global North and Global South. While Western companies from the USA and Europe cooperate primarily with players from the Global North, Eastern companies from China tend to focus on the

With increasing digitalisation the humanitarian sector sees new working methods and new players

Global South. International humanitarian organisations use the software of large tech companies because they are compliant with Western terms of use and data protection regulations. However, the geopolitical balancing act between US-based and Chinese companies is particularly evident in the Global South, where resource-poor actors do not have access to expensive tools and gadgets and rely on cheaper alternatives from China. It is still unclear how the different applications communicate and what specific challenges, such as security standards or unwanted dependencies, will result in future.

In addition, the roles of tech companies and humanitarian organisations are becoming increasingly intertwined: tech companies are now acting as service providers and humanitarian actors are expanding beyond their traditional roles and acting as service providers for IT systems and communication platforms. Almost all well-known tech companies are now acting as philanthropic investors, participating in the reconstruction and expansion of mobile networks, designing context-specific tools and, as demonstrated by recent events in the humanitarian crisis in Gaza, also providing humanitarian assistance, such as CVA, or taking a

political stance in favour of or against a warring party by supplying Western software specifically to the Israeli government. At the same time, humanitarian organisations are increasingly acting as service providers, developing

The roles of tech companies and humanitarian organisations are becoming increasingly intertwined

and deploying in-house IT systems. The SCOPE platform of the UN World Food Programme (WFP), for example, is a web-based application for biometric registration, targeting and distribution planning, transaction and reporting on the provision of humanitarian aid. The platform was developed for internal organisational purposes and is used by WFP and was piloted for the use of partners and governments. The platform manages more than 20 million identities of people who are either affected by a humanitarian crisis or a WFP cash recipient. It is one of, if not the most comprehensive data system in the sector, followed by the UN Refugee Agency's (UNHCR) Population Registration and Identity Management EcoSystem (PRIMES) platform with more than 10 million personal records of refugees worldwide.

There are numerous systems worth mentioning, developed with the help of well-known tech companies or humanitarian organisations – including the UN, international organisations or non-governmental organisations (NGOs), particularly those based in the Global North. Organisations with fewer resources that lack their own systems must either purchase them from external service providers or use open-source applications such as Kobo Toolbox. These applications are primarily used in countries of the Global South and play a subordinate role in the humanitarian system regarding their data sets.

To develop, use and market such systems, humanitarian organisations are adopting private-sector working methods such as business modelling, performance monitoring or profit orientation, which many actors regard as highly controversial. The criticism mainly concerns the tension between profit orientation and humanitarian principles: Human suffering is not compatible with profit maximisation, cost efficiency and effectiveness. Therefore, digital design processes, agile project

Human suffering is not compatible with profit maximisation, cost efficiency and effectiveness

management, optimisation processes and performance measurements must be adapted to fit humanitarian purposes, rather than the other way around.

The discourse surrounding humanitarian reform processes is as longstanding as the system itself. When translated into the digital context, the focus primarily revolves around issues of digital inclusion, participation, accountability and jurisdiction. This aims to increase the

participation of affected people while simultaneously minimising risks for them.

From digital inclusion to participation and accountability

The expansion of mobile networks and the rapid spread of digital technologies and digital communication services has the potential to better integrate affected and vulnerable populations worldwide, especially in countries of the Global South. Communication tools are used to disseminate information, exchange it and enhance the involvement and participation of local actors such as partner organisations, governments and aid recipients. However, due to strict data protection regulations, many organisations limit the use of digital communication tools and prefer face-to-face interactions with those affected or simplified technologies such as telephone hotlines, text messages or social media. Despite their widespread use by the population, common messenger services such as WhatsApp or Telegram often remain unused in the humanitarian sector. They are used more for providing information and campaigning, such as during an Ebola outbreak. The communication benefits of well-known messenger services and social media are often overlooked. Data protection determines the use and benefits, not the organisational, nor sector-wide frameworks for greater participation, community engagement and accountability to affected populations.

Due to strict data protection regulations, many organisations limit the use of digital communication tools

It is therefore not surprising that people in crisis contexts often seek different communication channels, such as to reach both young and old individuals, preserve their anonymity if necessary or simply provide a range of communication options. The risk of digital exclusion arises not only from a lack of access to information or devices like smartphones and tablets but also from a shortage of context-specific approaches and needs-orientated solutions. For example, women often have different levels of access to digital devices compared to men, younger people are generally more digitally connected than older generations, individuals with disabilities frequently face exclusion, and rural regions may lack sufficient connectivity to mobile networks.

People in crisis contexts often seek different communication channels

Many of these factors are not new but rather highlight existing social, inter- and intra-generational and cultural inequalities. Initiatives such as Humanitarian Open-StreetMap, which aim to make the invisible visible, are frequently cited in discussions of inclusion. In these initiatives, affected people and volunteers of all ages, genders and backgrounds directly participate in mapping critical infrastructure that has been destroyed by natural disasters or armed conflicts.

Inclusion and socio-technical systems can significantly broaden the scope of humanitarian action, enhancing transparency, accountability and choice for aid recipients. However, it is crucial to consider the potential risks and dangers to the affected population. The relationship and the positive and negative interactions between the social and technical system, or in simpler terms, human-machine interaction, are key features. A classic example is communication tools such as social media, call centres or chatbots, which can improve the dissemination of information by humanitarian organisations and serve as channels for feedback and complaints from aid recipients. Each tool is used differently and influences communication behaviour in virtual and physical spaces. These tools can also be misused to spread good news, misinformation or rumours. Another example is automated decision-making processes for the allocation of aid using AI-supported methods. Large amounts of data can be quickly evaluated, localities can be prioritised, and vulnerable populations can be provided with the appropriate aid supplies in a targeted manner. However, poor-quality or outdated data, systemic biases and stereotyping can lead to misjudgements with far-reaching consequences for those affected, often lacking transparency and coherence, making them difficult to trace retrospectively. Notably, examples of aid recipients falling out of the system due to automated decisions, thus no longer receiving social benefits for inexplicable reasons, highlight significant concerns.

Illustration: Affected people share their data for aid without further climbing the ladder of participation.

Chat-/ Voicebots (e.g. ChatGPT)

- Information-sharing
- Answering frequently asked questions
- Creating feedback loops
- Identifying specific user interests or intent (AI/ML-based)
- Integrating multi-languages

- Can be used at scale
- Can increase accessibility for persons with disabilities and others
- Provides innovative learning platforms

- Depend on wireless and mobile data networks
- Need to consider digital literacy, age, culture and other aspects for user-friendliness and user-centric design
- Risk of mis-/disinformation

Hotlines

- Information-sharing
- Consulting and involving people
- Creating feedback loops

- Familiarity
- Usually offered as toll-free setup
- Can increase accessibility for persons with disabilities and others
- Can be easily linked with Interactive Voice Response (IVR)

- Depend on wireless and mobile data networks
- Need to consider digital literacy, age, culture and other aspects for user-friendliness and user-centric design

Mobile messaging tools (e.g. Facebook Messenger, Telegram, Viber, WhatsApp)

- Information-sharing
- Consulting and involving people
- Creating feedback loops

- Depend on wireless and mobile data networks
- Manageability at scale, data protection and privacy, culture and age need to be considered

- Familiarity
- Can integrate different functions (e.g. text, audio, voice recording, visuals, files), provide real-time information, improve data-driven decision-making

Selected tools used for information-sharing and collecting feedback

Short Message Service (SMS)

- Information-sharing
- Consulting and involving people
- Creating feedback loops

- Familiarity
- Cost-effectiveness
- Can be used at scale
- Wireless and mobile data network not required

- Offers non-real-time services, messages might be delayed or delivered to wrong recipient
- Limited message size (160 characters per message)

Social media platforms (e.g. Instagram, Facebook, Twitter)

- Information-sharing
- Consulting and involving
- Tracking rumours, misinformation, disinformation and hate speech (MDH)

- Familiarity
- Can be used at scale
- Can provide real-time information and improve data-driven decision-making

- Depend on wireless and mobile data networks
- Manageability at scale, data protection and privacy, culture and age need to be considered

Where does German humanitarian action stand in terms of digitalisation?

Digital capacities and competencies that enable the use of new technologies and drive digital change in humanitarian action vary significantly. While humanitarian organisations at the international level, especially large and well-known organisations such as the International Committee of the Red Cross (ICRC), UNHCR or WFP, have been investing in digitally transforming their programmes and processes and building digital expertise for years, organisations with fewer resources are falling behind. Unfortunately, this also includes German humanitarian organisations, which have a lower level of digitalisation compared to their international counterparts.

German humanitarian actors have a low level of digitalisation compared to international standards

One reason for this disparity is national priorities and levels of digital literacy, which influence investments in the digital expertise of German organisations. For instance, in 2021, the Federal Foreign Office, which is responsible for humanitarian action, published its digitalisation strategy with a primary focus on foreign and security policy. Notably absent from this strategy, as well as other nationwide digitalisation and data strategies of the Federal Ministry for Digital and Economic Affairs (BMDV), are specific mentions of humanitarian action and its unique characteristics.

There is not only a lack of sector-wide visions and influence, but German NGOs are also caught between enormous pressure to innovate and digitalise and the need to comply with strict data protection regulations. In times of crisis, when funds become available, digital innovations are developed with earmarked funding. Consequently, these innovations are project-bound, context-specific, and are rarely integrated into other programmes, departments, functions or as public goods for the benefit of the entire humanitarian system. Despite initial success in pilot projects, they often fail due to lack of uptake and cannot be scaled up. This cycle results in funding one pilot project after another without achieving long-term change. Moreover, strict data protection regimes exacerbate the challenge of implementing solutions that are compliant with data protection but not tailored to local needs.

German NGOs are caught between enormous pressure to innovate and digitalise and the need to comply with strict data protection regulations

2. Digitalisation and its humanitarian challenges

In some cases, the opportunities and challenges of digitalisation in the humanitarian sector are similar to those in other sectors. These include issues such as data protection and security concerns, as well as socio-technical risks like social exclusion and disparities in opportunities. Despite cross-sectoral similarities, specific principles must be observed in the humanitarian sector.

The tension between technology and humanitarian principles

Humanitarian action is guided by the principles of humanity, neutrality, impartiality and independence. It focuses on assisting those affected by crises and disasters, aiming to save lives and alleviate human suffering. Every person in acute need has the right to assistance, regardless of their ethnic origin, gender or political and religious beliefs. To maintain neutrality and secure access to affected populations, humanitarian organisations refrain from taking sides, particularly in armed conflicts and war contexts. They operate independently of economic, political or military influence, dedicated solely to the humanitarian goal of supporting people in need and contributing to local rehabilitation.

Digital technologies, increasingly employed in armed conflicts and humanitarian crises, have the potential to deliver aid faster, tailor it more closely to local needs and enhance effectiveness. However, they also present risks to humanitarian organisations and those affected.

The geopolitical power imbalance between Western and Eastern tech companies significantly impacts the humanitarian system and its principles amid complex polycrises. Technological design and product development, typical in the private sector, cannot simply be transferred and integrated into humanitarian contexts without adaptation. Humanitarian organisations bear a responsibility to protect the sensitive data entrusted to them by vulnerable people. In many contexts, however, data processing activities and purposes remain unclear. The boundaries are blurred, and there is a great risk that data will inadvertently flow into large data lakes used for AI or other technologies. There is not only a lack of transparency, but also a lack of principles and ethics that address issues such as digital accountability, regulation and cooperation with the private sector. Currently, the use of digital applications, data collection, sharing and processing by humanitarian organisations in collaboration with tech companies have been left

largely to the discretion of individual organisations. Despite the existence of data protection regulations, not all humanitarian organisations can be prosecuted equally, partly due to the immunity status of UN organisations and partly due to a lack of appropriate jurisdiction at the international and national levels. The discourse on jurisdiction over humanitarian organisations, especially in the digital context, is still in its early stages. This uncertainty extends to tech companies acting as humanitarian actors, operating within a quasi-legal vacuum. Moreover, questions arise regarding whether such support is driven by altruism or by profit and self-interest.

There is a lack of principles and ethics that address issues such as digital accountability, regulation and cooperation with the private sector

The same software offered by tech companies like Microsoft, Google and others is utilised across humanitarian, military and various other sectors. In recent years, these large tech companies have increasingly engaged in politics through their provision of software in contexts such as Gaza or Ukraine, where they take positions for or against a warring party. For example, Elon Musk briefly activated his Starlink network for Ukraine in 2022 to provide uninterrupted internet connections via low-flying satellites, while the Israeli government long employed software from major US companies to biometrically identify Palestinian citizens and now uses AI for warfare optimisation and infrastructure targeting. The blending of humanitarian and military objectives, exemplified by the WFP's cooperation with the software provider Palantir, a specialist in big data analysis known for its support of Western governments in counter-terrorism and surveillance, continues to draw significant criticism. The mixing of humanitarian and military purposes and non-transparent use of data, combined with concerns about data misuse, are at the centre of criticism here.

The conflict of tension and the associated conflict of interest between technology and humanitarian principles becomes clear when each technology represents a political position of a particular tech company. Every decision in favour of or against a particular technology, knowingly or unknowingly, can quickly become a kind of statement, regardless of whether tech companies themselves act as humanitarian actors and intervene in humanitarian action. Risk analyses that examine cooperation with tech companies, their business models and data use, as well as insight and overview of transparent data processing processes, will become increasingly important in the future.

Data protection and data security

Various data protection regulations serve as guidelines and legal bases for humanitarian actors. In addition to internal organisational regulations, NGOs are subject to national and regional regulations, such as the European General Data Protection Regulation (EU GDPR). Local partner organisations are also subject to national data protection laws in the host country, where applicable. International organisations and the UN, however, are exempt from such regulations due to their immunity status. Their internal data protection guidelines are adapted to international standards, as shown by the ICRC regulations, which are considered the most comprehensive and influential in the sector. The different regulations and directives create a confusing maze that is difficult to grasp and makes contract negotiations more difficult and protracted.

The different regulations and directives create a confusing maze

In addition, data protection is often seen as a global issue, but it is primarily debated in the Global North, contrasting with the reality of many humanitarian crises. The operationalisation of data protection at all levels is limited by the lack of integration into all functions and areas, as well as the lack of contextualisation. Approaches such as "privacy by design", in which data protection and data security are considered from the outset in the development or design process and implemented transparently in the data cycles, are lacking not only in technical processes but above all in operational and programmatic processes. The challenges are not only due to human misconduct as a result of a lack of knowledge but are also partly socio-cultural in nature.

At the same time, the humanitarian system is affected by an increasing number of data incidents and cyber-attacks. The attacks on the ICRC in 2022, in which more than 500,000 pieces of sensitive data were compromised, or the phishing attack on the US Agency for International Development (USAID) in 2021, in which more than 3,000 user accounts of over 150 partner organisations were infected by phishing, are among the most publicly known data incidents in the sector. In general, such attacks are poorly known and visible. There is no official information on the type and number of incidents nor the motives of the attackers. Reporting obligations across the sector are absent, and there are also no official reporting options or channels to track, measure or systematically expand incidents, let alone influence any jurisdiction. Competent organisations or authorities to prosecute such data breaches are lacking. Data incidents are highly sensitive for humanitarian organisations, seen as vulnerabilities and are

The humanitarian system is affected by an increasing number of data and cyber-attacks

therefore treated as taboo. The ICRC demonstrated a proactive approach to handling data by publicising the incident and its approach, informing affected parties and openly discussing the challenges.

In addition to legal data protection regulations, the humanitarian sector lacks principles and guidelines calling for greater transparency and digital accountability. Many organisations adhere to globally recognised standards like the Principles for Digital Development, developed through a multi-stakeholder process, or the Inter-Agency Standing Committee's (IASC) Data Responsibility Guidance to guide the development of digital tools and data processing. Nevertheless, exploitative practices, also known as "data for aid", remain widespread. Humanitarian organisations often collect far more data than necessary, and those affected are often inadequately informed about their data use and rights. They have little choice as data is requested in exchange for cash or other aid, registering for cash distribution and recorded in the humanitarian organisation's database with personal details such as name, date of birth, age or telephone number. Some organisations also collect biometric identification features like fingerprints or iris scans for authentication purposes in exchange for cash and other humanitarian supplies. Many affected individuals do not question these practices during acute crises, prioritising essential basic needs. Therefore, it is crucial for humanitarian organisations to handle sensitive data in a trustworthy manner and to act as responsible data stewards for those affected and aid recipients. Organisations have limited control over their data, impacting crucial updates for supply allocation and data transfers to third parties, including implementing organisations, financial service providers, evaluation teams, donors and governments.

Those affected are often inadequately informed about their data use and rights, they have little choice as data is requested in exchange for cash or other aid

The humanitarian crisis in Ukraine, considered a highly digitalised humanitarian context by international standards, has highlighted the unpreparedness of humanitarian organisations to handle potential data requests from aid recipients. Unlike many others in crisis situations, Ukrainians are well aware of their data rights and have been asking questions about how their data is used, requesting updates or permanent deletion. However, transparent data flows and effective governance models are rare, leaving organisations to address these demands effectively.

Studies in Ukraine have also shown that affected people were not sufficiently informed about the use of their data and expressed concerns about their privacy. Project or programme-based feedback systems also rarely integrate with other data systems, making it extremely difficult to forward potential requests. In other crisis areas, many organisations have often cited the lack of digital skills among aid recipients as a barrier to implementing effective data stewardship and respecting data rights, with feedback typically focused on programme content and aid supplies. The case of Ukraine is an exception, highlighting the gaps in the governance system of humanitarian organisations.

From localisation to centralisation

The increasing digitalisation of the humanitarian system is leading to the standardisation and centralisation of highly decentralised work and decision-making processes. This affects decentralised aid projects broadly and the design of digital applications and data processing specifically. Innovations are often designed without involving the affected population or local partner organisations. Participatory processes for short-term humanitarian projects are frequently deemed too lengthy and costly, requiring translation and adaptation to local contexts. Additionally, for data protection reasons, data systems and servers are typically located in countries of the Global North, where most humanitarian organisations are headquartered. Although local partner organisations collect data on behalf of international organisations, they often have limited access to these datasets. Processes are optimised at the global level without their direct involvement or influence, thereby ensuring that new technological achievements have a lasting impact on processes at the operational level.

Innovations are often designed without involving the affected population or local partner organisations

3. Digital trends and future prospects for a digital humanitarian system

In the future, humanitarian action will continue to be characterised by the dynamic development and widespread adoption of digital technologies. What seems new, innovative and trendy in the digital world today may become outdated tomorrow. Many humanitarian actors, not deeply immersed in these debates, find it

Many humanitarian actors find it challenging to keep pace with these rapid developments and stay up-to-date and informed

challenging to keep pace with these rapid developments and stay "up-to-date" and informed. At the same time, the humanitarian sector is perceived as traditionally resistant to change and new ideas. Many actors refer to

contexts without mobile phone connections, where the level of digitalisation and local digital skills are too low. However, this is countered by the global expansion of mobile networks and the growing use of digital services and communication tools, particularly in the Global South. The trend underscores the necessity for both offline and online solutions to address humanitarian challenges. Below, four trends that characterise the current discourse and influence the digital agenda of the humanitarian system are discussed.

Efficiency pressure boosts data and digitalisation

With increasing digitalisation, humanitarian actors are also under pressure to become more efficient and innovative. The demand for a more efficient humanitarian system is highly topical, especially given the increasing humanitarian needs and decreasing budgets.

The pursuit of greater efficiency is forcing humanitarian actors to become even more innovative

The pursuit of greater (cost) efficiency is forcing humanitarian actors to become even more innovative and maximise data. The sector does not generally have a problem with too little data. Rather, there is a lack of utilisation

of this data and the generation of high-quality information. Feedback systems are an example of how data is generated but often only utilised in isolation.

Forecasts by the CALP network, a sector-wide CVA network of humanitarian organisations, predict that digital payments and cash provision will continue to grow and strongly influence the normative and operational debate around data and digitalisation. Issues such as responsible data management, data protection, privacy and cyber security will be debated primarily in this area, but topics such as blockchain and AI will also receive further emphasis. The pressure for efficiency

is reflected in the context of integrated programmes, data exchange and interoperability. While a lack of data standards, coordination and referrals to other sectors are widespread problems in the humanitarian system, these topics are particularly prioritised in the CVA context. This includes the interoperability and integration of humanitarian data into national social protection systems, the exchange of financial data and humanitarian outcomes or the request for sensitive data collected for compliance purposes (e.g. counter-terrorism, fraud or corruption). The digital cooperation between humanitarian organisations and governments in the Global North and South once again illustrates the tension between principled humanitarian action and political influence.

New tech hype around artificial intelligence

Upcoming digital trends will demonstrate how future-proof the humanitarian system is. Keeping pace with the ongoing technological development of emerging technologies such as AI is a major challenge. Many actors feel overwhelmed and have the impression that they are unable to keep up with the constant changes. Humanitarian organisations typically adopt a binary approach to digitalisation. This means they either exaggerate the potential of digital technologies or oversimplify their use to the extent that they focus only on the risks. The humanitarian sector has long been divided between those actors who have sufficient strategic and forward-looking capabilities and those who lag behind and stick to the "good old-fashioned way". AI is currently acting as a "game changer" in the debate.
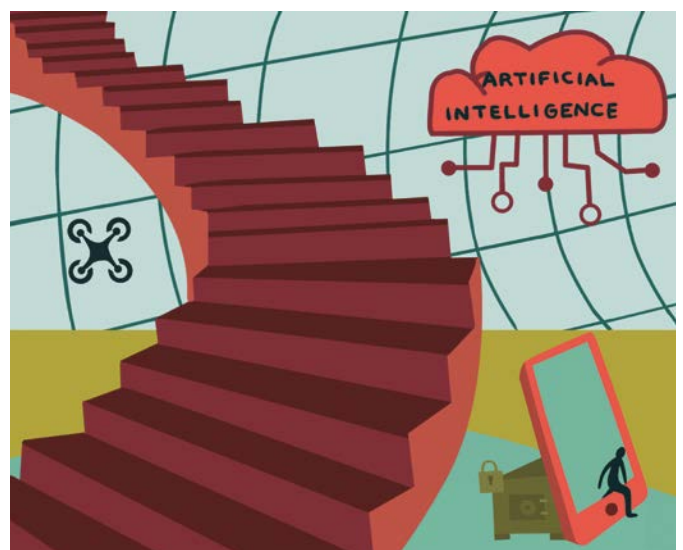

Illustration: Durch KI ergeben sich innovative Ansätze in der humanitären Hilfe, aber das Verständnis für die potenziellen Auswirkungen ist begrenzt.

The current AI hype primarily revolves around enhancing efficiency

The current AI hype primarily revolves around enhancing efficiency. Discussions focus on optimising decision-making processes and supporting them through AI. Artificial intelligence is increasingly employed in forward-looking humanitarian action, improving language systems and even aiding in writing project applications and evaluations.

Despite the significant potential that AI offers for new and innovative humanitarian approaches, there remains a limited understanding of the potential consequences of these technological dependencies. Experts caution against the bias of technological decision-making systems, known as automation bias, and warn against blindly accepting AI-generated conclusions. Tests indicate a lack of representative, principle-based humanitarian information that considers the diverse contexts, capabilities and needs of those affected. The humanitarian system lacks a coherent framework for integrating new AI-generated methods. Additionally, there is a lack of system-wide support or guidance to help humanitarian organisations deal with this new technology.

Fake News, misinformation and disinformation in the humanitarian sector

Meanwhile, humanitarian organisations are employing a diverse range of communication tools to improve collaboration and disseminate information to affected people. While platforms like Skype were revolutionary a few years ago, today, messenger services and social media take centre stage for real-time information dissemination, encompassing both positive and negative messages. The prevalence of disinformation and misinformation has become notably apparent since the war of aggression in Ukraine and the recent events in the Gaza conflict. This impacts reporting on humanitarian crises, the perception of humanitarian actors and communication with and among the affected populations. However, there have been few systematic studies on the motivation behind the spread of fake news within the humanitarian context or its influence on perceptions of the humanitarian system and corresponding decision-making processes, such as funding decisions by donors or private individuals.

There have been few systematic studies on the motivation behind the spread of fake news within the humanitarian context

Leaving the niche

It is increasingly evident that the humanitarian sector is part of a broader data ecosystem. Poly-crises, funding cuts, emergence of new actors, new ways of working and rapid changes in technology are further complicating this ecosystem. At the same time, humanitarian organisations often operate in silos, maintaining parallel systems and relying on humanitarian principles without questioning them or responding to the many changes of the 21st century. To effectively respond to the new developments and challenges, it is crucial for the entire humanitarian system to adapt. Recognising and embracing complexity and the "new normal" are essential steps toward developing integrated approaches across sectors and systems. In the technological age of the 21st century, digitalising the humanitarian sector is inevitable. This digital transformation aims to promote equal opportunities, user-friendly design and responsible use of data and digital technologies on a global, complex and cross-sectoral scale.

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About the author: Andrea Düchting is a Research Associate 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.

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Further CHA *to go* publications

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