The use of digital technologies in the Hungarian refugee response

Zita Lengyel-Wang

A well-managed Facebook group can mobilise hundreds of thousands of people to maximise peer-to-peer aid, be an effective real-time communication channel between organisations and volunteers, and serve as the focal point of an online refugee aid ecosystem.

Three decades after the Yugoslav wars, Hungary is once again neighbour to a country in armed conflict. But much has changed in the intervening years. NGOs and charities now play a key role in providing aid and social support, the country has become a major regional hub for business services and information technology innovation, and digital technology has opened up unprecedented opportunities to help Ukrainian refugees in Hungary.

In the first months of the war, many social media-based and digital initiatives were created, but many of these platforms and applications are no longer in use due to a lack of adoption, maintenance and change management. However, some online platforms have become well known and widely used by refugees, humanitarian actors and volunteers.

A Facebook group that meets the needs of refugees

On 24th February 2022, Hungary received its first refugees as Russia launched its invasion of Ukraine, and by 14th March 2023, over 2,350,000 people had crossed the Ukraine-Hungary border. Coordination was challenging, despite an outpouring of support from civilians, NGOs and local communities. One Facebook group, Segítségnyújtás Ukrajna, Kárpátalja (Hungary Refugee Help Digital Network: Ukraine, Zakarpattia), quickly became the primary online platform for refugees, volunteers and aid organisations. Within a week, the group had over 100,000 members and was receiving thousands of posts daily. The news of the large support community spread quickly among refugees and QR codes to the group were included in food packages distributed at train stations and border crossing points.

The Refugee Help Digital Network (RHDN) team running the group established a complex moderation protocol to ensure the content was safe, relevant, reliable, timely and accessible. Every post submitted is reviewed and approved by an administrator (using a 60-page moderation guidebook) who ensures that no sensitive information is shared and evaluates all proposed applications, content and programmes. RHDN volunteers from various professions – such as knowledge management, legal, medical, IT, risk, communication, user experience, logistics and project management – created processes and procedures in response to refugees' needs.

From the first days of the war, RHDN was aware of the enormous need for accurate information. Therefore, the team created an information centre to gather daily news updates and details of people's requirements through phone and instant message contact from more than 50 locations where aid provision was being coordinated – from mayors of rural towns, aid organisations and volunteer coordinators at train stations and airports. RHDN then published multilingual announcements about the donations needed, distribution points, shelters and so on, summarising key information using simple terminology.

The RHDN team also publishes posts about how to access legal and social rights, psychological and medical assistance, accommodation, employment and education, plus information tailored to the specific needs of more vulnerable groups such as women, people with disabilities, children, people in need of medical and psychological aid, LGBTQIA+ refugees, and Roma. These posts reach hundreds of thousands of people and provide critical information as there is no official government website for refugees in



QR codes for the Facebook group were included in food packages distributed at border crossing and train stations, so refugees could immediately reach hundreds of thousands of local helpers. Photo credit: Segítségnyújtás MOST / Refugee Help Digital Network

Hungary,¹ and NGOs often lack the capacity to investigate, process and share information.

The Facebook group now has over 130,000 members. It provides vital information first-hand to refugees and serves as a reliable platform for coordination and communication for civilians and humanitarian actors.

Digital risks and safety measures

Online platforms bring valuable benefits, but they can also pose risks that refugees and volunteers need to be aware of. The majority of refugees arriving in Hungary are women with children who have varying levels of digital literacy and cybersecurity awareness, and who may therefore be vulnerable to exploitation and trafficking. To increase their safety, RHDN implements various security measures such as removing sensitive information (exact addresses, phone numbers, photos of children and passport details) from posts before they are published and also educating refugees on potential risks. RHDN highlights potential safety risks for those looking for accommodation or employment, and issues warnings about phishing attempts, hackers and unethical working conditions.

Community rules, reporting mechanisms and keyword alerts are essential to prevent hate speech and discrimination. Digital platforms can also expose volunteers to psychological challenges such as vicarious trauma, burnout and compassion fatigue. Having a constant online presence increases these risks, so the RHDN Facebook group is supported with professional psychological supervision.

Best practices and Web3 principles

While there is no universally accepted definition of 'Web3', it generally refers to a new era in internet usage that involves structured data and advanced technologies such as artificial intelligence (AI) and blockchain to create a more secure and personalised web. In traditional humanitarian aid, information is centralised in the hands of authorities and a relatively small number of large agencies (and mostly used for one-way communication). RHDN has implemented Web3 principles, driven by data and insights, to improve aid and information provision.

Recent case studies on refugees' information-seeking behaviour show that they rely more on social media than government or NGO websites.² RHDN publishes information packages and creates databases to store information on organisations, services and refugee rights, trying to tackle the many barriers faced by refugees to accessing information – barriers such as lack of digital literacy, not knowing the local language, the inaccuracy of news on social media, and government websites that are not mobile-friendly.

The need for decentralisation also applies to digital products. A platform that tries to cover all aspects of humanitarian assistance is unlikely to succeed because of the very wide-ranging needs it has to address. Mutual referral is critical for both aid organisations and digital platforms. Facebook groups and Telegram channels are suitable information channels, and useful places to ask for donated goods and to address ad hoc needs. However, accommodation, transport and cash assistance requests, for example, can be managed better and more safely using designated platforms.

As the primary online space for Hungarian refugee aid activities, RHDN shares all relevant applications and websites through its Facebook group to reach as many users as possible. Before approving any posts promoting digital products, subject matter experts review the content, while the IT working group evaluates the application from a digital perspective, focusing for example on the product's accessibility, data collection practices, data storage protocol, functionality, risks and controls, change management and maintenance processes.

Other digital platforms serving refugees in Hungary

Since the migration and refugee 'crisis' in Europe in 2015, we have learned about the problems of 'digital litter'³, where hundreds of apps and websites were designed for refugees but eventually abandoned due to a lack of maintenance, resulting in outdated and misleading information. During the first months of the Ukraine crisis, RHDN facilitated discussions between developers of digital tools in order to synchronise efforts and avoid the spread of abandoned digital products. Successful approaches were often created by volunteers with digital knowledge backgrounds, despite

their lack of experience in assisting refugees. Their initiatives were driven by seeing specific gaps in refugee assistance that their solutions could fill.

ShelterUKR is the largest Hungarian platform focusing on accommodation. It was developed in less than a week by a tech company that wanted to create a peer-to-peer (P2P) accommodation app tailored to the specific needs of refugees. More than 10,000 refugees were hosted through the platform in the first month of the crisis, largely thanks to the developers' technical expertise, customised filters for refugees, optimised mobile experiences, and wide promotion on social media. Since then, the team has developed additional features to assist local NGOs' requests.

HunHelp, a platform where refugees can apply for food vouchers, was created by a group of Russian-speaking migrants to address the needs of refugees in remote areas – such as in small towns without aid distribution points. Hunhelp is run by a group of volunteers who manage crowdfunding, application management and distribution without any organisational support; to date, nearly 6,000 displaced people have received aid through this platform.

P2P initiatives are an important enabler of Web3 and humanitarian aid as well. Through RHDN's Facebook community an estimated 60,000 people have received help with issues such as accommodation, health care, psychological support and education. One of the reasons for this remarkable solidarity is the P2P aspect of social media: people want to help not just by donating to trusted aid organisations but also by responding to an individual refugee's request, whom they can contact directly.

Another advantage of shared digital spaces is that they can complement formal structures by simplifying the engagement between local NGOs, authorities and civilians. Even small NGOs, who do not have the capacity or foreign language skills to participate in the UNHCR-led Refugee Coordination Forum (RCF), are quick to respond to a comment where their coordinator is tagged to help a family in their region. While formal frameworks such as the RCF are an important mechanism for reporting

and high-level coordination, a shared digital space can instantly connect hundreds of NGOs and thousands of volunteers to assist refugees. RHDN has been an active member of the Hungarian RCF since its inception and has supported UNHCR's mapping efforts with a database of more than 100 local relief organisations working with RHDN.

Further potential with AI and data

As RHDN is run by a small group of volunteers, it has limited capacity to analyse the large amount of data that has been collected through the Facebook group. However, reports can be provided upon request, as the text of every written request is labelled according to a three-level taxonomy that classifies the theme of posts. An analysis of requests for accommodation revealed the changing trends from requests for short-term shelter to long-term accommodation, the percentage of successful housing, and whether the solution was provided by a P2P initiative, government or aid organisation. This analysis played an important role in helping NGOs shift their attention to long-term housing solutions.

In addition, NLP (Natural Language Processing) can be used to process this labelled text and provide valuable insights into the evolving needs of refugees, adding to the more limited picture provided by surveys conducted at border crossing points and shelters.

Conclusion

Digital methods and a Web3 approach can enhance humanitarian aid by enabling aid organisations to reach affected populations and local volunteers more effectively, while also increasing safety and preventing exploitation.

Our experience in Hungary shows that local NGOs often lack the capacity (time, expertise, staff) to create digital tools to support humanitarian efforts. Grassroots initiatives driven by individuals with technical knowledge can be a fast and efficient way to build digital tools to support humanitarian efforts. Collaboration between digital actors, NGOs, governments, communities and international agencies is key to success, avoiding duplication and creating a sustainable digital product.

Zita Lengyel-Wang

infocenter.segitsegnyujtas@gmail.com IT and Platform Strategy Coordinator, Refugee Help Digital Network

- 1. Adrienn Kiss (2022) Mapping and rapid assessment of existing national NGO coordination mechanisms focusing on Hungary, Poland, Romania, and the Republic of Moldova p9 bit.ly/reliefweb-mapping-rapid-assessment
- Dekker R, Engbersen G, Klaver J and Vonk H (2018) 'Smart Refugees: How Syrian Asylum Migrants Use Social Media Information in Migration Decision-Making', Social Media + Society, 4(1) bit.ly/smart-refugees
- 3. Meghan Benton (2019) 'Digital Litter: The Downside of Using Technology to Help Refugees' Migration Information Source bit.ly/migrationpolicy-digital-litter

 (CC) BY-NC-ND