Digital Pathways for Peace

Insights and lessons from a global online consultation





About this report

In March 2020, Peace Direct held a three-day online consultation with over 75 practitioners and academics across the globe. Participants and guest contributors exchanged insights and local experiences on the impact of digital technology on peace and conflict, how local peacebuilders incorporate digital technology in their responses to conflict, and how they envision positive change in this new branch of peacebuilding. We received more than 300 detailed comments over 11 discussion threads. This report presents the findings and recommendations from that consultation.

We would like to thank Dimitri Kotsiras as the main author of this report. We would also like to thank Joel Gabri for his written contributions. This report has been edited by Peace Direct. The main sections of the report include contributions from participants that took part in the online consultation. Where quotes are anonymous, they are from participants who preferred to keep their identities private for personal and/or security concerns. The contents of this report are the responsibility of Peace Direct. The text in this report should not be taken to represent the views of any other organisation.

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Abbreviations

ACLED	Armed Conflict Location Event Data		Preventing/Countering Violent
Al	Artificial Intelligence	Extremism	
AU	African Union	SDG	Sustainable Development Goal
CEWS	Continental Early Warning System	SMS	Short Message Service
CSO	Civil Society Organisation	TTT	Turning the Tide
DRC	Democratic Republic of Congo	UK	United Kingdom
EWER	Early Warning and Early Response	UN	United Nations
GIS	Geographic Information System	UNCTAD	UN Conference on Trade and Development
GNWP	Global Network of Women Peacebuilders	UNESCO	UN Educational, Scientific and Cultural Organisation
GPS	Geographic Positioning System	UNICEF	UN Children's Fund
ICT	Information Communication Technology	US	United States
IT	Information Technology	USIP	United States Institute of Peace
M&E	Monitoring and Evaluation	VR	Virtual Reality
MIDO	Myanmar ICT for Development Organisation	YPS	Youth, Peace and Security
MIT	Massachusetts Institute of Technology		
NGO	Non-Governmental Organisation		
OECD	Organisation for Economic Cooperation and Development		
P4D	Platform4Dialogue		

Executive Summary

Digital technologies – electronic tools, software, platforms, systems and devices that help generate, store and/or transfer data – are playing an increasingly vital role in advancing peacebuilding activities around the world. Technological innovation has been a powerful democratising force which has opened new avenues and spaces for civic participation and collective action, empowering marginalised voices and enhancing local accountability. Moreover, increased connectivity has led to the development of powerful online communities, who are reshaping the social contract between state and citizenry and are providing key opportunities to build more inclusive and equitable societies.

At the same time, these same technologies are being employed by autocratic states and conflict actors for sophisticated methods of censorship, surveillance and dis/misinformation, which are creating new divisions and inciting violence that can manifest itself offline. Hate speech, recruitment for terrorism, fake news, disinformation campaigns, privacy breaches, and other challenges to peaceful societies are increasingly dominating political and media narratives, reinforcing popular perceptions of technology as untrustworthy and dangerous. This has also led to unhelpful or harmful legislation and regulation around the use of technology that are further exacerbating existing 'digital divides' and inhibiting the rights and freedoms of individual users and civil society actors.

In response to these dynamics, the use of technology for peace, otherwise known as 'peacetech', has grown in prominence over the last decade and has generated innovative techbased solutions to tackle drivers of conflict and insecurity. In effect, digital technologies provide peacebuilders with user-friendly, efficient and scalable tools that not only improve programming and communications, but can also create alternative infrastructures for peace - challenging dominant conflict narratives and fostering positive communication and social cohesion between conflict groups. Yet despite this progress and growing interest from policymakers and donors, many questions remain and are still being debated around the strategic use of tech for peace.

As peacebuilders place more importance on the use of digital technologies to sustain peacebuilding work in this midst of the Covid-19 pandemic, outstanding questions on how to best capitalise on the opportunities for peace that digital technologies provide require further insight and knowledge-sharing.

This report presents the findings of a global online consultation Peace Direct held with peacebuilding practitioners and academics who employ digital technologies in their work. The purpose of this exchange was to unpack different local perspectives on the role that technology plays in peacebuilding, to share learnings, experiences and effective tech-based peacebuilding approaches, and to contribute to policy and practice discussions around the effective use of technology for peace. The result was a robust discussion that sheds further light on the intersection between technology and peacebuilding, and demonstrates the adaptive and inventive ways that peacebuilders continue to prevent and resolve conflict - both online and offline.

Key findings

The three-day consultation explored the novel and innovative ways that local peacebuilding practitioners and academics advance peace through technology. Though not exhaustive, below are a range of effective tech-based strategies employed by peacebuilders which have been identified in this report:

 Peacebuilders are using digital technologies to enhance their data collection capabilities by crowdsourcing information and utilising mobile and satellite technologies to map out detailed conflict trends and hotspots on the ground. This has vastly improved early warnings systems, enabling systematic and near real-time data to be shared, which has greatly reduced the time needed for critical responses.

Social media platforms, blogs, podcasts and online forums are being used by peacebuilders as vehicles of peace promotion, enabling rapid and sustained engagement through online peace messaging and digital storytelling. These techniques, bolstered by multimedia capabilities, have built awareness around peace in a systematic way by connecting users to relatable themes and individuals with lived experiences of conflict.

- Peacebuilders have also been able to tap into large and powerful online communities to mobilise for peace and drive social change. This is bolstered by open and inclusive spaces for exchange and knowledge-sharing, which have helped develop new partnerships and opportunities for collective analysis and action.
- Peacebuilders are increasingly utilising advanced technologies in their peacebuilding interventions, including using 'big data', artificial intelligence (AI) and blockchain programmes to collect data, as well as interactive technologies such as virtual reality and videogames to more actively engage people in peacebuilding.
- Peacebuilders have adopted a "hybrid" approach in their activities, marrying online and offline technologies to maximise their reach and minimise risks of exclusion and counterproductive programming. Their adeptness in switching between analogue and digital tools has made them adaptable to difficult environments and tuned in to local realities.

Despite the benefits that technology provides, local peacebuilders in fragile and conflict-affected contexts continue to face a number of intersecting issues that are creating digital divides and reproducing fault lines which can lead to violence – ultimately undermining their peacebuilding work:

- Structural barriers such as poverty, weak
 infrastructure and low digital literacy critical
 enablers for socio-economic transformation
 are preventing large segments of the global
 population from accessing digital technologies.
 Poor infrastructure development, prohibitive
 costs and a lack of accessibility and training have
 contributed to widening social inequalities that
 are leaving many behind.
- These digital divides are disproportionately affecting marginalised groups such as women and minorities. Underlying gendered norms and power imbalances replicated in online spaces have translated into continued harassment and targeting by spoilers and trolls, further undermining these groups' representation in online platforms.
- Restrictive regulatory and policy environments

 characterised by censorship, surveillance and sporadic internet shutdowns are threatening users' freedom and rights, and are contributing to shrinking civil society space.
- The use of technology for peace comes with complex ethical, privacy and security challenges that can replicate power imbalances and conflict dynamics in digital environments. Preventing this requires testing assumptions and determining the appropriateness of introducing technology in a conflict- and context-sensitive manner.
- Evidence gaps and sustainability issues around the use of technology for peacebuilding require further documentation around potential design biases, as well as staff training and capacitybuilding, to improve the overall impact of techbased peacebuilding interventions.

Recommendations

For governments and international bodies

- Promote digital literacy and e-governance programmes to support digital inclusion in online spaces and in tech-based peacebuilding activities. Governments and international bodies should develop accessible e-governance and digital literacy programmes that will support online civic participation and educate users on data privacy and healthy digital environments. These programmes should also include regional language groups to provide greater access to local communities around the world.
- Strengthen human rights-compliant regulatory practices on digital platforms. Governments and technology companies should ensure that any regulation balances protecting individuals' sensitive data and preventing the prevalence of misinformation, hate speech and inflammatory messages. Government and private sector initiatives to improve transparency and accountability around content regulation should be done in consultation with human rights experts and peacebuilding experts, who are best placed to work around the challenges of specifically defined hate speech and inflammatory language. In addition, resources must be provided for stakeholders who cannot afford or cannot access the consultations.

For donors, funders and civil society

- Increase support for tech-based peacebuilding initiatives at the local level. Donors should provide material support and training to local civil society which would enable effective tech-based peacebuilding initiatives to scale up in size. Flexible funding can help to develop staff capacity and digital literacy while covering various licensing, data storage and server costs.
- Document and analyse the applications of digital technologies in conflict-affected settings, with lessons captured and shared effectively. It is vital that civil society actors and donors tackle M&E design biases behind tech-based solutions and provide effective solutions to the issues faced by peacebuilders and beneficiary communities using technology, more in line with a usercentred and participatory approach.
- Develop and strengthen online civil society networks to expand effective peacebuilding campaigns and outreach. Where civil society organisations can rally behind a unified agenda, they can show their collective strength in order to elevate peacebuilding in the digital space. Collective action can strengthen alternative narratives and help foster a wider digital culture of peace. Donors should strengthen and support such efforts as well as the civil society networks behind them.



Digital technologies – electronic tools, software, systems and devices that can help generate, store and/or transfer data – have fundamentally changed how we interact with our world. In many ways, the so-called 'Digital Revolution' has been a democratising force; new online platforms and Information and Communication Technologies (ICTs) have proven essential in connecting people across borders and bridging cultural divides. In turn this has helped to facilitate new avenues for civic participation and engagement by providing anyone with powerful tools to create and share data in unprecedented and transformative ways.¹

The spread of these technologies in fragile and conflict affected contexts has also been accompanied by major social, economic and political shifts. Newly empowered communities and an active global civil society are utilising emerging technologies to challenge traditional power structures and re-shape their cultures and societies. The wave of citizen-led protests that sprung up around the world in 2019 capitalised on the ubiquity of mobile devices and the increasing use of encrypted messaging apps and social media platforms to rapidly mobilise. Meanwhile, 'hashtag' activism and online campaigns have emboldened and strengthened the international climate change movement, and technologies are helping refugees around the world to connect with each other and collectively amplify their claims to political and economic rights.2

Despite this potential for positive change, digital technologies are not inherently benevolent; they are also used to foment divisions, inspire fear and incite violence. Deliberate disinformation and propaganda campaigns on social media have targeted electoral processes and sown a deep mistrust in governing institutions.³ Online hate speech inciting violence played a role in the genocidal actions taken against the Rohingya community in Myanmar,⁴ and new surveillance techniques are being used by repressive regimes worldwide to monitor dissent and crackdown on digital activists and protests. 5 This is not to mention the ongoing online recruitment tactics of extremist groups and the serious privacy and ethical issues that permeate across the digital space. Finally, complex and intersecting 'digital divides' present major barriers to digital access, which are contributing to widening social inequalities that are leaving many behind.

With the aforementioned in mind, new digital pathways for change and the issues that underpin them present a critical opportunity to build more inclusive and democratic societies and contribute to a more effective security and peace framework. The transformational effect that technology has had in the peacebuilding landscape is becoming increasingly clear: from data-driven interventions used by civil society organisations (CSOs) to improve peacebuilding, humanitarian and peacekeeping responses, to the innovative ways that technology has empowered localised conflict management efforts, digital technologies can have the potential to effect lasting change to the peacebuilding space. Significantly, the United Nations (UN) has recognised the transformative potential of technology in its Strategy on New Technologies (2018), which claims that without "stepped up, smart and responsible use of technology", the UN will fail to reach its Sustainable Development Goals (SDGs) and will miss important opportunities to prevent conflict and sustain peace.

As the world continues to adapt to the impact of the COVID-19 pandemic, the importance of digital technologies to sustain peacebuilding work has become more important than ever. It is clear that digital technologies cannot be a panacea for the challenges facing peacebuilders on the ground, but how can we capitalise on the opportunities for peace that they can provide? How can we effectively support and engage the growing number of tech-based peacebuilders to tackle the issues presented by these new technologies in the digital space? What needs to happen to ensure that technology is used responsibly to mitigate and resolve conflict and sustain peace?

To tackle these questions, Peace Direct convened a three-day online consultation in March 2020 to explore the diverse and innovative ways that local peacebuilders and practitioners are capitalising on new digital technologies and advancing the emerging field of digital peacebuilding. The insights from this consultation form the basis of the analysis and recommendations developed in this report.



The findings and analysis in this report are based on discussions that were held during an online consultation that took place on Platform4Dialogue (P4D) from 17-19 March 2020. Over 75 participants were invited to contribute to a series of online, text-based discussions, exploring the impact of digital technologies on peace and security issues, and delving into civil society challenges, opportunities and support mechanisms needed to deliver sustainable peace through the responsible use of technology.

Participants were selected via purposive sampling, considering the basis of their experience in peacebuilding and digital technologies. Special attention was paid to the importance of having a gender balance and ensuring a wide coverage of countries and continents, as well as experiences at both the local, national and international level, both from a practitioner and academic standpoint. In addition to this selection process, Peace Direct approached several guest experts directly to contribute and moderate certain discussion threads.

Throughout the consultation, participants responded to questions posed in each discussion thread as well as points raised by other participants. For contributions that were deemed sensitive, participants were given the opportunity to post anonymously. All discussions were held in a password protected area of the P4D platform. Quotes from participants are illustrative of the perspectives raised during the consultation, and a small number of quotes were subject to minor edits for clarity and readability. All participant quotes within this report were given explicit consent to be publicly quoted.

The case studies in this report were based on select participants' contributions in the online consultation. Follow-up interviews and email correspondence were held with those participants to develop the case studies with their explicit consent.

Outline of the Report

Section 2 looks at how digital technologies are impacting peace and security, both in terms of current conflict dynamics and how they have democratised the peacebuilding space. Section 3 outlines the emerging 'peacetech' field and its inherent benefits for peacebuilding work. Section 4 explores effective digital strategies used by local peacebuilding practitioners to mitigate conflict. Section 5 focuses on the barriers and challenges that come with using digital technologies, and emphasises the structural, process and internal issues confronting local peacebuilders. To tackle these, Section 6 highlights some important pathways for collaboration to improve the use of digital technologies for peacebuilding.

The final section concludes that digital peacebuilders are making important advances towards peace, preventing and responding to conflict in novel and innovative ways that show much promise. Though essential steps are needed to tackle the 'digital divide' by promoting the equitable and inclusive use of technologies, there are clear and effective digital pathways for peace that should be strengthened and supported.

N.B. A glossary of key terms and concepts used throughout the report is included in the appendices.



In many ways, digital technologies are a double-edged sword. They can empower people to create meaningful opportunities for change, they can enable marginalised groups to participate in activities equally, and can be used by citizens to hold governments and power holders to account. However, these same technologies can strengthen the ability of those perpetuating conflict to engage in sophisticated censorship and surveillance, and disrupt and divide communities with dangerous consequences. Indeed, digital technologies are increasingly a powerful force that is fundamentally altering both peace and conflict dynamics.

2.1. Democratising peace

Rapid technological innovation has helped democratise the role of non-state actors in promoting peace. By decentralising the flows of information, digital technologies have opened up access to global networks for 'ordinary' citizens, enabling them to shape new narratives. Open access to digital media, satellite imagery and data processing software has equipped citizens with a wide array of tools that were once only available to large organisations and governments. In turn, these new horizontal interactions have shifted power away from traditional authorities, paving the way for a more inclusive, equitable and participatory global society that empowers local voices and increases accountability.

2.1.1. Newly empowered communities

Digital technologies have made it much easier for individuals who are usually 'beneficiaries' of peace initiatives to "engage and amplify their own initiatives for peace, quite independent from outside interventions." Indeed, global information flows have flattened; information can now also be transmitted horizontally from peer-to-peer, as well as transmitted to institutions in a bottom-up approach. Participants in the consultation noted that this horizontal shift in communication has equalised the playing field between traditional authorities and ordinary citizens. Elly Maloba (Kenya) explained that governments no longer have the monopoly over 'intelligence', while Constantine Loum (Uganda) said:

"No one has a monopoly in the use of DTs [digital technologies]; anyone can use them to mobilise for the force of good in society."

Furthermore, the decentralised nature of digital platforms has enabled previously marginalised groups to claim agency and proactively engage with one another in positive ways. Women are utilising digital tools and platforms to organise social movements and tackle gender inequality; for instance, Afghan women and diaspora organisations have used social media platforms including Twitter to engage government stakeholders on women's inclusion in the Afghan peace process. Likewise, youth are accessing digital platforms to develop their civic identities and express views that they are not afforded in traditional civic spaces, supported by the Youth, Peace and Security (YPS) agenda.

As 'ordinary' people act as both creators and consumers, they can facilitate a two-way communication that not only increases the spread of information, but also provides opportunities to engage in the public realm and enhances the possibilities for collective action (see section 4.2.1. for further details). As such, local citizens have been able to reclaim space and agency in shaping their collective future. Lumenge Lubangu (Democratic Republic of Congo, DRC) posited that:

"With new approaches through the evolution of technology, the power of the people by the people has resulted in the democratization of peacebuilding and has enabled the people to experience new concrete realities."

2.1.2. A new form of accountability

Digital technologies are helping to fundamentally alter the social contract between state and citizenry, providing new possibilities for conflict transformation at the local level. With most people able to take part in creating and disseminating information, citizens have taken it upon themselves to gather evidence and report on incidents of violence and human rights violations. Chinwe Ogochukwu Ikpeama (United Kingdom/Nigeria) explained that:

"Citizens now report news from the comfort of their mobile and digital devices, which is invariably transmitted to the public. Information on things that would have otherwise been delayed or missed are now easily accessed. Digital technology has given people a voice and created greater insight to unfolding events worldwide."

This participatory approach to reporting has played an important role in shaping alternative narratives and prompting viral social media campaigns and mass protests against authorities, forcing some governments to change their behaviour. Wonder Phiri (Zimbabwe) stated that:

"The concept of citizen journalism is having the effect of forcing government authorities to restrain from their actions as they never know who is recording them and this can dent the image of the government."

Consultation participants provided numerous examples of how digital technologies have shaped and sustained social movements around the world. Jane Esberg (United States, US) explained how protests against corruption in Venezuela relied on WhatsApp, while Adewale Bakare (Nigeria) highlighted the example of the ongoing Hong Kong protest movement that has gained international sympathy and solidarity through social media. Richard Ndi (Cameroon) further highlighted how social media has shone a light on a little-acknowledged conflict:

"Due to the role of social media, the international community is now putting its lenses on Cameroon to ensure that the conflict is resolved through a mediation process that is accepted by both parties to the conflict."

2.2. 'Digitisation' of conflict and violence

While digital technologies have cemented new ways of promoting civic participation and engagement, the use of these technologies has not been able to circumvent some of the imbalances and centralising forces that are replicated in the online space. Lassi Vasanen (Finland) explained that:

"Though social media is often seen as a decentralising factor, its strategic use can lead to the opposite."

Digital technologies can be powerful instruments that enable greater civic participation and engagement, but they can be as equally powerful in the hands of conflict actors, spoilers and autocratic governments. Authoritarian governments are adept at using sophisticated methods for censorship and propaganda, ¹¹ restricting civil society space and undermining grassroots mobilisation. Moreover, disinformation and polarisation are becoming more prevalent in online public forums and social media platforms, creating new divisions and inciting violence that can sometimes manifest itself offline.

2.2.1. Censorship and surveillance

Most digital technologies are not self-regulatory; they can be utilised by conflict actors and authoritarian regimes in fragile and conflict-affected contexts to push their propaganda, centralise control and undermine grassroots mobilisation. Repressive states have used tactics like internet shutdowns, propaganda campaigns and surveillance tools powered by Artificial Intelligence (AI) to monitor and predict actions of potential dissidents. 12 As the space for civil society is shrinking in many contexts, peacebuilders and human rights defenders are also being targeted by state-sponsored spyware that enables remote surveillance of their devices. For instance, Amnesty International has reported numerous cases of state surveillance using hacking tools like NSO Group's Pegasus platform to harvest human rights defenders' personal data.13

This increases the risk of protest and dissent, discredits state opposition and enables the state to restrict access and mobility of individuals or communities who try to mobilise for change. Valentina Baú (Australia) explained that:

"The censorship imposed by governments on digital media platforms carries serious public access limitations to the internet and harsh violations of information rights for citizens. Moreover, these same platforms are being used by governments to circulate propaganda messages. This means that while the introduction of digital platforms can improve political action and participation among citizens, it also opens up opportunities for repression and surveillance from the state."

While in some contexts these actions are done overtly, with the state diametrically opposed to its citizenry, shifts towards stronger surveillance and censorship are often more subtle. A clear strategy taken by many states is to adopt legislation that restricts the use of digital technologies, while employing these same technologies to control or curb digital access in the name of security and good governance. For instance, Ada Ichoja Ohaba (Nigeria) explained that in Nigeria a proposed bill on hate speech is being used as a pretext to quell dissent:

"Most people who are tagged as users of 'hate speech' are most often opponents of the ruling party, or citizens interested in criticising areas in which the government isn't working properly."

Qamar Jafri (Australia) confirmed this potential threat:

"Careful legislation is important regarding online hate speech because this forum may also be used by regimes to restrict freedom of expression and civil society voices against human rights abuses by the regime."

It is important to note that while these strategies are often employed by autocratic states, more governments have started engaging in forms of censorship and surveillance with the stated aim of protecting communities and ensuring good governance. For instance, the increased use of surveillance technologies to combat the COVID-19 pandemic, including adopting mobile location tracking programmes, has raised alarms about the risks to human rights and the fear that unnecessary surveillance measures will be introduced under the guise of public health. 15 As states continue to collect data on their citizens, ongoing issues around the protection of individual rights, the work of civil society and the balance between community safety and security, most of which are unresolved, highlight the potential dangers and ethical dilemmas of 'digitising' too rapidly (see section 5.2 for details).

2.2.2. Radicalisation and polarisation

Digital technologies can mobilise engagement and participation in violent and extremist groups. Criminal and terrorist activities are often conducted under the radar through obscure websites (including in the 'Dark Web'), but their messages are also amplified in social media channels where videos of executions and violent crimes can be broadcast to a large audience and go viral. 16 Likewise, though terrorist recruitment campaigns largely rely on offline interactions, ¹⁷ extremist groups are increasingly adept at using online tools to expand their recruitment of foreign and local fighters this is exemplified by the Islamic State's ability to recruit 40,000 foreign nationals from 110 countries through effective social media campaigns. ¹⁸ More generally, digital technologies have also enabled people who are physically removed from conflict to participate in it without immediate risk. 19 Jacqueline Lacroix (US) stated that:

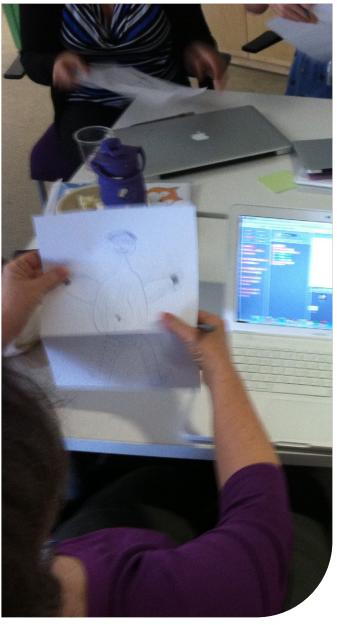
"As is the case with most innovative tools, bad actors inevitably exploit digital platforms for malignant purposes – hate speech, online harassment and doxing, and the use of these platforms to recruit and perpetuate violent extremism."

The presence and success of these spoilers has been bolstered by the very structure and design of digital platforms. Algorithms play an important and obscure role in filtering and determining what information to expose to an individual, often prioritising content that has been accessed before instead of providing divergent views and insights.²⁰ In fact, a recent internal investigation on Facebook's algorithms revealed that they "exploit the human brain's attraction to divisiveness."²¹ In turn, these "filter bubbles" limit people to a narrowed and biased worldview, reinforcing pre-existing beliefs and thereby polarising public opinion. This can exacerbate feelings of marginalisation among disaffected individuals and can spur them into action. Chinwe Ogochukwu Ikpeama (UK/Nigeria) explained that:

"The use of digital technology has invariably created a 'digital separation' which can be seen on various social media platforms. [Spoilers] use these technologies to mobilize marginalized groups to action due to already existing mistrust. Likewise, digital technology has also been used to counter such divisive narratives, but not on the same scale as the perpetrators."

A compounding factor is the circulation and prevalence of untrustworthy information in vulnerable online environments, which can sow divisions between online and 'offline' communities, spread fear and anger or incite violence against a certain group. Facebook acknowledged in a public apology to the Sri Lankan government that disinformation and incendiary content on its platforms factored in the violence that erupted during the 2018 anti-Muslim riots.²² Likewise, minority Shia Muslims in Pakistan have been blamed on Twitter for importing the COVID-19 virus from Iran, which has led to an increase in inter-communal tensions both online and offline.²³

A well-crafted message can emulate a legitimate person-to-person interaction, spreading false information through a rumour that is perceived as credible and plausible.²⁴ This was acknowledged by consultation participants, with Lumenge Lubangu (DRC) stating that:



"The information contained in rumours is not necessarily false, but rather unofficial in the sense that the truth they express may be that in which the group wants to believe, which is a sufficient criterion to make it 'true information'."

Alarmingly, false information of this kind does not require sophisticated digital tools to spread and can be conducted in relatively low-tech digital environments to great effect. It largely relies on existing fault lines within a society and the widespread use of digital platforms to spread false information at an alarming rate.

Case study: How the use of social media contributed to dehumanising Myanmar's Rohingya community

Facebook has had a tremendous success in Myanmar, where the majority of its 20 million internet-connected users equate Facebook with the internet. Despite being a latecomer to the internet revolution, Myanmar saw mobile phone penetration rates grow exponentially, and most users' first experience of internet technology was on their smartphone using Facebook. The social media app often came pre-loaded with new phones and was promoted via a 'Free Basics' programme that removed data charges for using the app and generated free news content. As a result, most internet users in the country relied primarily on Facebook as their main source of information.

Despite this exponential growth in internet usage, digital literacy has remained very low with most users unable to verify or differentiate content, including real news from misinformation.²⁷ Moreover, the liberalisation of media enabled divisive voices to foment ethnic and religious conflict on social media, proliferating dangerous rumours and hate speech against minority and religious groups, chief among them the Rohingya community. Nationalist extremist groups such as the 969 Movement and the Association for the Protection of Race and Religion (known as Ma Ba Tha) were able to capitalise on platforms like Facebook to pursue their anti-minority and anti-Muslim agenda.

Over years, Facebook users were continuously exposed to a steady stream of hateful content

against minority groups including Rohingya Muslims. This drastically increased in 2017 and was bolstered by a systematic propaganda campaign that had been supported by members of Myanmar's military. Made-up stories were narrated on Facebook pages, claiming that Rohingya Muslims were stockpiling weapons in mosques to attack the Buddhist population and that Buddhism faced an existential threat, calling for decisive action against the Rohingya. Py August 2017, a military crackdown against a Rohingya rebel group sent hundreds of thousands of Rohingya Muslims fleeing across the border to Bangladesh.

In the aftermath of the crisis, an investigation by the UN determined that the Facebook platform played an important role in enabling the spread of hate speech against the Rohingya. Under fire by the media and policymakers, Facebook later commissioned its own report, Human Rights Impact Assessment: Facebook in Myanmar, which corroborated that Facebook's platforms (including WhatsApp, Messenger, Facebook and Instagram) were used by conflict actors in Myanmar to incite violence against the Rohingya community living there. Facebook admitted guilt for its lacklustre response before and during the crisis, and hired hundreds of native speakers and reviewed their policies to better combat hate speech and dehumanising language.³⁰ Despite these measures, hate speech has continued in Myanmar and fears remain that the remaining half million Rohingya still living in the country are at risk of further atrocities.



The use of digital technologies in peacebuilding work is not a novel phenomenon. In the mid-1990s, community centres in North Belfast ran mobile phone networks to counter rumours and keep communities connected during stretches of sectarian violence. Fahamu, an African social activism organisation, pioneered 'e-advocacy' in 2004 by organising widespread social justice campaigns using mobile text messaging (SMS) technology. And the importance of data collection for conflict prevention gained prominence in the early 2000s with intergovernmental initiatives such as the African Union's (AU) Continental Early Warning System (CEWS). 33

The field of technology for peacebuilding, colloquially known as 'peacetech', has been growing steadily in importance as breakthroughs in technological innovations, from the internet to ICTs, started to influence the periphery of security and peacebuilding.³⁴ With the UN placing more importance in capitalising on the 'data revolution' in its post-2015 development agenda, many actors have taken to utilising digital technologies as a central component of their peacebuilding work. This is evidenced by the establishment of important organisations such as the US Institute of Peace's (USIP) PeaceTech Lab, tech-focused peace research centres in **Stanford**, Harvard and Massachusetts Institute of Technology (MIT), as well as hundreds of other tech-related initiatives, including Build Up, Peace Direct's own Peace **Insight** platform and the Toda Peace Institute's peacetech research programme.³⁵ Likewise, the ICT4Peace Foundation was established to champion the use of ICTs for peacebuilding and works closely with the UN to strengthen its capacities to map, share and use data across its various agencies and locations.36

Though tech-based interventions have flourished over the past decade, the field is still developing and has yet to become mainstream in the peacebuilding space.³⁷ Beyond the operational advantages that inherently come with digital technologies (see section 3.1. below), many questions remain around the strategic use of these technologies in peacebuilding work. With the space technology inhabits in peacebuilding still in flux, ambiguities around roles and boundaries are being debated and negotiated.³⁸

3.1. Operational and programmatic advantages

To many consultation participants, a big part of this shift to digital technologies has to do with the inherent operational benefits that technology provides. Particularly so in helping to overcome logistical, financial and communication barriers that have traditionally impeded the effectiveness of peacebuilding programmes. As Jacqueline Lacroix (US) stated:

"On a very basic level, technology makes it possible to connect directly with communities affected by conflict, which would have previously required someone in the field and would have faced much higher costs (both monetarily and in terms of time) and risks."

More specifically, Elly Maloba (Kenya) highlighted the utility of technology in enhancing project management and accountability, especially when it comes to financial management issues in the field:

"Out in the field, digital technology was very helpful in ensuring accountability of project funds. Hitherto participants to activities would sign attendance lists and reimbursement forms before receiving hard cash. When we started using mobile money transfers directly to recipients' phones, it made it easier to audit activity-based workplans and funding. This sealed many loopholes for financial management."

Likewise, the consultation highlighted how digital technologies have facilitated data collection and risk management in programme implementation and to peacebuilders themselves. Contantine Loum (Uganda) emphasised the ease in which information can be sourced and disseminated (see section 4.3. for examples), while Pradeep Mohapatra (India) recognised its utility in mitigating, adapting and transferring risks. Ada Ichoja Ohaba (Nigeria) added that:

"Digital technologies have helped us record positive impacts as they have reduced the risk we face as field workers because we can get early warning signals from conflict-prone communities before going into the field.

3.2. Increased visibility and participation

While the operational benefits of using technology in peacebuilding programmes are clear, a key value that civil society actors have placed on digital technologies is the ability to expand their audiences and strengthen the visibility of local peacebuilding. Chrisitan Cito Cirhigiri (Belgium) said, for instance:

"Digital technology, particularly platforms such as Facebook and Instagram, have been important for our [peacebuilding] work of not only increasing the visibility of youth-led peacebuilding but also sharing positivity around youth as agents of change."

With the usage of technology rapidly increasing in the developing world, peacebuilders have more opportunities to connect local efforts to global audiences and highlight the effectiveness of their work. Wonder Phiri (Zimbabwe) exemplified this:

"Traditionally, we interacted with our target group using training workshops or seminars. Each activity would reach out to approximately 30 participants. Digital technology is enabling us to reach out to ten times more participants as they follow us on social media. In addition, other organisations disseminate our work to their direct beneficiaries."

Peacebuilders often work in fragile and conflict-affected contexts where access to communities is limited. In this regard, digital technologies have provided the means to engage communities in hard-to reach areas and include them in peacebuilding initiatives. Jacqueline Lacroix (US) provided an example of this:

"In my work with PeaceTech Lab developing lexicons of hate speech in Libya and Yemen, we would not have been able to reach nearly as diverse a group of respondents as we did without the use of technologies ranging WhatsApp and phone calls to Google Forms and other online tools. [...] The use of technologies greatly enhanced the overall scope of the project and the geographic reach."

The ease in reaching communities also opens up the space for peacebuilders to engage more voices and promote alternative narratives, allowing previously marginalised communities to speak up about issues affecting them. Elsa Marie DSilva (India) explained that:

"We have used social media very effectively to get people to talk about taboo topics like sexual violence and abuse, share their experiences, create communities of support and gain confidence in breaking the silence."

By design, digital tools encourage a high-level of interaction, which facilitates the networking of groups previously shut out of processes. This can encourage new avenues of participation and engagement that increase local ownership of peacebuilding activities. Valentina Baú (Australia) said:

"These technologies allow communities to have a voice, to contribute content and ideas, and even to learn new skills. Effectively designed [peacebuilding] projects in this area have the potential to be transformative and truly enhance participation."

3.3. Potential for innovation

Beyond breakthroughs in efficiency and accessibility, digital technologies have the potential to be harnessed for major peacebuilding innovations. Tech-based solutions are often used to address gaps and complement existing peacebuilding processes rather than creating new ones. But as the peacetech field progresses, new actors – such as entrepreneurs and tech developers – are entering the peacebuilding space and designing technology with direct peacebuilding benefits in mind.

Seemingly futuristic ideas are already being used to advance peacebuilding. Whether it is <u>HIVE Pakistan</u> using holograms of revered figures to promote

coexistence and social harmony, using Virtual Reality (VR) installations such as <u>The Enemy</u> to close the empathy gap between warring parties, ³⁹ or creating video games for peace such as <u>Junub Games's Salaam</u> which highlights a refugee's experience of fleeing conflict, ⁴⁰ practitioners continue to find new ways and approaches to engage others in peacebuilding. In these instances, digital technology is no longer re-purposed to support peacebuilding but rather strategically designed to reshape how peacebuilders conduct their interventions. As Chinwe Ikpeama (UK/Nigeria) said:

"Digital technology has led to an evolution of peacebuilding modes, techniques and practices."

Case Study: HIVE Pakistan

HIVE is a Pakistani civil society organisation working to counter extremism and work towards an inclusive, peaceful society. In 2018 they started the AIK – Better Together project. The AIK project ("one" in Urdu, standing for unity) aims to build community resilience and counter extremist messages. Alongside more "traditional" activities – such as workshops, training, and community engagement – the project makes use of holographic technology to bring to life their message of interfaith harmony, pluralism and social cohesion in a new and engaging way.

AIK – Better Together's use of technology is both creative and novel. HIVE uses the words and ideas of Pakistan's founder, Quaid-e-Azam Muhammad Ali Jinnah. A revered and respected figure in Pakistan, Jinnah called extensively for interfaith harmony, pluralism and social cohesion. HIVE has taken his words and use 3D holographic representations of Jinnah to put together an audio-visual performance that it screens at large public events around Pakistan.

At these gatherings Jinnah appears to speak directly from his speeches and writings, which is

presented alongside commentary on the current state of Pakistan, and calls on attendees to work for unity and peace. While Jinnah's ideals are taught at schools throughout Pakistan, many attendees note that hearing them in this way has a much more profound impact on their understanding of the founding principles of Pakistan. In addition to the holographic screening, these events also include other art installations to reinforce Jinnah's message.

As of 2020, thousands of people have attended screenings across the country. HIVE places particular emphasis on reaching grassroots communities in semi-urban locations, and has held events in locations in Karachi, Swat. Lahore and Kasur. HIVE recognises that alone these events are not enough to change attitudes and behaviour, but they can start a conversation and dialogue around matters of peace affecting Pakistan. Therefore, HIVE has developed an extensive programme of follow-up activities in the locations the screenings take place to build on the impact of the screenings, such as decorating rickshaws with images of Jinnah and his quotes, as well as training workshops with community activists and social media outreach.



The use of digital technologies in peacebuilding has evolved drastically in recent years and is now characterised by a wide and diverse variety of initiatives and approaches. Rapid innovation has been accompanied by experimentation, and peacebuilders around the world have continued to adopt digital technologies as key resources by which they can actively participate and contribute to conflict resolution and peacebuilding. While new and innovative tech-based approaches will inevitably come to the fore, currently available strategies highlighted from the consultation can help civil society and donors alike to make informed decisions about the appropriate uses of technology in their programming.

4.1. Promoting peace through digital communication

"Talking about violence is easy. Talking about peace is hard."41

According to Search for Common Ground, communication is "an interactive process, involving a multitude of actors and information flows." As a growing importance is placed on interactivity in the digital space, peacebuilders have adapted to digital communication approaches in order to engage people more directly (and frequently) in peace narratives and create open spaces for marginalised voices and personal experiences to be amplified, re-shaping attitudes and behaviours in the process.

4.1.1. Online peace messaging

As grassroots communication swaps traditional media for online platforms, peacebuilders are increasingly relying on a variety of digital tools to promote their messaging around peacebuilding to a wider audience. These include online blogs, social media campaigns, digital TV/radio programmes and multimedia approaches such as virtual peace talks, webinars and photo competitions.

The purpose of this approach is to sensitise people around the values and norms of peacebuilding, attempting to shift away from conflict narratives and focus instead on commonalities like shared culture and collective well-being. Consultation participants noted the importance of peace messaging, claiming that it provides interactive ways to get people more engaged with a cause and promote a narrative that can change underlying attitudes and behaviours. This is vastly different to online 'counter-messaging', a core tactic of preventing/countering violent extremism (P/ CVE) programmes used to disrupt online content disseminated by extremist groups and individuals, which can further exacerbate isolation and polarisation.⁴³ Jacqueline Lacroix (US) posited:

"I believe there is potential for positive messaging and narrative-focused programs through digital or traditional media to positively impact problems of polarization and adversarial identity formation."

Awareness-raising and positive messaging around peace is particularly important in fragile contexts where a history of conflict or divisive events like elections have led to violence. Positive peace messaging on social media played an important role in instilling a desire for peaceful change in recent elections in Ghana and Liberia,⁴⁴ and positive messaging around the contributions of youth have increased youth participation in peacebuilding.⁴⁵ Participants acknowledged this strategy, with Arnold Djuma Batundi (DRC) stating that online peace messaging was used to sensitise people against conflict in the DRC's recent presidential elections, while Illa Sani (Niger) stated:

"We implemented an awareness-raising and information campaign that primarily targeted youth on social media, including Twitter, Facebook, WhatsApp, etc. and managed to reach thousands of youth with our messaging around peacebuilding and non-violence conflict management."

An important step in peace messaging is to recognise and encourage the contributions of marginalised groups. This can help dismantle negative perceptions while simultaneously providing opportunities for marginalised voices their insights and knowledge. Lassi Vasanen (Finland) provided an example of how this could be done:

"How can one go about strengthening narratives from marginalized communities? In one of our peace projects, this consisted of four components: (1) supporting these voices by mapping the "public mood" and creating messages; (2) engaging in dynamic outreach to stakeholders and partners; (3) building coalitions and networks; and (4) utilizing knowledge management tools in order to do all of this more efficiently and effectively."

Case study: Wagiga Hadid and countering rumours and misinformation in South Sudan

South Sudan has suffered from a disastrous civil war marked by atrocities, ethnic and gender-based violence, the recruitment of child soldiers and other war crimes that have killed hundreds of thousands of civilians and displaced millions in neighbouring countries across East Africa. Despite the establishment of a transitional coalition government and a negotiated peace roadmap, deep mistrust and ongoing intercommunal tensions remain a major impediment to lasting peace. In this fragile context, polarising rumours, hate speech and misinformation are rampant. For instance, according to the UN Children's Fund (UNICEF) six out ten rumours related to COVID-19 that are circulating in South Sudan are false.⁴⁶

To tackle this issue, the Sentinel Project established the Hagiga Wahid project (Juba Arabic for "One Truth"), essentially an online platform that works to dispel malicious rumours and misinformation which can contribute to intercommunal tensions and lead to violence. Focused on the South Sudanese context as well as refugee settlements in northern Uganda, Hagiga Wahid fills the information gap by engaging South Sudanese in collecting, verifying, and responding to rumours and misinformation.

Members of the public are invited to submit rumours that they have heard to the project via zero-cost SMS messages or a free mobile app. Hagiga Wahid then submits these reports to a structured process

of verification, dissemination and intervention. On receiving a report, the project team's first task is to verify the information. Local sources of knowledge – such as community leaders, local non-governmental organisations (NGOs), or local authorities – are contacted to determine whether the piece of information is true or false. Upon receiving independent verification or refutation of the report, the platform will disseminate findings back to relevant stakeholders. Finally, in situations where a rumour proves correct and has a high chance of leading to violence, the project team will work with relevant actors to defuse the situation.

In recent months, the project has been able to turn this infrastructure and approach toward the COVID-19 pandemic. Using the same systems and methodology, Hagiga Wahid has been able to tackle misinformation and falsehoods around the coronavirus.

Hagiga Wahid provides an accurate, independent, and trusted source of information for refugee and host communities, resulting in a reduction in community tension, as well as encouraging a critical approach to rumours among the target groups. Furthermore, the digital technologies the project employs allow the system to work with communities across both sides of the border and between communities, enabling rumours to be dispelled before they have a chance to spread more widely.

4.1.2. Digital storytelling

Digital technologies have opened up opportunities for local peacebuilders to share their own stories and communicate lived experiences of conflict. As an instrument for socialisation, storytelling focuses on empowering personal narratives and highlighting a state of transformation or change in a way that is relatable and impacts the reader.⁴⁷ Significantly, storytelling can assign value and meaning in ways that data and figures cannot.

For local peacebuilders, it is important to use storytelling strategies in order to validate the transparency and authenticity of their work. Dennis Ekwere (Nigeria) explained how he communicates to his audience:

"The strategy I use is my real-life story, using social – especially Facebook – to tell the story, draw the attention of stakeholders to the post and make it a trending issue. My tactic is always to be precise, factual and truthful with my claims. That way, I do not spread fake news or lay claims of falsehood."

Digital stories are not exclusively written narratives; they often include video-narratives, recorded voice/ audio messages, or still and moving images to help tell the story. Multimedia content can help make stories more creative and potent by expressing intangible aspects in a visual or oral format. Valentina Baú (Australia) provided an example of a participatory photography project she worked on in Kenya:

Digital photography, and the immediate access it provides to images, has been crucial in establishing a dialogue between young people from different tribes. The stories told around the images taken were incredibly powerful and allowed participants to learn more about each other's experience and community narrative.

Other multimedia examples include: Border Lives, an oral history project that created a <u>video series</u> which explores the lives and experiences of people living in the border between Northern Ireland and the Republic of Ireland; <u>Zoomin.TV</u>'s <u>Local Heroes</u> video series which profiles individuals at the grassroots level who try to change their communities for the better, and <u>Idlib Lives</u>, an interactive website produced by The Syria Campaign that spotlights leading activists working towards peace in Syria's northern Idlib province.

Digital stories also provide another avenue for marginalised communities to amplify their voices and tackle prejudice and discrimination. Digital storytelling is rooted in the notion of 'democratised culture'; storytelling allows for a diversity of voices to be heard, marrying diversity awareness with communication and advocacy to tackle prejudice and stereotyping, and build connections. Indeed, consultation participants saw transforming attitudes and behaviours as an express aim of their digital peacebuilding work. Aishatu Gwadabe (Germany/Benin) explained that:

"Through the tool of digital peace storytelling, we aim to enable voices to express a diversity of experiences. [...] It connects with the practice of active listening to overcome prejudice, leading towards a transformative learning process by motivating people to undergo self-transformation."

Furthermore, storytelling can be utilised as a form of truth-telling in order to heal traumatic experiences and promote social coexistence. Anna Dupont (Mali) explains that the Commission on Truth, Justice and Reconciliation in Mali has been looking at ways to increase awareness around their work:

"They recently carried out their first public hearing with victims of violence from all sides who narrated stories. The first meeting was quite powerful. It was eventually shown widely on TV and in video format on social media channels. Five more public hearings are planned in the next few months."

Significantly, telling stories about peace fits within a larger practice of active listening and promoting a culture of peace. This is essential to enact nonviolent social change, especially in divided societies. Christian Cito Cirhigiri (Belgium) explained that:

"We have also learned that it is critical to think of online storytelling as a building block on the continuum ending with transforming peace narratives in digital spaces. The question then is not only how we apply storytelling in peacebuilding but also what kinds of peacebuilding narratives are we trying to transform."

Case study: Peacemaker 360 – youths as active agents of change

Young people are at the forefront of many movements and community-based efforts around the world that are advancing peace and promoting more inclusive and equitable societies. Yet, despite the historic adoption of the UN's youth, peace and security agenda, youth peacebuilders remain largely excluded from decision-making processes and their positive contributions are seldom acknowledged in digital media.

Recognising this gap, Christian Cito Cirhigiri, a young peacebuilder originally from the DRC, founded Peacemaker 360 in 2016 to give more visibility to youth-led peacebuilding and connect local peacebuilders from around the world. Peacemaker 360 uses online social media platforms to profile youth peace activists and share their stories, with the ultimate goal of celebrating, connecting and amplifying global peace activism.

The platform uses digital storytelling techniques to highlight transformative narratives of change and resilience and develop peer youth networks. These include publishing online blogs and interviews profiling youth activists, hosting targeted livestream discussions on Facebook,

and creating illustrations and photo portraits of individual youth peacebuilders on Instagram. Over four years, Peacemaker 360 has shared the stories of over 4000 youth peacebuilders in 45 countries and has become a key interactive space for sharing knowledge on youth-led peacebuilding and promoting youth as positive agents of change.

Despite this success, Christian noted that their storytelling efforts are only one part of a continuum that can lead to transforming peace narratives in digital platforms. The critical component is determining what narratives they have the power to change and how to assess the behavioural change that comes from their storytelling. To that end, Peacemaker 360 is developing its own impact monitoring tools so they can improve the quality of their storytelling and align it with the desired narrative change they seek. Christian asserted:

"We believe that by showcasing youth peacebuilders' stories in social media platforms such as Facebook, Instagram and Twitter, we contribute in a small way to building a bridge of productive dialogue between youth and others."

4.2. Digital mobilisation and networking

As briefly discussed in section 3.1, digital technologies have opened new avenues for networking and mobilisation, breaking down communication barriers between physically separated communities and increasing opportunities for collective action. This shift has enabled local peacebuilders to establish alternative spaces for engagement and exchange that build awareness around peacebuilding and can tap into a large constituency of supporters to enact positive change.

4.2.1. Developing online peace constituencies⁴⁹

Digital technologies have reduced the barrier to entry for people to participate in social and political movements, and are playing a constructive role in mobilising grassroots participation at a global level. With public discourse shifting online, users are increasingly connecting to new, powerful global communities of like-minded people who can be propelled into action on behalf of a domestic or global cause. The development of online communities can cut across diverse sociocultural and political landscapes, binding users through normative values and a heightened sense of solidarity. Adewale Bakare (Nigeria) said:

"[Digital technology] is strengthening and building networks of different people across the globe with a common identity or values around social and economic development and making peacebuilding effective."

Peacebuilders have capitalised on the development of these communities to create new constituencies for peace, using them as vehicles for peace promotion. Mohamed Farahat (Egypt) explained that:

"In the digital age, technology plays a significant role in advancing peacebuilding, especially in mobilizing people and raising their awareness on the importance of peacebuilding, mobilizing people to participate in the process."

In an era where the physical space for civil society is shrinking, online mobilisation has proven effective in circumventing government crackdowns by mobilising in a dispersed and network-like manner, using encrypted communications and coded language with their members. To that end, organisations like the Paradigm Initiative, Tactical Technology Centre and Mobilisation Lab have supported activists on how to counter authoritarian governments in the online space. 52

These communities can leverage digital technologies to be more agile and organise themselves across borders more efficiently, with the ability to 'activate' remote supporters without a large resource investment. For instance, the <u>+Peace Coalition</u> has coordinated multiple global online campaigns, mobilising communities and organisations to raise awareness about peacebuilding in their contexts. Moreover, fast and easy communication can accelerate group decision-making and online communities' responsiveness to a crisis. Claire Devlin (UK) said:

"Social media in particular has the capacity to link peace movements in a much less hierarchical fashion than would otherwise be possible and allow consensual decision-making."

Through online mobilisation, peacebuilders can connect their local peace agendas to wider online networks. These networks can create online hubs for regular discussions, coordinate social media campaigns, engage in online lobbying and boycotts, and organise e-petitions, which have been popularised by platforms such as Avaaz, As Degrees and Change.org. While critics have dismissed some of these actions as 'slacktivism', 53 these mobilisation tools go a long way in helping to raise awareness of an issue, which over time contributes to stronger collective identities. Dennis Ekwere (Nigeria) acknowledged their inherent value in pressuring targeted stakeholders:

"I have used social media to drive social change in my country. Through online petitions, we have attracted the concerned stakeholders to engage in dialogue and conciliation."



Moreover, civil society online networks can play an important role in strategically countering misinformation and hate speech. For instance, #defyhatenow, a South Sudanese community-based organisation operating across Africa, has worked to raise awareness around the dangers of misinformation and training fact-checkers. Likewise, civil society groups in Brazil have banded together to combat misinformation around the COVID-19 pandemic.⁵⁴

Consultation participants further recognised that youth are a key mobilising force for collective action. Research has also highlighted that youth are among the most engaged in political and civic life online,⁵⁵ and millions of youth are using digital platforms to voice their opinions and undertake in progressive forms of collective action.⁵⁶ Consultation participants recognised this momentum and saw activities seeking to facilitate this process as essential to advancing the Youth, Peace and Security (YPS) agenda. Constantine Loum (Uganda) asserted that:

"We need to engage youth as key constituents in making peace; it is akin to the gender mainstreaming, where a deliberate effort is made to keep youth engaged through specially designed peace program targeting them as consumers or implementers. [...] So current peacebuilders need to target them in peacebuilding and motivate them in harnessing DTs [digital technologies] as a force of good for the world."

4.2.2. Platforms for dialogue and exchange

Digital technology has made possible near-instant, affordable communication between people based anywhere in the world, and in doing so has opened up possibilities for important exchanges, developing partnerships and peer networks that foster knowledge and improve peacebuilding practice.

Some of the most immediately apparent use of digital technologies in this regard are initiatives using tools such as online video calls, social networks, or even videogames, to promote cultural exchanges between individuals from groups that would otherwise find themselves separated by borders or divided by conflict. One such example is Sharing Perspectives Foundation's Virtual Exchange. Ami Carpenter (US) explained that:

"Virtual exchanges – defined as sustained, technology-enabled, people-to-people education programs – can vastly expand the number and diversity of young people who have access to profound cross-cultural experiences as part of their education."

Similarly, James Offuh (Cote d'Ivoire) stated that:

"Digital intercultural dialogue is a platform for learning, deep listening and effective communication. I call it a 'digital living system', where everyone is deeply heard without critics, accusations or condemnation. Every opinion is part of the whole – a community collective of wisdom. It dignifies and humanises every participant from all cultural diversities."

In addition to offering peacebuilders tools they can make use of in their work, digital technologies provide access to an ever-expanding array of opportunities for learning, networking, and collaboration. Numerous initiatives have emerged in recent years that provide practitioners space to connect, learn from each other and share their experiences. Indeed, the analysis in this report is based on discussions hosted in one such platform, Peace Direct's <u>Platform4Dialogue</u>.

Case study: Peace Direct's Platform4Dialogue

Launched in 2019 by Peace Direct,
Platform4Dialogue brings together and connects
people around the globe to engage in discussions
on issues of common interest. Over the past 12
months Platform4Dialogue has hosted discussions
between peacebuilders on topics such as youth-led
peacebuilding, the impact of COVID-19 on local
peacebuilding, and recommendations for the Global
Fragility Strategy.

One of the primary goals for Platform4Dialogue was to create an inclusive space for discussion and collaboration. Recognising that many of the participants will face challenges and obstacles when accessing a website such as Platform4Dialogue, the project made a conscious effort to remove as many of these obstacles as possible. For example, allowing for real-time translation of discussions into these English, French, Spanish and Arabic; following accessibility best practices to accommodate those with visual impairments; and ensuring usability in low bandwidth environments.

An online discussion platform such as Platform4Dialogue also enables thinking about inclusion in ways not possible in face-to-face meetings. The nature of the way Platform4Dialogue works means that discussions are held asynchronously - in other words participants don't need to be online at the same time. They can participate at times that suit them. This reduces many of the barriers that participants may face compared with real-time discussions. Participants can be based anywhere in the world and are not required to set aside large blocks of time. This allows discussions to include a real breadth of viewpoints and allows for conversations that represent greater diversity. Participants can also set their own pace, they have the time and space to read, absorb and reflect on the discussions before contributing their own thoughts, perhaps enabling a richer and deeper dialogue.

Moderation and facilitation of online discussions presents some unique challenges – the anonymity provided by the platform may enable participants to engage in a negative way; or as participants drop in



and out of the discussions it takes concerted effort to ensure the discussion builds on contributions already made instead of repeating the same points over again.

Online discussions such as Platform4Dialogue have benefits too: it is far easier to follow parallel conversations and identify opportunities to bring conversations together; there are more ways to take participants outside of the main discussion; and it is possible to remove disruptive or malicious contributions.

One of the motivations for Platform4Dialogue came from Peace Direct's need to create a discussion space for participants in conflict-affected contexts. In many contexts in-person gatherings of civil society may not be possible due to safety concerns or be affected by travel limitations. In situations like these an online platform can enable discussions that may not otherwise be possible.

By developing Platform4Dialogue instead of relying on existing solutions, Peace Direct has sought to address many of the ethical and safety concerns that come with the use of technology. It ensures that potentially sensitive data will not be sold or passed on to third parties, for example, and includes features to improve the safety and security of participants, for example allowing anonymous participation.

4.3. Gathering data for conflict prevention

4.3.1. Crisis mapping and crowdsourcing

By and large, most attention in this space has been paid to crisis mapping initiatives, with projects such as the <u>Ushahidi platform</u> regularly used a reference point to demonstrate the value and innovation of 'peacetech'. ⁵⁷ Crisis mapping initiatives rely on tools - such as satellite imaging, geographic information systems (GIS), geographic positioning systems (GPS) and mobile technology - to collect, track, analyse and visually present data and statistics through the use of interactive maps. With much of the data geo-tagged or -located, practitioners can filter through streams of information, pinpoint 'hotspots' of violence, determine where to focus their peacebuilding interventions and advocate for targeted support to mitigate against violence. Examples of crisis maps include global platforms such as the <u>Armed Conflict Location &</u> Event Data (ACLED) project, as well as more localised crisis maps such as the Kivu Security Tracker and LRA Crisis Tracker, where the movements of armed groups and incidents of violence are tracked and recorded. Moreover, online crisis maps are adaptable and allow new information to be overlaid and filtered along with existing data. For instance, International Alert's Philippines team adapted existing conflict maps to include data on COVID-19 hotspots, highlighting areas where infections, vulnerabilities and tensions converge.58

This approach has had very clear applications in improving early warning and early response (EWER) systems. An inherent operational challenge of early warning systems is to ensure that warnings are sent to the appropriate stakeholders at the right time, and any delay or inability to send the relevant data greatly diminishes the value of that information. Aishatu Gwadabe (Germany/Benin) described how this problem affected an early warning system she had worked on:

"The problem of administrative delays and anachronisms in the [offline] system were major impediments to the smooth running of our early warning system, which became a problem for achieving our project objectives. In order to gain speed and [improve] ergonomics, we decided to digitise all operations of our early warning system."

Many participants recognised the value of digital technologies in supporting early warning initiatives, including how they streamline the documentation and mapping of incidents of violence and human rights violations in near real-time, allowing for rapid information sharing and more timely responses. Hassan Mutubwa (Kenya) claimed how GIS and mobile SMS systems ensure credibility via effective cross-referencing of information and sources, while Elly Maloba (Kenya) noted that:

"Digital technologies have had a significant impact on how we collect, analyse and disseminate conflict early warning and early response reports. A mixture of digital tools helps in mapping and synthesising reports in order to present compelling cases about conflict which are met with appropriate responses from all levels."

Traditionally, collecting data on violence has relied on trained field monitors or trusted informants who manoeuvre on the ground, but logistical and security challenges often prevent them from verifying and triangulating information. However, with the advent of online and mobile platforms, peacebuilders are now able to collect vast amounts of data from multiple, decentralised sources through online crowdsourcing techniques. For example, Amnesty International has set up its <u>'Strike Tracker'</u> project in Syria, which crowdsources information from digital activists on how the US's airstrikes have destroyed the city of Ragga in its battle against the Islamic State. Another recent example is the Coronavirus Tech Handbook, which has crowdsourced ideas and tools from thousands of expert contributors to support a coordinated COVID-19 response across a variety of disciplines.

This emerging practice has not only allowed for more data entry points to inform analysis and provide a feedback loop, but it has also opened the space for traditionally marginalised voices to be heard. Ada Ichoja Ohaba (Nigeria) attested that:

"Crowdsourcing can give a voice to marginalised groups because it helps community members give adequate information of cases which were not properly handled by the authorities." Indeed, crowdsourcing data can provide the 'big picture' data and trends that decision-makers seek in order to make informed decisions about how to respond. However, it is important to note that crowdsourcing can run into certain sustainability, ethical and security challenges, which will be discussed in sections 5.2.1. and 5.2.3; therefore, it is important to consider when to use it and look into ways where it can complement more traditional crisis mapping work.

Case study: Safecity and sexual violence in India

Safecity is a crowdsourced mapping project which documents stories of sexual violence in public spaces. The project invites women to anonymously submit reports of sexual violence to an online platform that collects and displays them in an interactive online map. Launched in India in 2013 as an immediate response to a horrific gang rape on a Dehli bus, the project has to date collected over 12,000 stories from cities across India, and the rest of the world.

The goal of the project is two-fold. On a very immediate, practical level the data allows women – and everyone in general – to identify locations where they may be at higher risk of sexual violence. At the same time, by documenting incidents of sexual violence it is possible to identify trends and hotspots, which can be used by NGOs and local authorities to respond accordingly.

Data is collected in two ways. It's possible to post reports directly to the website, in anonymous and secure way. However, recognising that many do not have the access to technology that would allow them to do this, Safecity also collects reports manually through in-person workshops, focus group discussions and reports from local authorities.

This data is then aggregated onto an interactive online map which enables anybody with access to view and analyse the data. Safecity also produce

regular reports and dashboards that present the data in an accessible, and actionable, way.

Safecity has partnered directly with local NGOs, police departments, and other local authorities to facilitate co-ordinated responses to the



problems the reports highlighted. Police patrols in Mumbai have changed their patrols to more effectively police known hotspots. Over 13,000 people have attended workshops to raise awareness of sexual violence and legal rights. Roundtables have been contacted to discuss and identify solutions. Safecity is also able to provide services directly to victims of sexual violence and harassment.

Collecting, presenting, and publicising data in such a way has proved to be an effect mechanism to hold institutions to account; it's hard to ignore the data and direct experiences of women. Safecity note that this often has an empowering effect for the women submitting reports and attending the workshops. It offers them a space to share their experiences, discover that they are not alone, and help them understand the context in which sexual violence takes place.

4.3.2. 'Big Data' and blockchain technology

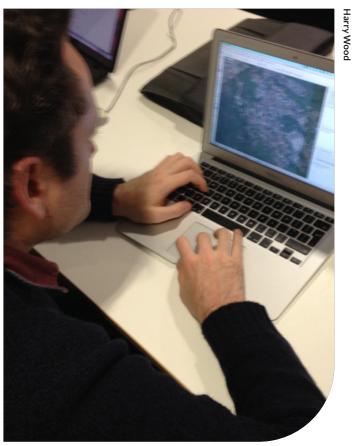
As datasets continue to grow in variability and complexity, attention has shifted to the potential benefits of 'big data'60 and AI programmes to process large stores of data in order to generate insights and actionable information. Most of this data derives from the private sector, and includes 'data exhaust' – data trails left by users' online activity, behaviours and transactions - as well as online information and crowdsourced data.

The breadth, complexity and speed of big data has made it increasingly valuable in supporting peacebuilding outcomes. It has huge benefits not only for early warning work, providing rapid and accurate information that further reduces the time lag between warnings and timely responses, but it also helps to generate real-time awareness of a situation and beneficiary behaviours that informs programmes and policies. 61 Examples of big data initiatives include analysing radio broadcast data to deep data mining of social media platforms involving a combination of human and machine-learning processes to understand people's perceptions of a given issue or topic. A recent and important application of big data has also been to monitor and predict outbreaks of the COVID-19 epidemic using mobile phone data and remote imaging to engage in contract tracing.62

Indeed, this sub-field of peacetech has gained traction with policymakers because of the potential it holds, including the UN who has established a 'big data' lab called **UN Global Pulse**. Mohamed Farahat (Egypt) concluded that:

"Big data has significant implications for decision-making, by assisting decision-makers to identify the problem and find proprietary solutions in the context of peacebuilding. Big data will play a very important role in the monitoring and analysis of people's behaviours in conflict areas."

Despite the manifold possibilities that big data presents, it is important to note that at this stage it cannot be a replacement for traditional research and data, as conventional research methods are still needed to validate big data and help identify potential biases within their datasets.63



There has also been an increasing interest in the potential of advancing peace and democracy through blockchain technology, a sophisticated and distributed online ledger that ensures trustworthy exchanges and transactions which cannot be tampered with. Originally associated with Bitcoin currency,64 blockchain technology applications have been developed to enable social change. For example, Democracy Earth Foundation piloted a blockchain-powered digital voting platform called Plebiscito Digital (Digital Plebiscite) which allowed Colombian expatriates to vote on the peace treaty negotiated by the Colombian government and the FARC rebel group.65 Blockchain technology, however, remains at an early stage of development, and therefore many design choices and suitable frameworks for its use in peacebuilding need to be considered. Nonetheless, as Travis Heneveld (US) said:

"Digital tools based on distributed ledger and AI technology, combined with the right inclusion, ethical and other considerations, will help ensure a safer and more trusting sharing of information."

4.4. The utility of 'offline' technology

There is a tendency to equate digital technology with the internet and connectivity. Much of the focus of digital technology is directed toward the impacts of the internet, particularly the role of social media, the ease and immediacy of digital communication and the positive and negative impacts of our increasingly connected world. However, the 'digitisation' of peace and conflict encompasses technologies that do not have an online aspect. Valentina Baú (Australia) noted:

"We need to keep our definition of digital technology broad. Video, photography, radio and animation – depending on their format – are definitely technologies belonging to the digital space, which are being adopted in peacebuilding interventions. Digital does not have to mean "online."

There are many digital technologies that offer peacebuilders opportunities to deliver peacebuilding interventions in new and creative ways. For example, there is ongoing research into the use Virtual Reality to build empathy towards 'out-groups'; satellite imagery has been used to monitor population displacement and call attention to ongoing atrocities; and video games have been developed to promote peaceful conflict resolution instead of violence.

At the same time participants noted that, despite the potential digital technologies may hold, we should not be too quick to rush ahead without careful consideration of the implications. For starters legacy technologies still have their place. While the ever-improving affordability and accessibility of digital technologies may put them in the hands of an increasing number of people, in many contexts legacy technologies, such as radio, are still the most accessible and available. There is a danger that ignoring these will exclude the most vulnerable groups. Chris Simmonds (UK) noted that:

"If radio is the main means of communication among a target audience or key actors, then that medium should be the main focus, with appropriate security measures oriented to that (back up stations, multiple broadcast locations, pseudonyms, only non-specific info shared on air). Digital elements should be less of a focus here exactly because major work in the digital realm would be unsustainable, exclusionary and extremely risky."

In many cases it may be most effective to apply a "hybrid" approach to the use of technology, combining legacy technologies with digital ones. In this way peacebuilders are able to maximise the positive potentials of particular technologies, while minimising the shortcomings. Lisa Schirch (US) stated that:

Peacebuilders can use a combination of legacy media like TV, radio, magazines, and newspapers in combination with social media technologies. Social media is great for distribution of material. If you have a story about your peacebuilding in a local newspaper in your country, share this story on social media.

Greg Funnel

How digital peacebuilding can reduce the negative impacts of COVID-19

The COVID-19 pandemic has had major and devastating impacts around the world. From bringing the global economy to a grinding halt to fuelling misinformation and fomenting distrust of government authorities, the virus has upended any sense of 'normality'. Alarmingly, it has also aggravated drivers of conflict, especially in fragile and conflict-affected states, and poses a major systemic threat to peacebuilding capacity around the world.⁶⁶

Facing travel restrictions, funding freezes and dwindling donations, many civil society organisations have entered a period of high insecurity as they try to cope with scarce financial resources and deal with ongoing logistical and operational challenges in their peacebuilding work. Moreover, organisations have been forced to reduce staff capacity and most international personnel have returned to their home countries. The retreat of peacebuilding interventions comes with great risk – potentially undermining peace processes and emboldening conflict actors to fill in the vacuum. In fact, many active conflicts – such as in Syria, Yemen or Libya – have not altered course as a result of the pandemic.⁶⁷

Despite these challenging circumstances, peacebuilders have proven remarkably adaptable and are finding innovative ways to continue their work, including:

- Switching to video conferencing, encrypted communications (e.g. WhatsApp groups), and online project management platforms (e.g. Trello, Asana) to coordinate their activities and strategize remotely, accelerating a shift that has gradually been taking place across the peacebuilding space for many years.
- Prioritising online platforms and digital radio programming to promote peace messaging and raise awareness of the risks related to COVID-19. Initiatives include video messages of peace and goodwill by the Welsh League of Youth (Urdd Gobaith Cymru),⁶⁸ repurposing Mali's UN peace radio, Mikado FM, to relay public service messages about the pandemic and

- peace,⁶⁹ and Turning the Tide (TTT) in East Africa teaming up with a local news station to promote peace messaging through radio broadcasts and raise awareness of the virus.⁷⁰
- Establishing platforms to tackle misinformation online. For instance, the Myanmar ICT for Development Organisation (MIDO) created a platform called "Real or Not" that is designed to fact check misinformation regarding the pandemic. This is likewise, youth in South Sudan have played a crucial role in tackling misinformation and polarisation related to COVID-19, with youth advocacy groups banding together to dispel fake news about the virus on Facebook.
- Reducing digital divides by raising the voices of marginalised groups. The impacts of COVID-19 are deeply gendered and are disproportionately affecting women and other marginalised groups incidents of gender-based violence and domestic violence have increased.⁷³ To that end, the Global Network of Women Peacebuilders (GNWP) has set up an online podcast highlighting frontline initiatives to reduce the negative impacts of COVID-19 on women.⁷⁴
- Crowdsourcing ideas and information to support a more effective response to the virus.
 For instance, Ecuadorian NGOs organised an online 'Post-Crisis Hackathon' to crowdsource project ideas to tackle the virus and broadcast the results in a live YouTube broadcast to help gain visibility to innovative ideas. The Likewise, PeaceTech Labs have set up a COVID-19 Violence and Response Tracker to crowdsource ideas and information on both problems and peacetech solutions to tackle COVID-19 related violence.
- Supporting flexible and inclusive funding structures to support local peacebuilding organisations affected by the pandemic. For instance, Peace Direct, Conducive Space for Peace and Humanity United recently established a <u>Digital Inclusion Initiative</u> to provide the opportunity for peacebuilders to take part in a global network, access learning tools for digital peacebuilding and apply for grants.



While digital technologies are now more widely adopted by local peacebuilders, they still face a wide range of challenges linked with operating in difficult and conflict-affected contexts, which are fraught with inherent structural and governance issues that can undermine their work. Moreover, peacebuilders must equally account for a more holistic approach when using technology in their programming, which must consider ethical guidelines, conflict sensitivity and security planning across all stages of their interventions.

5.1. Structural and policy barriers

For many participants operating in fragile and conflict-affected contexts, intersectional issues including poverty, limited infrastructure, digital literacy, marginalisation, and restrictive regulatory environments have perpetuated – and in some case exacerbated – restrictions in access to digital technologies. These 'digital divides'⁷⁶ are leading to new exclusions that widen inequalities and risk replicating and amplifying some of the fault lines that can lead to violence.⁷⁷

5.1.1. Poverty and limited infrastructure

There is a strong correlation between digital divides and poverty. According to the UN Conference on Trade and Development (UNCTAD), digital access across the world is characterised by a wide gap between developed countries, where digital innovations are supporting rapid economic development, and the least-developed countries, where only one in five people use the internet.⁷⁸ Moreover, one third of the world's population does not own a mobile phone, and 50% of the global population does not even have access to the internet.⁷⁹

This is partly tied to poor infrastructure development across some lower-developed countries, as well as the targeted destruction of infrastructure in conflict-affected contexts, but it is also directly impacted by urban-rural divides that are leaving many behind. The resulting scarcity in availability can make accessing digital technologies quite costly and prohibitive. Reflecting on this, Arnold Djuma Batundi (DRC) stated that:

"Technologies are not given for free. There is a cost, so the poor cannot easily access them, even if they are in urban areas and it's possible to access them. A people bruised by repeated wars will not have easy access to digital technologies."

Without regular access, the positive dividends that digital technologies can provide are lost on the communities who would benefit the most from them. Anna Dupont (Mali) noted:

"I am finding it difficult to see exactly how digital technologies can support peacebuilding as many areas that are highly unstable and conflict prone do not [yet] have widespread access to digital tools and the internet due to poverty. How can we utilise these technologies for "positive" outcomes if the beneficiaries do not yet have access, knowledge or the experience of using digital tools and resources?"

Undoubtedly internet penetration rates and the ownership of mobile phones are on the rise in emerging economies. ⁸⁰ However, the access gap is still notable and consultation participants who primarily rely on telephone networks to communicate in the field stated that topping up their phone credit is a constant challenge impeding their work.

5.1.2. Digital literacy and marginalisation

While weak infrastructure and costs remain key barriers, gaps in digital literacy have prevented many from taking advantage of new technologies. Indeed, the UN Educational, Scientific and Cultural Organisation (UNESCO) considers digital literacy a critical 'enabler' of socio-economic transformation.⁸¹ And yet, digital literacy levels are often overestimated;⁸² awareness of digital technology is fairly low in some contexts, and its utility is not always well understood.

For participants, this presents a major challenge for digital inclusion, as entire communities are at risk of being excluded from the digital space. Qamar Jafri (Australia) explained that:

"Basic literacy around the use of technology (e.g. computers and on line media) is one of the most fundamental aspects of digital inclusivity. Those individuals who are illiterate with technology are excluded from the online space."

Tied to this, linguistic barriers add to digital literacy issues as many digital tools are limited to major language groups, which

further alienates local communities from using them. Landry Ninteretse (Burundi) stated that:

The place of local languages in new technologies is important – the latter are often associated with foreign languages and thus accessible only to the elites in cities. In order to increase adoption of new technologies, it is important to ensure the usage of local languages for wider accessibility."

Some local populations have managed to partially bypass their literacy issues by manipulating and adapting the technology itself. For example, Anna Dupont (Mali) points out that despite high illiteracy in Mali, "people use WhatsApp voice options and specifically locally-developed apps that allow for voice messages to be sent." This example speaks to the importance of context-relevant uses of digital technologies; discussed further in section 5.2.1.

While digital technologies are increasingly adapting to accessibility needs, gradually reducing the entry barrier for groups like older adults and people with disabilities, minority groups and women continue to be disproportionately affected due to ongoing socio-cultural factors that disadvantage them. Statistically, women are significantly more limited in their uptake of digital technologies, particularly in Africa and Asia, where a prevailing perception is that "mobile internet is not relevant to their lives." Arnold Djuma Batundi (DRC) asserted that:

"Traditional and customary habits in certain regions of my country (especially in rural areas) marginalise women at birth. Men prohibit their wives from using phones, for example, or connecting to social networks. Those who accept it strongly survey them which always leads to conflicts in the home."

Even for women and minority groups who can access digital networks, their participation is sometimes met with animosity and hate. Jacqueline Lacroix (US) explained that:

"Minority groups and women are often the most likely to be targeted by harassment and hate speech, in some cases forcing them out of spaces in which they are already underrepresented."

This is part and parcel of a larger structural problem around the design of the technologies themselves. Melanie Pinet (UK) stated that:

"The risks linked to artificial intelligence (and other digital technologies) also reside in their development: those designing them are far from representing others' worldviews and experiences, let alone those of under-represented minorities and traditionally disadvantaged groups."

Peacebuilders are therefore limited by digital literacy gaps, which are compounded by underlying gendered norms and replicated power imbalances that act as barriers to women and minority groups' access to digital technologies. Lassi Vasanen (Finland) explained:

"The digitalisation of media seems to go in line with existing power disparities; the marginalised communities also have less weight in the social media sphere. Therefore, it is important to strengthen these narratives while remaining conflict sensitive."

5.1.3. Restrictive regulatory environments

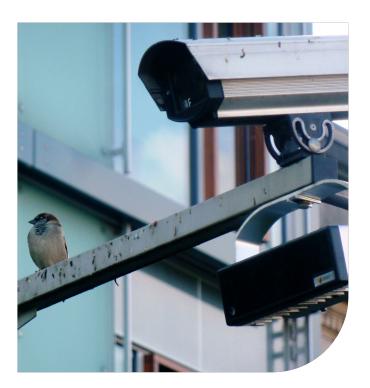
As discussed in section 2.2.1., in many conflict-affected contexts peacebuilders face challenging regulatory environments that suffer from repressive governance which can place severe restrictions on the internet, telecoms and media connectivity, including on encryption technologies (see section 6.2. for further details). This can range from censoring and filtering the internet to prohibit the spread of unfavourable information, a notable example being China's 'Great Firewall',84 to imposing punishing taxes on the use of online networks and transactions using mobile phones, such as in Uganda where the government is attempting to stop "idle chatter."85 Constantine Loum (Uganda) rationalised that:

"Government restrictions, including the taxing of social media and sites being blocked in some countries, create problems for peacebuilders in promoting their peace messaging around the world."

This is especially an issue in times of crisis or conflict, where rapid and debilitating measures are put in place under the pretext of perceived threats to national security. Valentina Baú (Australia) elaborated on this:

"Another important barrier to connectivity is internet shutdowns. In recent times, there have been a number of internet disruptions instigated by public authorities."

Indeed, repressive governments worldwide are increasingly resorting to this tactic to silence critics. ⁸⁶ In Sudan, a 68-day shutdown in early 2019 coincided with widespread protests against the leadership of long-time President, Omar al-Bashir. Likewise, the Indian government organised more than 40 internet blackouts in the Jammu and Kashmir region in 2019, many of which took place after the government rescinded the territory's autonomy. And in the DRC, a 20-day internet shutdown followed the 2018 presidential elections after the results were contested amid widespread allegations of fraud.



A major complicating factor is the complicity – coerced or intentional – of the very companies and providers offering digital technologies and services. Large tech firms including Apple, Google and Facebook have approved government censorship and restrictive measures in order to enter new markets such as in Myanmar, highlighting how profit motivations can sometimes supersede moral convictions.⁸⁷ An anonymous participant from Zimbabwe noted that:

"If telephone and internet providers are complicit or want to avoid negative government responses, internet freedom is very quickly and seemingly limited at the state level."

Expanding on the implications for local peacebuilding, Elly Maloba (Kenya) explained that:

"From a practitioner's point of view, the challenge is posed by the lack of control of people in the developing world over the source technology. As such, much of what passes as end-user technologies is subject to foreign corporate or government policies and legislation that leaves little guarantees over security issues."

5.2. Process and internal challenges

While local peacebuilders are utilising digital technologies to streamline their work, connect to larger audiences and increase their visibility, they are consistently faced with added ethical and programmatic challenges around the use of technology which can test their organisational and programmatic capacities and lead to potentially harmful results.

5.2.1. Ethical, security and privacy issues

Local peacebuilders have a duty to prioritise and respond to the ethical, legal, security and privacy-related challenges that come from using digital technologies and manipulating data in their programming. This involves defining clear processes and procedures, ensuring that information and data is not used for alternative or unintended purposes – applying 'do no harm' principles and ensuring conflict sensitivity.⁸⁸ Melanie Pinet (United Kingdom) explained:

"We need to ensure that digital technologies do not negatively disrupt social dynamics and be attentive of the unintended effects they have in complex settings and social environments."

While peacebuilding principles are widely and effectively used in 'offline' peacebuilding work, there are particular risks associated with technology that need to be carefully considered, 89 especially in fragile or volatile contexts. These include, among others:

- Protection of users who are unaware of the risks of using technology deployed as part of a peacebuilding programme, including within the implementing organisation;
- Loss of control or misuse of personal data unintentional or not:
- Research or access biases that prevent equal participation of beneficiaries, including providing real informed consent;

- Creating unrealistic expectations by introducing technology; and
- One-way or mass communication with diminishing incentives for face-to-face contact.

All these risks are compounded by the fact that the data collected and the mechanisms employed to protect that data from breaches or misuse are not always under the control of local peacebuilding practitioners. As a result, data-driven interventions could be met with suspicion in contexts impacted by legacies of colonialism, repressive state surveillance and/or mistrust of foreign corporations. Such important risks can challenge existing assumptions about how appropriate a proposed digital tool is within a peacebuilding project, and can put into question the ethical utility of digital technologies. Chris Simmonds (UK) epitomised this issue with a simple question:

"Sometimes the ethical questions can boil down to, 'Is it unethical to use digital tools for peacebuilding in the first place?'"

In response to this, participants largely agreed that technologies can be ethically used, but only after conducting in-depth assessments and sensitisation with partners and beneficiaries. Specifically, Lisa Schirch (US) underlined the importance of weighing inevitable trade-offs while limiting the use of technologies if the risk to harm is too great, while Constantine Loum (Uganda) explained that the ethical use of technologies can only be improved by regularly sensitising beneficiaries on the benefits of technology. Moreover, Arnold Djuma Batundi (DRC) also noted the importance of establishing an organisational security plan:

"In my opinion, peacebuilders and human rights defenders must be first aware of the risks that they are exposed to in their work. This is the most important step. Then they must set up an organisational security plan. These are simple measures, but which allow them to reduce risks, vulnerabilities, threats and increase their capacity."

Equally important, participants explained that addressing the ethical dilemmas requires active participation of beneficiaries in a way that promotes their ownership. Lassi Vasanen (Finland) talked about service design principles, stating that:

"A starting point is to ensure that the end user is the one who determines whatever the solution will be. [...] In practice, the fact that we do not introduce any tools or practices without discussing and consulting with our partners first, which helps ensure that the tech we use is usable for all."

It is therefore critical to move away from a 'supply-driven' use of technologies and employ them in a way that is determined by local capacity. Jacqueline Lacroix (US) emphasised that:

"In incorporating technology into projects, the local media and technology context is typically the first thing to take into account. In program development, getting a sense of which types of media are most popular and the preferences of target populations for communication are key in determining what technologies to include in trainings or use for collaboration, communication, etc."

Aishatu Gwadabe (Germany/Benin) concluded that:

"In particular, it is of utmost importance for us to use context relevant technologies that do not 'reinvent the wheel'."

5.2.2. Demonstrating effectiveness and impact

Digital technologies are often espoused as a veritable 'gold mine' for measuring and documenting impact, providing cost-effective and efficient ways to tabulate large amounts of data, reduce staff time and present detailed quantitative measures and/or visual representations. Certainly, technological innovation has streamlined many aspects of peacebuilding work, notably in the collection and manipulation of data. In practice, however, the evidence base for this is somewhat lacking. Reflecting on this issue, Valentina Baú (Australia) stated:

"There is often an over-claiming of what digital technologies seem to be able to achieve in peacebuilding, and such claims are not effectively supported by rigorous evidence. Researchers and practitioners need to strengthen collaboration in order to build solid evidence-based approaches to the use of technologies in this context."

Peacebuilders are only gradually adopting digital strategies to their peacebuilding activities, while many promising uses of digital tools remain largely unexplored. Part of this issue has to do with practitioners' unfamiliarity with new digital tools, as well as a general perception that technology comes with high costs and high uncertainty. 91 Moreover, the overabundance of data that often comes with their use complicates evaluations, with peacebuilding practitioners sometimes struggling to parcel out usable data. 92 Jacqueline Lacroix (US) highlighted some of these limitations in digital interventions in social media:

Digital programs such as these typically use measures such as 'clicks' (engagement) or views. This can be valuable along with limited demographic data (if available) to see if campaigns or efforts are reaching targeted groups, but this does not assess any changes in attitudes or behavior."



To work around this issue, Lassi Vasanen (Finland) highlighted the use of data mining to analyse social media posts, and also suggested doing a sentiment analysis, 93 but conceded that this is still in its early stages in the peacebuilding space. He concluded that:

"Since the technology is already there it would be a pity not to use it to better plan, implement and monitor our programmes."

As a starting point, Elly Maloba (Kenya) offered three ways to help bridge the evidence gap:

"(1) Contextualising reports and real-time reporting to inform concise actions; (2) harnessing the power of data by capturing vast amounts of indicators in their complexity and multiplicity; and (3) providing agency or strengthening platforms and collaborative actions."

It is important to note, however, that better data collection for monitoring and evaluation (M&E) can be accompanied by privacy and security concerns that may not be immediately apparent. While we have learned that digital technologies alone cannot solve existing problems within the peacebuilding space, there is an opportunity to leverage them in order to close the evidence gap and strengthen peacebuilding interventions overall.

5.2.3 Sustainability of tech-based peacebuilding

Employing some digital technologies can be time and potentially resource-intensive, and often requires training that demands investments in staff capacity and organisational development. For cash-strapped peacebuilding organisations, this can prove deeply problematic and may prevent them from adopting tech-based approaches to their work. Part of the problem is that the devices, networks and software that peacebuilders use – and are becoming increasingly reliant on – are often developed by the private sector, and therefore practitioners have little say or control over their business models. 94 Elly Maloba (Kenya) confirmed that:

"End user technologies such as GIS for mapping or even Windows OS [operating system] are almost always proprietary, requiring licensing and hence are costly to acquire or deploy."

This financial sustainability issue is compounded by the 'projectisation' of peacebuilding programmes, where the initial "seed funding" for tech-based initiatives is often timebound, and those funds tend to end just as a tech-based initiative has reached a level of maturity. 95 Moreover, some funders in some contexts do not prioritise the use of technology in peacebuilding programmes. Dennis Ekwere (Nigeria) attested in his context that:

"What still makes digital tech difficult in my work is the low interest of funding partners in the use of technology in peacebuilding."

Lastly, digital technologies employed in peacebuilding often rely on the participation of beneficiary communities to stay up-to-date, and peacebuilders continue to face challenges in maintaining high levels of participation after the initial inception phase.



To tackle the aforementioned digital divides and process barriers, a multifaceted and collaborative approach is necessary. This should include collaborative investments in digital infrastructure and policies that manage the provision of ICT services and promote digital literacy and e-governance programmes. Civil society coordination can further support more voices to take part in digital peacebuilding processes and activate networks to support digital inclusion. And efforts should be made to ensure that regulation and accountability are transparent and inclusive in a way that protects individuals while embedding peacebuilding norms.

6.1. Promoting digital access and inclusion

To address the challenge of digital access, it is necessary to develop the digital infrastructure in low-tech environments, which will require significant investments to target and expand limited mobile broadband services in order to lower the cost of digital access across the globe. The importance of making investments in digital infrastructure is in line with recommendations from the UNCTAD (2017), the World Economic Forum (2016) and the Organisation for Economic Cooperation and Development (OECD, 2017),% who call for complementary and collaborative investments to address infrastructure challenges.

Beyond investments, there is a clear need to promote access and inclusion by implementing digital literacy programmes. Critical digital and media skills are a necessary measure to promote internet safety and enhance awareness of and resilience against predatory threats online. More importantly, digital literacy levels directly affect

the possibility of using digital tools to enhance inclusivity and participation. To that end, the promotion of digital literacy is a key approach to challenge growing inequalities, misinformation and conflicts. The Simmonds (UK) posited that:

"I totally agree any future digital world has to include increased digital literacy – this is increasingly happening around the world, and should particularly be a focus for peacebuilding audiences. This should include basic uses, but also on the ways in which bad actors manipulate technology."

Indeed, civil society actors can play an important role in upskilling communities to utilise digital tools and scrutinise information effectively. They can act as a bridge between other stakeholders such as governments and the private sector, and support digital literacy to focus on civic agency and empowerment, specifically for marginalised groups. By training newcomers to the online space, civil society can help shape positive 'influencers' that can promote digital inclusion and participation. Aji Ceesay (The Gambia/UK) said:

"I think a further step can be improving digital literacy among other young people who are interested in technology but lack literacy (such as those from lower economic backgrounds or from rural areas). This can help minimalize marginalization."

Moreover, developing digital literacy can further help understand how users' data is being collected and used, helping to renegotiate the relationship that individuals have with technology companies. Melanie Pinet (UK) stated that:

"In relation to literacy, I would also be keen to see more education from civil society and schools around data privacy and healthy use of digital technologies. A number of tech companies' business model is based on providing free services in exchange of collecting users' data (and advertising) and the consequences of sharing one's data are too often unknown

or overlooked by most users, particularly where levels of literacy are lower."

Governments, on their end, could play a leading role in creating and deploying accessible e-services that are citizen-oriented and transparent, which would promote citizen engagement and civic participation. The design of these services would require a collaborative approach, implicating local public authorities, the private sector, academia and civil society. E-governance applications would provide a powerful impetus in reducing digital divides and restoring trust by promoting transparency in democratic processes.⁹⁸

6.2. Strengthening civil society coordination

In the latest UN Annual Report, 99 the Secretary-General stressed that peace challenges are increasingly global and that collective action from all partners is required. While peacebuilding activities have shown the ability to have effective impact at an individual and local level, "progress can be more efficient, faster, and perhaps more sustained, if individuals and organisations dedicated to peace work together more self-consciously and deliberately." 100

For local peacebuilders, digital technologies provide a critical opportunity to better coordinate responses and programming. Alternative online spaces allow large numbers of organisations to organise discussions remotely in a "networked and dispersed-like manner". Social media offers cost-effective methods and access to large online communities to coordinate larger peace campaigns and amplify their message. And online security services have allowed civil society to share and archive data in a secure manner. Chris Simmonds (UK) agreed that:

"There are huge benefits it [digital technology] can bring in terms of understanding and coordination. Something as simple as shared database of audiences reached, supplemented with increasing use of things like crisis-mapping, could have huge impacts on the way multiple peacebuilding actors coordinate responses and campaigns."

To capitalise on this potential, consultation participants emphasised the need to break through the silos that often undermine civil society effectiveness and marshal their resources to speak as a collective. Christian Cito Cirhigiri (Belgium) argued that:



"To coordinate effective peacebuilding work among CSOs and peacebuilding individuals, we [peacebuilders] need to stop working in silos but rather foster digital collaboration that enhances our organizational strengths and maximizes the impact of outreach. [...] We need galvanizing agendas to elevate peacebuilding in our digital era."

To that end, Arnold Djuma Batundi (DRC) provided a few key areas where civil society actors can focus their efforts:

"Some strategies that could help us coordinate and activate our work in digital spaces could include the organization of community educational actions/campaigns on the positive use of digital technologies, setting up information protection and security mechanisms, creating (digital) working networks between civil society organizations working on peacebuilding, and of course all of this can only be possible when the organizations have sufficient access to these technologies."

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6.3. Supporting regulation and accountability

As discussed in section 2.2.2., digital technologies, especially social media platforms, can be used by spoilers to foment divisions and incite violence. This is a major issue that has come to light in recent years, catalysing debates around the need for regulation to mitigate risks. Indeed, digital technology companies have been self-regulating and moderating content for decades, but for many this has proven insufficient as the dangers of hate speech and cyberattacks have been amplified in political narratives. Moreover, online platforms' reliance on automated filtering using AI tools has exposed flaws and limitations, recently highlighted by its failure to moderate COVID-19 related misinformation. 102 A challenge therein lies in the companies' reluctance to effectively regulate their platforms, as they have few incentives to do this from a business standpoint. Claire Devlin (UK) explained:

"The companies have less incentive to regulate, as it could mean cutting out content that is actually really popular, plus it costs money to implement regulation. The most popular social media platforms are not liable under US law in which they're incorporated, so there's no penalty for hosting inaccurate information, even if it's hateful. Even if they would enforce regulation, do we want managers of private companies deciding what is and isn't acceptable content?"

Given this reality, governments have an important role to play in the regulation of technology companies. Indeed, internet regulation has come under intense scrutiny as governments have come to grips with the dangers of social media, especially in light of increasing evidence that disruptive communication tactics are being used to weaken democratic institutions and public trust in governance. ¹⁰³ This has led to an increasing trend towards more restrictions to online communication, with new legislation being fashioned to hold technology companies to account for the content being posted by users on their platforms.

Key examples include the UK's Investigative Powers Act (2016) and the proposed EARN IT Act in the US. Introduced by the US Congress with the expressed goal of tackling child sexual exploitation, the law would effectively remove protections towards end-to-end encryption – a critical tool used by many peacebuilders to protect themselves - and could lead companies to abandon this technology altogether. 104 Melanie Pinet (UK) further attested that this legislation would likely prompt companies to aggressively moderate speech. Restrictive legislation of this kind, currently being considered by many states, ¹⁰⁵ can pose serious threats to international human rights, especially those related to freedom of expression, and it opens the space for abuse by less democratic states (see section 2.2.1.). Jacqueline Lacroix (US) stated that:

"I don't know that government regulation is the best approach, however, given the potential for corrupt governments to abuse regulations to target opposition figures. Despite the currently deeply flawed system of regulation by tech companies, I do think that this could be the right approach given more involvement by and consultation by human rights and conflict experts."

Increasing resistance to censorship and surveillance has opened the space for an alternative option. While government's role in regulation is not disputed, some experts have advocated the potential of putting in place a co-regulatory system in which regulators would collaborate with civil society and industry experts to reduce harm and create a safe space for online communication. This could effectively increase levels of accountability as a multi-stakeholder collaborative process would ensure that a wide range of principles and norms are reflected in the digital space, and ultimately increase civil society's ability to support more effective online regulation. Claire Devlin (UK) concluded that:

"I think the role of civil society peacebuilders is enormous in holding companies to account instead of passing control to States. This would mean us all hugely improving our understanding of the terms under which the most popular platforms, especially Facebook, actually regulate their content. NGO and small tech firms could have a great impact by collaborating more closely. It's time to get to know each other!"



As demonstrated throughout the report, digital technologies can play a critical role in contributing to conflict resolution and peacebuilding. They have helped open new avenues and spaces for active citizen engagement and collective action, empowering local voices to break down traditional power structures and redefine the social contract through citizen expression and peaceful mobilisation. Likewise, increased connectivity and the development of powerful online communities have fostered positive dialogue and provided key opportunities to build a more inclusive and equitable digital environment.

Yet, at the same, these same technologies present corresponding risks and vulnerabilities that can undermine peace, replicate power imbalances, and incite violence. Conflict actors, spoilers and autocratic government have been empowered by these tools to restrict, censor and survey dissidents as well as promote online polarisation and disinformation campaigns, fomenting divisions and increasing mistrust within digital society. Moreover, intersectional 'digital divides' have denied access and protection to swathes of people, further exacerbating global inequalities.

Despite the complex challenges facing peacebuilders, they continue to play important roles in preventing and resolving conflicts as the world shifts into the digital space. Though not exhaustive, below are some innovative tech-based peacebuilding approaches that have been identified in this report:

- Peacebuilders have enhanced their data collection capabilities by crowdsourcing information and utilising mobile and satellite technologies to map out detailed conflict trends and hotspots on the ground. This has vastly improved early warnings systems, enabling systematic and near real-time data to be shared, which has greatly reduced the time needed for critical responses.
- Social media platforms, blogs, podcasts and online forums are being used by peacebuilders as vehicles of peace promotion, enabling rapid and sustained engagement through online peace messaging and digital storytelling.
 These techniques, bolstered by multimedia capabilities, have built awareness around peace in a systematic way by connecting to users to relatable themes and individuals with lived experiences of conflict.
- Peacebuilders have also been able to tap into large and powerful online communities to mobilise for peace and drive social change. This is bolstered by open and inclusive spaces for exchange and knowledge-sharing, which have helped develop new partnerships and opportunities for collective action.

- Peacebuilders are increasingly utilising advanced technologies in their peacebuilding interventions, including using AI and blockchain programmes to collect data, as well as interactive technologies such as virtual reality and videogames to more actively engage people in peacebuilding.
- Peacebuilders have adopted a "hybrid" approach in their activities, marrying online and offline technologies to maximise their reach and minimise risks of exclusion and counter-productive programming. Their adeptness in switching between analogue and digital tools has made them adaptable to difficult environments and tuned in to local realities.

States and institutions are also responding to risks of conflict, often with unhelpful or dangerous legislation that calls for stricter regulation on digital platforms focused on censorship and surveillance, inhibiting the rights and freedoms of individual users and civil society actors. Likewise, companies have responded by either minimizing the need for content regulation, using the guise of free speech to prioritise their business models over the safety and security of users, or overreacting to social and political pressures and aggressively censoring content. Ensuring a balance between community safety and security, digital civic rights, and the protection of civil society space online is central to solving key ethical and security challenges that will determine how the digital era is shaped.

To reap the opportunities for peace provided by digital technologies, policymakers and donors must recognise the important and ongoing digital divides that are undermining effective access and inclusion to technology, and invest in the capacities of peacebuilders to best capitalise on the use of digital technologies for effective peacebuilding. To that end, this report argues that an increased support for, and strengthening of tech-based peacebuilding initiatives, combined with a fostering of collaborative approaches that promote digital inclusion, will have a critical bearing on peace today and for future generations.

In response to this, Peace Direct have developed the following recommendations aimed at international donors, governments and other actors responsible for crucial decisions related to the makeup, funding and implementation of tech-based peacebuilding efforts:

For governments and international bodies

- programmes to support digital inclusion in online spaces and in tech-based peacebuilding activities. Developing accessible e-governance and digital literacy programmes will support online civic participation and educate users on data privacy and healthy digital environments. These programmes should also include regional language groups to provide greater access to local communities around the world. Raising this as a policy priority could: tackle digital divides preventing marginalisation and polarisation; reduce mistrust in governance structures; increase civic participation, and; build community resilience against misinformation.
- Strengthen human rights compliant regulatory practices on digital platforms. Current levels of regulation by technology companies are not inclusive or transparent. Governments and technology companies should ensure that any regulation balances protecting individuals' sensitive data and preventing the prevalence of misinformation, hate speech and inflammatory messages. Government and private sector initiatives to improve transparency and accountability around content regulation should be done in consultation with human rights experts and peacebuilding experts, who are best placed to work around the challenges of specifically defined hate speech and inflammatory language. In addition, resources must be provided for stakeholders who cannot afford or cannot access the consultations.

For donors, funders and civil society

- Increase support for tech-based peacebuilding initiatives at the local level. Donors should provide material support and training to local civil society which would enable effective tech-based peacebuilding initiatives to scale up in size. Flexible funding can help to develop staff capacity and digital literacy while covering various licensing, data storage and server costs.
- Document and analyse the applications of digital technologies in conflict-affected settings, with lessons captured and shared effectively. Employing digital technologies is not always the best approach to engage in conflict prevention and can potentially replicate the divisions, tensions and power imbalances that exist in offline spaces. It is vital that civil society actors and donors tackle M&E design biases behind tech-based solutions and provide effective solutions to the issues faced by peacebuilders and beneficiary communities using technology, more in line with a user-centred and participatory approach.
- Develop and strengthen online civil society networks to expand effective peacebuilding campaigns and outreach. Where CSOs can rally behind a unified agenda, they can show their collective strength in order to elevate peacebuilding in the digital space. Collective action can strengthen alternative narratives and help foster a wider digital culture of peace. Donors should strengthen and support such efforts as well as the civil society networks behind them.

Appendix A: participants

Below is a list of the participants who took part in the online consultation. We also acknowledge the contributions made by participants who wish to remain anonymous. The details included here represent those provided by participants at the time of the consultation, and may no longer reflect their current roles.

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Burundian Peacebuilder

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Appendix B: glossary of terms and concepts

Algorithms: instructions given to computer systems that allow such systems to make decisions based on a set of rules. For example, an online discussion platform may automatically block posting of a piece of text if it contains certain words.

Artificial Intelligence (AI): the ability for computer programs process, learn from, information enabling them to complete tasks which otherwise would have required human guidance – such as visual processing, writing coherent text, or decision making.

Big data: extremely large data sets that modern computing power has made it possible and affordable to analyse.

Blockchain: a technology that makes use of encryption to make it possible to record information in such a way that the information cannot be tampered with or changed, and does not depend on a central authority to verify the information's authenticity. The technology was popularised by the Bitcoin digital currency but has been used in other applications.

Crisis mapping: the use of digital technologies and data to quickly create useful maps to aid responses to crisis situations. For example, following the Haiti earthquake in 2010 it was possible to use satellite imagery and existing mapping data to produce maps showing the worst affected areas.

Crowdsourcing: making use of digital technologies, such as the internet or mobile phones, to allow a wider range of volunteers to perform particular tasks – such as data collection or image analysis.

Dark Web: an area of the internet, usually only accessible by specialised software, which ensures anonymity for its users.

Data exhaust: data trails left by users' online activity, behaviours and transactions.

Digital divide: the gap that exists between communities that have different levels of access and literacy in regards to digital technologies.

Digital literacy: the extent to which an individual is comfortably able to make use of digital technologies, such as computers, the internet, or mobile phones.

Digital technologies: technologies that make use of computer systems to process information. Such technologies could include, for example, mobile phones, the internet, or digital cameras

Disinformation: the intentional spread of false information in order to misrepresent the truth or sow division.

Doxing: to publish the private personal information of another person or reveal the identity of a person without their consent.

E-governance: the use of digital technologies to provide government services.

Early Warning Early Response (EWER): the gathering of data to alert to impending crisis situations, such as conflicts or famine, and enable quick interventions.

End-to-end encryption: the ability for two, or more, users to communicate in such a way that cannot be intercepted or read by anyone other than the intended recipient(s)

Filter bubbles: the notion that through a process a combination of algorithms and self-selection, internet users will often only be exposed to a narrow range of news and opinions. Information Technology (IT): an umbrella term which describes the use of computers to process and store information.

Information and Communications Technology (ICT): an expansion of the term "Information Technology" to include telecommunications technology such as the internet and mobile phones.

Lexicon: the vocabulary of a language or branch of knowledge.

Online/offline: the distinction between activities that take place, and are mediated by, the internet (online) and those that do not rely on the internet (offline)

Peacetech: the use of technology to support peacebuilding activities.

Polarisation: the divergence of opinions and beliefs towards extremes, with little space for middle ground or compromise.

SMS: the technology that enables mobile phone uses to send short text messages to other users.

Social media: online networks that allow users to share text, images, videos and other digital content.

Viral: the phenomena in which a piece of digital content (such as an image or video), or an idea, rapidly spreads across social networks and the wider internet.

Virtual Reality (VR): the use of specialised equipment and computer programmes that allow full immersion in a computer-generated environment. For example, such systems may require users to wear a special headset that completely replaces their vision with that generated by a computer.

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