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Digital Inclusion in Peacemaking: A Strategic Perspective

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Preface

Armed conflicts and peace processes are becoming increasingly digitized, with conflict parties and stakeholders accelerating their use of digital technologies, and especially social media, to further their interests and agendas. In response, those who facilitate efforts for a peaceful settlement of conflict – mediators and mediation support actors – are now increasingly turning to technology as well. This is evident in initiatives such as the CyberMediation Network: a platform for mediation support organizations and experts that explores the impact of digital technologies on mediation. Peacemaking (and peacebuilding) continue to be viewed as quintessentially “human” processes. Yet the increasing use of technology requires us to rethink the activities, approaches, and our very understanding of such efforts. The 2020 Covid-19 pandemic, and the almost global lockdown and travel restrictions it has caused, moreover demonstrate the need to reflect on how technology can support us in maintaining human activities. Efforts to make and build peace are no exception.

While inclusion in peace processes is conventionally understood in analogue and “offline” terms, digital technologies can support mediators’ efforts to integrate a broad variety of perspectives, interests, and needs into a negotiation process. The increased availability of digital technology opens up new opportunities for inclusive political processes that can end armed conflict and build peace. However, the use of digital technologies also changes how those affected by conflict can participate in peacemaking efforts. To facilitate digital inclusion effectively, mediators need to consider a variety of context factors, as well as associated risks and unintended consequences. These are related to the technological, social-cultural, and political environment in which digital inclusion efforts are implemented. Digital inclusion cannot be fully controlled, but it can be actively shaped by mediators and mediation support actors in order to contribute to the peaceful settlement of armed conflict.

This CCDP Working Paper, written by Dr Andreas Hirblinger, provides a comprehensive perspective on digital inclusion in peacemaking, developed in the course of the year-long “Designing Digital Inclusion in Peacemaking Project”, funded by the United States Institute of Peace (USIP). The paper develops a strategic approach to digital inclusion. Drawing on the author’s earlier academic research, digital inclusion can serve various strategic purposes, such as strengthening the legitimacy of peace processes and their outcomes, empowering marginalized and vulnerable groups, transforming community relationships, or reducing threats or risks to a peace process. The paper also provides important reflections on how we can and should understand digital inclusion, namely that the voice of conflict stakeholders is integrated into a peace process in the form of digital data. “Voice” can be understood as various kinds of information that are expressed – intentionally – by the conflict party or stakeholder in an attempt to change an objectionable state of affairs. Based on these reflections, the paper presents a conceptual framework for digital inclusion that helps us to understand how digital technologies can contribute to any of these strategic purposes by delivering specific functions and outputs. Drawing on this framework, the report presents specific use cases, which were designed during a participatory online course that formed part of this project.

The findings of this CCDP Working Paper highlight that further research is needed to better understand the effects of digitalization on peace processes. As the author makes clear, research in this field needs to carefully balance the concerns and interest of both the practitioner and academic worlds – developing comprehensive perspectives while looking at more specific questions, cases, and applications. At the CCDP, we are committed to consolidating our research agenda on this topic. Since the beginning of this year, Dr Hirblinger's newest research digs deeper into more specific aspects, such as the opportunities and challenges of employing Artificial Intelligence in machine-supported conflict analysis. Another project explores how digital technologies help or hinder dealing with uncertainty in peace processes. Through strong partnerships with mediation practitioners, we thus seek to contribute to the development of theoretically-grounded and empirically-informed perspectives on how digitalization impacts peace processes. This paper is a first and important milestone.

Prof. Keith Krause
CCDP Director

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Introduction

Mediation is commonly understood as a human-centred activity. At their core, conventional definitions of mediation entail that the conflict parties seek a negotiated settlement with the assistance of a third party.¹ These definitions are vague about the means used to settle the conflict, as long as they involve consensual means, and common reason and logic, rather than coercion. Yet inclusion in peace processes has predominantly been operationalized in analogue and “offline” terms, such as providing seats at the table to civil society representatives, or conducting consultations through which important conflict stakeholders can express their views.² Consequently, the question of how digital technologies can contribute to mediated peace processes, and more specifically, how they can enhance inclusive peacemaking, is yet to be answered. This report sets out to do so.

Until recently, many mediators tended to perceive the presence of technologies as an obstacle and threat to the peaceful settlement of conflict. This is because peacemaking efforts usually occur in a context of on-going hostilities, in which the conflict parties continue to use means other than pure negotiation to achieve their preferred objectives. These means include technologies that can disrupt, derail, or damage mediation efforts. Today’s peacemaking efforts take place in a highly technologized political landscape, in which surveillance and spying technologies are pervasive. Conventionally, mediators have gone a long way to guarantee that negotiation processes can take place in safe spaces, in which confidentiality and the protection of participants can be guaranteed. The use of digital technologies in peacemaking, therefore, seemingly stands in tension with an essential need of mediators: to control the environment in which the negotiation process occurs.

1.1 The Digitalization of Peace Processes

The increasing role of digital technology – i.e. electronic equipment, applications, and platforms that communicate, process, and store data – has for some time been the subject of academic and practice-oriented debates around peacebuilding. The United States Institute of Peace (USIP), for instance, already published a report on the impact of new media on peacebuilding and conflict management in 2011.³ While written before the repercussions of social media use during the Arab Spring could be fully grasped, the report shed light on the use of social media in “grassroots” protest movements and how it could be harnessed in “communications for peacebuilding”. As the authors argued, “the use of these technologies to resist political oppression or promote conflict has garnered much more attention than the use of these same technologies to promote peace and postconflict reconstruction”.⁴ Almost a decade later, the discourse around digital technologies – and especially social media – is even more strongly centred around their conflict-aggravating potential, and particularly their utility in efforts to increase political polarization, spread misinformation, and decrease trust in political institutions.⁵

1 Peter Wallensteen and Isak Svensson, ‘Talking Peace: International Mediation in Armed Conflicts’, *Journal of Peace Research* 51, no. 2 (March 2014): 315–27, <https://doi.org/10.1177/0022343313512223>.

2 Hellmüller, ‘Beyond Buzzwords: Civil Society Inclusion in Mediation’; de Waal, ‘Inclusion in Peacemaking: From Moral Claim to Political Fact.’

3 United States Institute of Peace, ‘The Impact of New Media on Peacebuilding and Conflict Management’, Study guide series on peace and conflict (The Endowment of the United States Institute of Peace, 2011), <https://www.usip.org/publications/2011/09/impact-new-media-peacebuilding-and-conflict-management>.

4 *Ibid.*, 16.

5 Joshua A. Tucker et al., ‘Social Media, Political Polarization, and Political Disinformation: A Review of the Scientific Literature’, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 19 March 2018), <https://doi.org/10.2139/ssrn.3144139>.

The mediation community has thus largely remained reluctant to take their mediation efforts “online”. This markedly changed in 2020 in the context of the global Covid-19 pandemic, which saw many mediation teams resorting to digital means of communication in order to keep peace processes going in the face of global travel bans that made “offline” mediation impossible. But even when travel and face-to-face meetings are feasible, mediators will witness the ever-growing impact of digital technologies on peace processes. Most – if not all – conflict parties already make proactive use of the increasing availability of digital technologies to further their interests and agendas. Consequently, and inevitably, conflicts are partly fought out in the digital sphere. What is more, conflict stakeholders, third parties, and the general population increasingly use digital technologies to obtain information about the conflict, partake in political activities, or engage in conflict resolution efforts. Today, social media applications play a crucial role in forming political opinion and facilitating political mobilization.

These challenges, however, cannot be addressed by withdrawing from the digital space. Rather, mediators need to form part of an effort to increase social responsibility in the digital sphere, by asking “what is to be done?”⁶ Not least in conflict settings, this can involve enabling new forms of participation that make a peaceful settlement more likely. Digital technologies open up new avenues for communication and engagement in mediation that previously did not exist. Traditional “shuttle diplomacy” may now partly be replaced by a mediator’s instant communication with the conflict parties, for example through messaging services such as WhatsApp. Moreover, conflict parties that are territorially scattered, or based in hard-to-reach areas, may engage in negotiation efforts through digital technologies. For instance, in 2017, mediators almost exclusively used instant messaging technology to broker local ceasefires in Syria, with many of the signatory parties never meeting in person.

Against the backdrop of the increasing use of digital technologies, this report builds on an emerging discussion of the potentials of digital technology to promote inclusion in the context of peace processes. In past contributions, Kahl and Puig Larrauri explored how new technologies can support peacebuilding efforts by promoting empowerment and enabling people to “participate in localized conflict management efforts”, by fostering collaboration, for example.⁷ Mancini and O’Reilly pointed to the potential of digital technologies for the purposes of violence prevention, especially when promoting horizontal communication that connects conflict “warners” and “responders” without relying on elite actors.⁸

Other studies have explored the potential of technology in contributing to a “communications for peace” – an interactive process that “could engender emancipation”.⁹

Undoubtedly, digital technology, and especially social media, can have positive and negative effects on peace processes. This report underlines the potentially positive role of digital technology by exploring its utility in facilitating inclusive peacemaking. While the report contributes to building the mediation community’s knowledge base of how to harness the utility of technology for peacemaking, it also remains cognisant about the challenges and risks of using digital technology. The report neither aims to spread tech-optimism nor tech-pessimism. Rather, it carves out a reflexive and pragmatic path through which mediators can explore options for digital inclusion, while carefully addressing potential risks.

6 Maren Beaufort, ‘Digital Media, Political Polarization and Challenges to Democracy’, *Information, Communication & Society* 21, no. 7 (3 July 2018): 915–20, <https://doi.org/10.1080/1369118X.2018.1451909>.

7 Anne Kahl and Helena Puig Larrauri, ‘Technology for Peacebuilding’, *Stability: International Journal of Security and Development* 2, no. 3 (22 November 2013): 15, <https://doi.org/10.5334/sta.cv>.

8 Francesco Mancini and Marie O’Reilly, *New Technology and the Prevention of Violence and Conflict*, vol. 2 (New York: International Peace Institute, 2013), <http://www.stabilityjournal.org/articles/10.5334/sta.cp/>.

9 Julia Hoffmann, ‘Conceptualising “Communication for Peace”’, *Peacebuilding* 2, no. 1 (14 February 2014): 100–117, <https://doi.org/10.1080/21647259.2013.866461>.

1.2 Turning to Tech in Peace Mediation

Over the past two years, mediators and mediation support actors have been increasingly inclined to use digital technologies in their work. Efforts to adopt digital technologies have, for instance, been facilitated by the CyberMediation Initiative.¹⁰ This resulted in a number of events and policy publications about the role of digital technology in peace mediation.¹¹ The United Nations Department of Political and Peacebuilding Affairs (UN DPPA) and the Centre for Humanitarian Dialogue (HD Centre) also released a report on the use of digital technologies in mediation,¹² as well as continuously updating online resources that can serve as a toolkit for mediation practitioners.¹³ In 2020, the CyberMediation Initiative merged into a larger CyberMediation Network, with the aim of continuing the knowledge exchange around digital technologies among a broader range of partners.

These activities contributed to a first systematic, practice-oriented overview on the use of digital technologies in mediated peace processes. They also suggested that digital technologies can foster inclusion in peace processes. The Digital Mediation Toolkit mentions “inclusivity” as one of the main “thematic areas” in which digital technologies can be applied. The toolkit suggests that digital technologies could be used “to solicit input from large numbers of people on the issues they view as priorities, their aspirations or their views of the process without necessarily broadening the actual negotiating table.”¹⁴

In the broader peacebuilding field, the utility of technology has been discussed more comprehensively over the past years. The field of “Peacotech” has steadily grown, and dedicated Peacotech organizations and Peacotech labs have emerged in several countries. The term “PeaceTech” refers to technologies that are employed strategically in peacebuilding efforts.¹⁵ Some of the applications and tools that fall under this umbrella thus have potential utility for inclusive peacemaking. Furthermore, PeaceTech practitioners have repeatedly noted that the field is continually evolving, sometimes at a pace that is hard to keep up with. In parallel, there is a growing number of case studies and efforts meant to summarize and capture the newest trends and developments.¹⁶

Due to constant innovation, there is a perception that PeaceTech always remains “in the making” and unconsolidated.¹⁷ Since technologies are constantly in flux, some peacebuilding scholars have argued that technology remains in a “liminal” state, i.e. characterized by a continuous ambiguity about its role.¹⁸ This creates unease among those who aim to use these technologies in a planned and predictable manner. This also poses challenges for any attempt to produce guidance material that should remain relevant after the next round of software updates has been rolled out. Publicly available freeware, in particular, is subject to trends and changing popularity (do you still remember ICQ?).

10 'CyberMediation Initiative Launched to Address Potential and Challenges of Digital Tools in Peace Mediation | DiploFoundation', <https://www.diplomacy.edu/launch-of-cybermediation-initiative>.

11 David Lanz and Ahmed Eleiba, 'The Good, the Bad And the Ugly: Social Media and Peace Mediation', Policy Brief (Bern: Swisspeace, 2018).

12 UNDP and HD Centre, 'Digital Technologies and Mediation in Armed Conflict' (Geneva: United Nations Department of Political and Peacebuilding Affairs and Centre for Humanitarian Dialogue, March 2019).

13 Digital Mediation Toolkit | UN Peacemaker', <https://peacemaker.un.org/digitaltoolkit>.

14 UNDP and HD Centre, 'Digital Technologies and Mediation' (footnote 12), 24.

15 Diana Dajer, 'Cracking the Code of Tech for Peace: International Perspectives of Peacotech Research and Practice', in *Reflections on Building Inclusive and Sustainable Peace* (London, 2018), 70–79, https://www.britishcouncil.org/sites/default/files/j063_peace_and_beyond_essays_final_web_new_0.pdf.

16 *Ibid.*, 72–73.

17 *Ibid.*, 77.

18 Pamina Firchow et al., 'PeaceTech: The Liminal Spaces of Digital Technology in Peacebuilding', *International Studies Perspectives* 18, no. 1 (1 February 2017): 4–42, <https://doi.org/10.1093/isp/ekw007>.

This report responds to the challenges of fast-paced innovation by offering insights that are less focused on specific technologies. Instead, it provides a conceptual framework that helps to understand what strategic purposes digital technologies can serve when used for inclusion, and through which functions and outputs. The report thus offers a strategic approach to digital inclusion, through which mediators can gradually leverage the potentials of digital technology to achieve specific purposes.

1.3 Outline of the Report

This report is structured as follows: Chapter Two provides a summary of the project's methodology and principal research steps, including an assessment of current technology uses, a review of experiences and insights from other fields, and the participatory design process. Chapter Three presents important reflections on digital inclusion and discusses the significance of “voice” in digital data. Chapter Four gives an overview of the emerging practice of digital inclusion, which technologies are used and how, as well as how these are linked with offline inclusion efforts and activities across different tracks. Chapter Five introduces a conceptual framework for digital inclusion, outlining four principal strategic purposes that digital inclusion can serve, in addition to the functions and outputs that technologies have to deliver to achieve them. Chapter Six goes on to discuss these four strategic purposes in greater detail, drawing on knowledge from adjacent professional fields, and presenting a summary of potential technology use cases for inclusive peacemaking. The chapter also includes illustrative snapshot case studies from Colombia, Ukraine, Syria, Libya, and Myanmar. Finally, Chapter Five discusses the most critical context factors that shape digital inclusion, as well as possible risks and unintended consequences associated with them. The Conclusion discusses key challenges, related to innovation, that mediators will have to address in order for digital inclusion to become a meaningful component of peacemaking efforts.

2. Project Methodology

This report is the core output of the yearlong “Designing Digital Inclusion Project”, conducted at the Centre on Conflict, Development and Peacebuilding (CCDP) of the Graduate Institute, Geneva. The project aimed to assist the mediation support community to effectively use digital technologies to enhance inclusion in peace processes. It asked what digital technologies are currently used by mediators to enhance inclusion in peacemaking, and what could be learned from adjacent professional fields. By doing so, the project strived to enable purposeful forms of digital inclusion that take account of the most important context factors as well as related risks and limitations of digital technology. The report provides practical insights into the potential of digital technologies to facilitate the participation of actors beyond the principal negotiation parties. As will be shown, digital inclusion can have various strategic purposes, such as strengthening the legitimacy of peace processes and their outcomes, empowering marginalized and vulnerable groups, transforming community relationships, or reducing threats or risks to a peace process. The report will introduce a conceptual framework that discusses the functions and outputs technologies have to deliver to fulfil any of these strategic purposes. This chapter discusses the project’s overall methodology and its principal research steps.

2.1 Assessment of Current Uses of Digital Technology

The project first assessed how mediators and mediation support actors currently use digital technologies to complement conventional efforts to promote inclusion. The project looked at how digital technologies are used to facilitate communication between conflict stakeholders within the digital sphere. It explored linkages between digital and conventional mediation formats across different tracks of diplomacy, ranging from high-level talks (track 1) between political and military leaders, across unofficial dialogue and problem-solving activities (track 2) involving experts and civil society, to people-to-people diplomacy at the “grassroots” level.¹⁹ Further, the project identified factors that could enable or constrain the effectiveness of digital technologies. To this end, the project team conducted an online survey.²⁰ In addition, 20 interviews were conducted with mediation professionals and experts, who provided more in-depth insights into individual cases, as well as past and current discussions about the use of digital technology in peacemaking. The assessment covered all geographic regions and included experiences from Afghanistan, Northern Ireland, Syria, Yemen, Libya, Ukraine, Myanmar, Colombia, Mali, the Central African Republic (CAR), the Democratic Republic of the Congo (DRC), Kenya, and South Sudan.²¹

19 Dan Snodderly, ed., *Peace Terms. Glossary of Terms for Conflict Management and Peacebuilding* (Washington D.C., 2011), 50-51, <https://www.usip.org/sites/default/files/files/peaceterms.pdf>.

20 Invitations to participate were distributed widely among the most relevant organizations, including the mediation support units of international and regional organizations such as the United Nations (UN), European Union (EU), the Organization for Security and Co-operation in Europe (OSCE), the Intergovernmental Authority on Development (IGAD), non-governmental organizations such as the HD Centre, swisspeace, the Conflict Management Initiative (CMI), the Berghof Foundation, and Accord, as well as mediators and their teams employed in internationally mandated mediation initiatives. To ensure strong participation by women, invitations were also sent out to members to all networks for women mediators. Prominent experts and mediation scholars were also contacted individually. The distribution of respondents with track 1, track 2, and track 3 mediation experience was relatively balanced, meaning that the online survey reached a relatively broad and diverse sample of mediation practitioners. Overall, the questionnaire was submitted by 73 respondents, but not all questions were answered with the same degree of detail.

21 This list is not complete, to safeguard the anonymity of respondents.

2.2 Learning from Adjacent Fields

In the last few years, digital technologies have been used in a wide range of professional fields adjacent to peacemaking. There are some documented examples of technology use in peacekeeping missions, as well as in the context of peacebuilding and conflict prevention efforts more broadly, mainly under the heading of “Peacetech”. However, a much larger body of literature focuses on the use of digital technologies for development, or “ICT4dev”, which has extensively discussed how increased participation through digital technologies can contribute to development outcomes that are more locally owned and better tailored to user communities. This literature has also outlined how digital inclusion can contribute to reducing socio-economic inequalities and marginalization.

Moreover, there is also a substantive body of literature on humanitarian relief or disaster response, which discusses digital technologies primarily in terms of their potential to provide better data and adequate information. Relevant learning examples can also be distilled from the literature on e-participation in policymaking, and the role of social media in social movements, for example regarding the potential of technologies to enable deliberation and political expression. Finally, literature on countering online hate speech also contains relevant insights, especially with regards to shaping narratives that affect community relations.

These fields bear similarities to peacemaking in terms of the context in which these technologies are applied, which are often characterized by limited socio-economic development and communication infrastructures. Much like with peacemaking, these fields pursue objectives related to the principle goal of increasing participation. The application of digital technologies in these fields has unveiled a range of intervening factors, challenges, and risks that should also be considered when applying digital technology in the field of peace mediation. Therefore, this report draws on the knowledge resources produced in these adjacent fields – including from the academic and policy or practice-oriented literature – to inform the adoption of digital technologies by the mediation community.

2.3 Participatory Design of Use Cases

In its final step, the project aimed to translate insights from adjacent professional fields to peacemaking. Rather than merely adapting applications, the project sought to tailor digital technologies to the needs of the mediation community. The project team thus invited mediators and mediation support actors to participate in an online course aimed at developing practical learning and guidance resources. This activity was implemented jointly with Helena Puig Larrauri and Maude Morrison from Build Up.²² The course presented the preliminary findings of the preceding two research activities and discussed how digital technologies could facilitate inclusive peacemaking in four distinct peacemaking scenarios: negotiations after a full-fledged civil war, negotiations to end a localized armed insurgency, negotiations in the context of electoral violence, and national dialogues after a popular uprising. These scenarios were chosen to highlight a wide variety of technology use cases i.e. a specific situation in which a technology could be applied, tailored to different contexts and peacemaking challenges. The results of this online course can be found on the project's online resource on www.digitalpeacemaking.com.

²² Build Up is a non-profit organization that works to transform conflict in the digital age. More information can be found on www.howtobuildup.com.

3. Towards Digital Inclusion: Preliminary Considerations

This chapter provides an introduction to how we can understand digital inclusion in peacemaking. This first requires getting a clearer idea of both digital technology and inclusion, before asking how the two can be brought together. The chapter also looks at how digital technology can help overcome some dilemmas and challenges that characterize current approaches to inclusion, including the competition for seats at the negotiation table.

3.1 Moving Beyond “Tools” and “Gadgets”

In this report, digital technologies are understood as devices, platforms, or techniques that communicate, process, and store data. Digital technologies encompass both tangible electronic equipment (i.e. hardware) and intangible applications and platforms (software) that are used to work with data. They thus include computer and mobile phone-based applications, as well as social media. The peacebuilding and peacemaking communities increasingly utilize the term “digital technologies” in place of the more unwieldy term *information and communication technologies* (ICT). ICTs, by definition, also contain non-digital technologies, i.e. devices that process or communicate data in electrical forms other than digital, such as analogue radio and TV (even though these also increasingly function through digital signal transmission). Some definitions of ICTs even contain non-electronic technologies, including paper-based technologies²³ While this report is concerned with those technologies that are digital, there is little to be gained from hair-splitting over definitions. The interest and necessity to better understand the role of digital technologies in peacemaking has little to do with their exact technical set-up (such as whether data is transmitted digitally or merely electronically). More relevant for present purposes is the increasing use of such technologies by conflict parties and stakeholders, and their potential to influence dynamics and outcomes of mediated peace processes.

Importantly, technologies are more than just “tools” or “gadgets”. By definition, we can understand technologies as containing specific knowledge, through which they complete a task.²⁴ It is thus essential to not only ask about the material aspects of technology (the tools or gadget), but also the knowledge and skills required to build and utilize them. Digital technologies are always situated in a context and are “socially embedded”. They have been shaped by the environment in which they were developed and serve specific preferences.²⁵ Knowledge is not only necessary to create a specific technology, but also to apply it purposefully. Where this specific background knowledge is missing, we are likely to see technologies failing, or serving purposes other than initially intended. In other words, specific tools require an informed operation in order to fulfil their particular purpose.

This is related to a further important question, namely if technologies are “neutral”. Some argue that technologies can be applied to serve various agendas and objectives and do not themselves define them. The opposing view is that technologies and societies are shaped mutually and that technologies cannot be employed to perform a task, but evolve jointly

23 Richard Heeks, *Information and Communication Technology for Development (ICT4D)*, Routledge Perspectives on Development, 9 (London ; New York: Routledge is an imprint of the Taylor & Francis Group, 2018).

24 *Ibid.*, 9.

25 Chrisanthi Avgerou, ‘Information Systems in Developing Countries: A Critical Research Review’, *Journal of Information Technology* 23, no. 3 (1 September 2008): 133–46, <https://doi.org/10.1057/palgrave.jit.2000136>.

with specific political (and peacebuilding) initiatives.²⁶ Debates in recent years have been rather dominated by concerns about the detrimental role that digital technologies can play in political processes, and particularly in settings of heightened political polarization, populism, xenophobia, and racism. In addition, feminist critiques of technology have flagged that current patterns of technology design, access, and usage mirror broader social patterns and institutions that negatively affect women and other marginalized groups. Technologies are coloured by the intentions, interests, and inclinations of those who build and use them. They do not exist independently from the broader power relations – and power struggles – that characterize our societies. This insight means, of course, that technology can also be a tool for emancipatory agendas if they are used for the right purpose and in a suitable manner.²⁷

When asking how digital technology can serve peacemaking, one must take a strategic approach, as suggested in this report. When discussing how to enhance inclusion through digital technologies, it is important to keep in mind that the choice of technologies has an effect on which user can access and use said technologies, and in what way. Once put in place, these technologies have an impact on the dynamics of peace processes. For instance, they may be prone to facilitate specific political agendas, enhance the voice of specific stakeholders over others, or provide access to specific segments of the population while making participation more difficult for others. Those who intend to foster inclusion using digital technology, therefore, need to be clear about its strategic purpose.

3.2 A Strategic Perspective on Inclusion

Inclusion has emerged as a central concern for mediators and mediation support actors over the last years. It now forms an essential element to international efforts to support peaceful settlements of armed conflict and to build long-term peace. Inclusion is also increasingly enshrined in international policy provisions and international law, particularly since the 2012 United Nations Secretary General's Report on "Peacebuilding in the Aftermath of Conflict".²⁸ However, there is no single, shared understanding of inclusion. At best, we can understand the term as a "family resemblance concept", which is "sustained by an untheorized consensus of what it should be and the work it should do".²⁹ But the term also risks being used as a "buzzword", to correspond with expected normative commitments, while its utility remains unclear.³⁰

The UN Guidance on Effective Mediation defines "inclusivity" as the "the extent and manner in which the views and needs of conflict parties and other stakeholders are represented and integrated into the process and outcome of a mediation effort".³¹ The term "inclusion" focuses on the efforts in the process through which inclusivity is achieved. The UN's definition mirrors some of the early reasoning behind inclusion, namely, to enable participation beyond the principle conflict parties, through which the views and needs of all stakeholders can be brought into the process. In practice, however, implementing inclusive peace processes has remained a considerable challenge. Inclusion can lead to a change of power relations at the negotiation table and beyond. Political elites may view inclusive

26 J. R. Welch, S. Halford, and M. Weal, 'Conceptualising the Web for Post-Conflict Governance Building', *Peacebuilding* 3, no. 1 (2 January 2015): 58–74, <https://doi.org/10.1080/21647259.2014.973673>.

27 Amy O'Donnell and Caroline Sweetman, 'Introduction: Gender, Development and ICTs', *Gender & Development* 26, no. 2 (4 May 2018): 217–229, <https://doi.org/10.1080/13552074.2018.1489952>.

28 Catherine Turner, 'Mapping a Norm of Inclusion in the Jus Post Bellum', SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 17 March 2018), <https://papers.ssrn.com/abstract=3421539>.

29 De Waal, 'Inclusion in Peacemaking' (footnote 2), 165.

30 Hellmüller, 'Beyond Buzzwords' (footnote 2).

31 UN Peacemaker, 'United Nations Guidance for Effective Mediation', 2012, <https://peacemaker.un.org/guidance-effective-mediation>.

arrangements as a threat to their power and oppose it. In some peace processes, such as in Syria, more inclusive arrangements have also been hindered by powerful foreign states that reject inclusive peace negotiations for normative reasons or based on a realist political calculus. Moreover, the participation of larger parts of society in peace processes is made difficult by insecurity, on-going military operations, or the destruction of infrastructure through armed conflict. While digital technologies cannot change the political context in which peace processes take place, they allow mediation professionals to respond to these challenges differently, by enabling more flexible and less place- or infrastructure-dependent forms of inclusion.

Along with its rising popularity, the approaches to inclusion, and the rationales to strengthen it, have considerably diversified. Many of these approaches also implicitly or explicitly correspond with deeper reflections about the causes and dynamics of conflict, and how inclusion can help to address, mitigate, and overcome them. To matter for peace processes, inclusion should therefore be understood as purposeful. Inclusion is not an end in itself but a means to an end. In their recent research, Hirblinger and Landau have identified several major strategies of inclusion in peacemaking practice that are based on various rationales.³² Inclusion has been furthered to strengthen the legitimacy of peace processes and their outcomes, to empower and protect vulnerable or marginalized groups, and to transform relationships between conflict parties and stakeholders. Drawing on this framework, this report sheds light on how digital technologies can contribute to any of these strategic purposes. It will also demonstrate that digital technologies can be strategically applied to foster inclusion in ways that conventional approaches to inclusion cannot. Specifically, as will be demonstrated, digital technologies can strengthen efforts to protect vulnerable groups while reducing the risks of a break-down of the peace process or a return to armed violence.

3.3 The “Politics of Inclusion” and Fragmented Peace Processes

Current efforts to foster inclusion arrangements risk leading to a “politics of inclusion” around the negotiation table: a competition for seats between participants claiming to represent various populations and stakeholder groups that match specific identity traits (gender, age, or ethnicity, for instance). Such identity traits have increasingly been used to decide who should have legitimate access to the negotiation table. This is partly because inclusion has to a great extent become associated with women’s participation,³³ but the discourse has also moved on to include other identity markers, such as “youth”. Further, peace processes often necessitate resolving animosities along ethnic or religious identity categories. Participants in peace processes have thus become associated with the seemingly homogenous constituency they represent, while at the same time “owning” various identity traits simultaneously. This challenge of intersectionality is common in other forms of democratic representation as well.³⁴ However, given that peace processes are often characterized by a great variety of fault lines and limited options to participate in the negotiations, there is in practice a relative scarcity of available seats, leading to competition over access to the table. This is particularly obvious in track 1 negotiations, where the number of participants is usually small, which leads to competition between different groups for a seat at the table. In addition, a reliance on single identity markers such as gender or geographic origin poses the risk that such inclusion formats may brush over, or misrepresent, what is in fact a heterogeneous group of stakeholders.³⁵

32 Andreas T Hirblinger and Dana M Landau, ‘Daring to Differ? Strategies of Inclusion in Peacemaking’, *Security Dialogue*, 31 January 2020, 096701061989322, <https://doi.org/10.1177/0967010619893227>.

33 De Waal, ‘Inclusion in Peacemaking’ (footnote 2).

34 Aletta Norval, ‘Democracy, Pluralization, and Voice’, *Ethics & Global Politics* 2, no. 4 (1 January 2009): 297–320, <https://doi.org/10.3402/egp.v2i4.2118>.

35 Hirblinger and Landau, ‘Daring to Differ?’ (footnote 32).

While there is always a high number of identities and interests that need to be considered in a peace process, contemporary peace processes are also characterized by increasing fragmentation. In contexts such as Syria, Yemen, or South Sudan, the proliferation of armed groups, political parties, and civil society groups has meant that broad-based inclusion becomes difficult to achieve.³⁶ Conventional inclusion formats must usually go through a delicate selection process in order to guarantee that participation is balanced. This also pertains to the participation of perceived “neutral” civil society actors, which may worsen detrimental power dynamics at the negotiation table if civil society groups or women representatives side with elements of the political elite or armed opposition.³⁷

These problems are related to a misguided understanding of *what* should be included in a peace process. Inclusivity is not primarily achieved through the inclusion of persons, but the views and needs of conflict parties and stakeholders. These are related to the various identity traits that matter in a given conflict.³⁸ In this respect, digital technologies may provide practical solutions, because they allow access to the negotiation table, and help broaden the process in manners that conventional inclusion modalities cannot. They can focus on the integration of views and needs that are expressed among a diverse set of stakeholders without necessitating their physical presence – thus reducing pressure at the negotiation table. Digital technologies therefore set out to enable more direct, fluid, and adaptive forms of participation that help overcoming the “politics of inclusion” that are by-products of conventional forms of inclusion. Digital inclusion allows for more direct forms of participation and therefore circumvents the challenge of distributing seats at the table in a way that reflects the overall composition of those affected by the conflict. Digital inclusion also enables participation on a larger scale, which means in effect that a more heterogeneous and fine-grained set of views can be integrated into the process. Stakeholders can also participate more flexibly, engaging with others depending on the specific issues and purposes.

3.4 The Significance of Voice

How then does digital inclusion differ from conventional forms of inclusion? It is important to note that many (if not all) current efforts to strengthen inclusion already rely on digital technology. This starts with the use of email or text messaging services to communicate with the conflict parties and stakeholders, the use of videoconferencing software to connect geographically dispersed stakeholders to an on-going negotiation process, or the use of imaging technology or maps to illustrate and analyse key issues. However, we can understand digital inclusion as qualitatively different from conventional forms of inclusion as it aims to achieve various strategic purposes primarily by the use of digital technology, through which the views and needs of conflict parties and stakeholders are articulated, transmitted, and integrated into the peace processes.

Conventional forms of inclusion usually require the physical presence of a representative at the negotiation table, or in other inclusion formats like consultations or workshops. These representatives can ensure that their preferences are communicated directly to the mediator and other conflict parties and stakeholders, in order to inform the on-going peace process. They will also be able to verify if their message has been accurately received and taken into account, albeit to a limited degree. When using digital technology, messages are

36 Kathleen Gallagher Cunningham, “Understanding Fragmentation in Conflict and Its Impact on Prospects for Peace,” *Oslo Forum Papers*, 6 (2016): 20.

37 Hirblinger and Landau, ‘Daring to Differ?’ (footnote 32).

38 This requires what can be called a “relational” approach to inclusion, see *ibid.*; see also Dario Castiglione and Mark E Warren, ‘Rethinking Democratic Representation: Eight Theoretical Issues’ (Centre for the Study of Democratic Institutions, University of British Columbia, 18 May 2006).

translated into digital data and transmitted by digital means. This means that the “data” is split from the “sender”. This is why the emphasis on voice is important for purposes of digital inclusion, as it ensures that the data integrated into the process corresponds with the message that the sender set out to deliver.

There are large amounts of data available that could inform peace processes that have not originally been produced with this intent. Posts and comments on social media may contain political messages that could help mediators understand the preferences of conflict parties, conflict stakeholders, and their respective constituents. However, this information is usually not posted by social media users with the intention to inform a given peace processes. While a Tweet or Facebook post may contain relevant information, there is no way to guarantee that the author actually wanted the information to inform the peace process in this particular manner.

This issue has been raised through warnings about the “extractive” potential of digital technologies, and their possibly disempowering effects that may discourage engagement in peace processes.³⁹ Research in other domains has shown that while social media users have to agree to the collection and use of personal data that is difficult to keep track of, they nonetheless have a sense of the range of uses of that information and the inferences that might be made from it.⁴⁰ That said, using social media data to inform political processes, without the explicit consent of social media users, is likely to backfire. An emphasis on the need to capture voice in order to be truly inclusive can avert such risks.

By way of definition, the report here suggests that digital inclusion in peacemaking means that the voices of conflict stakeholders are integrated into a peace process in the form of digital data. As “voice” we can understand various kinds of information that are expressed by a conflict party or stakeholder, including factual information, preferences, experiences, opinions, or beliefs. The emphasis on voice limits the kinds of information and data relevant to inclusion to what has been intentionally expressed by a conflict party or stakeholder, with the aim of giving an account of oneself in an attempt to change an objectionable state of affairs.⁴¹ The emphasis on voice is particularly relevant in peace processes, because these are shaped by dynamics in which established political institutions may have been abolished or are under critique, and new and inchoate political demands and ideas, which aim at the re-negotiation of the political status quo, need to be given expression.⁴² If conceived as an effort of gathering voice, digital inclusion can contribute to mediators’ efforts to transform violent conflicts and promote a peaceful settlement of conflict.

39 Helena Puig Larrauri and Yeonju Jung, ‘Reimagining Peacebuilding Through Innovation Stockholm Forum on Peace and Development. Conference Report’, Session Report (Stockholm: Stockholm Forum on Peace and Development, May 2017), https://www.sipri.org/sites/default/files/2017-09/session_report_no_14.pdf.

40 Benedict Rumbold and James Wilson, ‘Privacy Rights and Public Information’, *Journal of Political Philosophy* 27, no. 1 (2019): 3–25, <https://doi.org/10.1111/jopp.12158>.

41 Mirca Madianou, Liezel Longboan, and Jonathan Corpus Ong, ‘Finding a Voice Through Humanitarian Technologies? Communication Technologies and Participation in Disaster Recovery’, *International Journal of Communication* 9 (14 September 2015): 3020–3038. This definition draws on the works of Judith Butler and Albert Hirschmann.

42 Norval, ‘Democracy, Pluralization, and Voice’ (footnote 34).

4. The Emerging Practice of Digital Inclusion

This chapter provides an overview of the digital technologies currently used by mediators and their teams, as well as mediation support organizations, in their efforts to facilitate inclusion in peace processes. The assessment is based on the results of the online survey, as well as selected expert interviews that were conducted for this project. All data was collected between March and June 2020. The results presented do not claim to be representative of all mediation practices, but indicative of broader trends. There now exists a wide variety of technologies that can be used in peace processes. A comprehensive overview of technologies would therefore not only read like an encyclopaedia, but would also require constant updating. While this report discusses individual technologies in some detail, the main goal is to provide an overall conceptual framework that can guide mediators in their use of digital technologies. This guidance aims to be relevant independent of the exact technical specificities that continue to change due to on-going technological advancements. This chapter first provides a short overview of which technologies are used and how. It mainly discusses the communication patterns that result from the use of digital technology, how digital technologies are used in combination with “offline” conventional forms of inclusion, and how digital technologies bridge peacemaking efforts among different tracks.

4.1 Which Technologies are Currently Used, and Why?

Many mediators make use of digital technologies, but not all the time and not for all purposes. Three out of five of the survey participants stated that they had used digital technologies to support their mediation efforts. Importantly, this stands in contrast to the higher usage rates by conflict parties. More than four out of five of the respondents had experienced that conflict parties or stakeholders would use digital technologies to make their views heard. For instance, conflict parties made use of digital technologies to shape the “information battleground”, and influence participants’ perceptions, stance, and willingness to negotiate. At times, conflict parties may also use digital technologies to share grievances, put forward proposals, and promote or reinforce their positions. In many contexts, conflict party representatives involved in a negotiation may use their personal social media profiles to post updates about the process and share details, or even documents. However, only two out of five of the respondents had experienced that conflict parties had requested for digital technologies to be used as a tool for inclusion in the mediated peace process. This indicates a divergence between the use of technologies by the conflict parties, and their interest in having technology used in the mediation efforts themselves. This should not be interpreted to say that other stakeholders – especially those with limited voice – would not appreciate stronger inclusion through digital means.

The survey also yielded insights into which technologies are used and why. The top technologies used were email, followed by websites, interactive data visualization and analysis tools, online discussion forums, short messaging services, and smartphone messaging applications. These results are indicative of the fact that the majority of the mediation support community uses pre-designed, ready to use communication technologies that can be utilized for various purposes. In contrast, specialized, dedicated, and more demanding technologies seem to be less widely used. The survey also indicates that mediation professionals choose their technologies mainly based on the criteria of “what works”. Important considerations are the appropriateness for a particular context, the availability and reliability of technology, as well as stakeholders’ preferences and acceptance of technology, visible in local use patterns. Additional important factors are the ease of

deployment, use and maintenance, the overall performance and usefulness of technology for a given purpose, as well as cost considerations. Security considerations are a crucial additional factor, and particularly concerns about data security, data manipulation, and surveillance risks, as well as protection concerns for those who use the technology.

4.2 Communication Patterns: Two-Way versus Networked Communication

The survey also produced interesting insights on the communication patterns between mediation professionals, conflict parties, stakeholders, and the broader population. Four out of five mediation professionals use digital technologies to facilitate their communication with conflict stakeholders, while three out of five use digital technologies to communicate with the conflict parties or the general public. This indicates that while mediators use digital technologies to communicate with parties to a given conflict, the technologies are used just as much to reach the wider population, and even more to reach other conflict stakeholders. For example, some mediation teams set up several decentralized reporting centres, to which individuals could send reports about ceasefire violations and other crucial developments. Another example is the use of SMS-polling technologies aimed at getting a sense of the perceptions and preferences of the broader population. The comparably lower use of technology for direct communication with conflict parties is likely due to the mediators' concerns about possible surveillance. This includes risks of the content from the conversation being intercepted, or the identity and geographical position of those who use those technologies being disclosed. Many mediators invest considerable resources to guarantee the safety of the conflict parties they interact with, and consequently strive to keep digital traces to a minimum. Where such concerns are less prevalent, digital technologies are more likely to be used.

Mediation professionals also use digital technologies to facilitate communication that does not primarily involve them. Almost three out of five respondents have used digital technologies to facilitate communication between conflict parties and the general public. This again indicates that these technologies are already used in manners that foster inclusion. For example, such communication may be facilitated to guarantee a basic level of buy-in among the conflict parties' constituents through information sharing and consultations. Moreover, half of the respondents have used digital technologies to facilitate communication among other conflict stakeholders. This suggests that digital technologies can strengthen interaction among parties that usually do not have direct access to the negotiation table. Almost two out of five mediation professionals who answered the survey also stated that they used digital technologies to facilitate communication between conflict stakeholders and the general public, which also increases a broader engagement in peace processes.

By contrast, digital technologies are applied less to facilitate the communication between conflict parties, and between conflict parties and conflict stakeholders. Here again, data security concerns are likely to play an important role. It seems plausible that exchanges between conflict parties, and between conflict parties and other stakeholders, are perceived as more sensitive and challenging to manage, which is why most mediation professionals continue to rely on face-to-face communication. There are, however, some interesting outliers, such as the use of text-messaging services to establish contact between representatives of quarrelling groups that have not been in direct contact for years, or even decades. Digital technologies have also been used to increase empathy between communities associated with different conflict parties. The Donbas Dialogue in the Ukraine, for instance, uses a virtual dialogue platform that connects communities living in government-controlled areas with communities living in areas controlled by the opposition (see text box on page 29).

It is essential to consider that many digital technologies enable forms of communication that are not strictly between two parties, but instead unfold in relational networks. For instance, messaging services have conventionally been used to connect two parties, but now often entail larger groups of participants. Such networked communication can span across geographic regions. A WhatsApp group may be moderated by an administrator, who regulates the membership of the group, while all members have an equal ability to contribute to the chat. By contrast, other communication platforms may allow a stronger level of moderation and control, for instance through the curation of specific dialogue themes, moderation functions such as calling on, or muting participants, or even censoring specific content and comments. In addition, some technologies are more suited to enabling vertical communication between a central agent and a larger group, such as an online survey, polling, or crowdsourcing applications, whereas other technologies enable horizontal and decentralized communication, such as online fora or Wikis. The design of such technologies shapes the dynamics of inclusion, and ultimately what objectives can be achieved through them. As the use cases presented in Chapter Six of the report makes clear, the design of the technology will be decisive for delivering specific functions and outputs that help to achieve a specific purpose.

4.3 Integrating Offline and Online Inclusion Efforts

The survey responses indicate that digital technologies are used primarily in combination with conventional, “offline” forms of inclusion, and to a smaller degree, to facilitate stand-alone, “online” forms of inclusion. Almost nine out of ten respondents used digital technologies in combination with offline inclusion formats, such as consultations or workshops. This points to the continued need to facilitate dialogue through physical, “face-to-face” encounters. Moreover, the responses suggest that mediators often alternate between online formats and offline formats, or use them in parallel. For example, online platforms provide opportunities for the organization and coordination of offline activities and for agenda-setting. In the lead-up to offline activities, digital technologies are also used to conduct informal consultations and preliminary discussions with individual actors, which are then continued, extended, and finalized through offline activities. For example, during the negotiations in Myanmar that led to a nationwide ceasefire agreement in October 2015, mediators used a Facebook page of a non-governmental organization that all major conflict parties agreed to, which served as an ad-hoc consultation platform.

In addition, digital technologies may be used to create and share content that is then further used during offline meetings. Digital technologies can enable broader participation during offline activities, for instance through video streaming or video conference services. Importantly, many mediation professionals believe that digital technologies cannot replace face-to-face meetings and that these conventional forms of interaction continue to be understood as the “real” effort. In particular, offline forms continue to be perceived as more meaningful and better suited to building a basis for collaboration. They are also understood as a prerequisite for online activities. Hence, digital inclusion can currently complement conventional forms of inclusion, but cannot fully replace it.

4.4 Creating Linkages between Tracks

Digital inclusion can be a vehicle for connecting various peacemaking efforts. These often run across tracks, involving formal, high-level negotiations between political and military leaders in track 1, informal dialogue and problem-solving activities involving experts and civil society in track 2, and “people-to-people” diplomacy that encourages interaction,

understanding, and trust-building between hostile communities in track 3.⁴³ Three out of four respondents in the online survey stated that they used digital technologies to create linkages between different peacemaking tracks. For example, digital technology can enable civil society actors to convey their perspectives to participants in track 1, for instance through electronic messages, “digital feeds”, or videoconference links. Messaging services can also provide a platform for informal discussions among important civil society leaders that then inform official negotiating positions of the conflict parties. Furthermore, information gathered through online consultations can be fed back to the formal National Dialogue processes. Mediation professionals also use information gathered through social media sources to analyse and monitor conflict dynamics and trends, and to inform mediation strategies. This information may also be presented to stakeholders and conflict parties participating in various tracks. However, as discussed above, this does not contribute to digital inclusion if the information is not provided intentionally by the technology users.

Digital technologies can also be used for multi-level peace advocacy to capture sentiments and interests expressed in one track and present it to stakeholders involved in another track. It is important to note, however, that in digital inclusion, differentiating between different “tracks” becomes increasingly difficult. This is because digital inclusion stakeholders connect in spaces that are much more fluid and dynamic than a static model of separate peacemaking tracks assumes. Once conflict parties and stakeholders interact on social media platforms, this happens in a trackless space, in which conventional roles and political boundaries are challenged. In some cases, conflict party representatives have shared information from the negotiation process with their followers or constituencies, and have engaged in discussions with these audiences through social media channels. In other cases, civil society activists hook political elites into a social media debate with the wider population, by using a combination of Twitter hashtags, or tagging them in comments on Facebook. These examples point to an emerging practice of digital inclusion that has already begun to change how the broader public participates in peace processes. However, what is needed is an informed and strategic approach to digital inclusion, as will be discussed in the following section.

43 Compare with Snodderly, *Peace Terms. Glossary of Terms for Conflict Management* (footnote 19), 50–51.

5. Digital Inclusion: A Conceptual Framework

This chapter introduces a conceptual framework for digital inclusion, which elucidates how digital inclusion can serve specific *strategic purposes* in peacemaking. Inclusion is not an end in itself but a means to an end. Drawing on a review of international policy and guidance documents, as well as expert interviews, a recent study by Hirblinger and Landau demonstrated that there exist various rationales for inclusion: to increase the legitimacy of peace processes and their outcomes, to empower and protect vulnerable and marginalized groups, and to also support the long-term transformation of social and political relationships.⁴⁴

Building on this insight, this report highlights four different strategic purposes of digital inclusion:

- To build the legitimacy of processes and outcomes by involving a broad range of stakeholders beyond the principal conflict parties.
- To empower women and marginalized groups by providing opportunities for participation in peace processes and political institutions.
- To transform relationships underlying conflict by focusing on the relational dynamics between conflict parties and stakeholders.
- To protect vulnerable groups and reduce the risk of continued violence by enabling early warning and early action.

In developing an actionable pathway to achieve each of these strategic purposes, it is helpful to consider the individual *functions* that digital technologies are expected to fulfill, as well as the *outputs* they need to generate to be useful for inclusion.

When designing PeaceTech, the non-profit Build Up distinguishes three general functions of technology, namely data management, strategic communications, and dialogue and networking. As illustrated in the table below, these general functions can be differentiated further to generate a detailed understanding of what digital technology must deliver in order to facilitate digital inclusion in mediated peace processes. Data management can be broken down to differentiate between data gathering, data analysis, and data dissemination. Strategic communications can be further differentiated in the amplification of *more* voices and the amplification of *diverse* voices. Finally, dialogue and networking can entail connecting technology users, coordinating technology users, or enabling their collaboration.

These functions create various outputs that help to achieve each of the four purposes. The data management functions help to produce new or better information, increase the speed and spread of information. The strategic communication functions can enable political expression, increase the participants' influence in the process, and encourage empathy. Finally, the dialogue and networking functions enable mobilization and representation, and they further deliberation.

This conceptual framework helps us to identify the specific strategic purposes of digital inclusion. Moreover, the framework specifies the functions that digital technologies need to fulfil in order to contribute to any of the strategic purposes. Importantly, this framework does not provide a one-size-fits-all solution but a heuristic that can guide the designing of digital inclusion efforts in a context-sensitive manner. Moreover, not all functions are

44 Hirblinger and Landau, 'Daring to Differ?' (footnote 32).

required to achieve a specific output or strategic objective. [This flowchart](#) provides a comprehensive overview, based on the use cases created as part of this project.

Strategic purposes of digital technology	Description
Build the legitimacy of processes and outcomes	Increase public support for peace processes and their outcomes, by involving conflict stakeholders beyond the principal conflict parties
Empower marginalized groups	Provide marginalized or vulnerable groups the power to inform peace processes, by providing opportunities and resources for participation
Transform relationships	Transform the social, political, and cultural relationships underlying conflict, by focusing on the relations between conflict parties and stakeholders
Protect vulnerable groups and reduce the risk of continued violence	Enable early warning and early action, by fostering horizontal networks of information exchange
Functions of digital technology	Description
Gather data	Collect data relevant for the peacemaking context, actors, or specific events
Analyse data	Process, prepare, compare or triangulate data relevant for the peacemaking context, actors, or specific events
Disseminate data	Share or publish data relevant for the peacemaking context, actors, or specific events
Amplify messages	Increase the visibility of information and make it more marked
Diversify messages	Increase the diversity of information or the diversity of senders
Connect actors	Enable exchange and communication between actors
Enable coordination	Enable alignment between usually disjoint actors
Enable collaboration	Enable joint action towards between actors towards a common objective
Outputs of digital technology	Description
Better information	Provide data that is not otherwise available
Faster information	Reduce the time required for data transmission
Wider information	Widen the reach of data among the population
Political expression	Make the thoughts and feelings of stakeholders known
Assert influence	Enable stakeholders to affect the course of the peace process
Encourage empathy	Increase the ability of stakeholders to understand and share the feelings of others
Mobilization	Organize and encourage a particular group to take collective action
Representation	Provide information that depicts someone's interests, needs, or concerns
Deliberation	Enable discussion through which an issue is carefully considered

The next chapter illustrates the conceptual framework through examples of uses from adjacent fields, and also presents a selection of technology use cases developed during the course of the project.

6. The Strategic Purposes of Digital Inclusion

This chapter provides a detailed discussion of how digital technologies can serve any of the four strategic purposes discussed above by carrying out specific functions and delivering specific outputs. To this end, the chapter follows the overall approach of the project: it first discusses how digital technologies are used in professional fields adjacent to peacemaking, before presenting a summary of the use cases developed during the project's online course. The functions and outputs necessary to achieve each strategic purpose are detailed throughout and emphasized in bold. The chapter also features selected snapshot case studies from past and on-going peacemaking efforts in which digital technologies were used to facilitate inclusion. The full documentation of use cases is available on www.digitalpeacemaking.com.

6.1 Building Legitimacy of Processes and their Outcomes

Inclusion has been widely used as a vehicle to strengthen the public support and acceptance of political processes and their outcomes, and digital technologies play an increasing role in such efforts. Broadly speaking, digital technology, and particularly social media, have been found to influence, and moderately strengthen, participation in political life. However, the causal link between non-directed social media use and increased political participation is not always straightforward, nor is it the same across different political events and contexts.⁴⁵ However, this has not discouraged efforts to use these technologies in a directed and intentional manner to enable political participation. Responding to increasing social media user rates, many organizations and initiatives have encouraged a stronger involvement of citizens in political processes through variants of “eParticipation” or “online participation”, which can be understood as the extension of democratic processes mediated by digital technologies.⁴⁶ These initiatives are based on the assumption that the use of digital technologies increase opportunities for political engagement, and thus strengthen democratic processes and the legitimacy of political institutions. These initiatives can take many forms, including information sharing, electronic voting, online debates, consultations, decision making, or other forms of involvement and collaboration.⁴⁷ However, these efforts often have mixed results.⁴⁸ Nonetheless, digital inclusion continues to be understood and widely used as a means to foster a participatory democratic culture.

As an example, the utility of technology in fostering political participation has been explored through online consultations and their potential to legitimize rule-making processes that help to gather and analyse data about citizen perceptions, interests, and demands.⁴⁹ These processes can also **amplify the messages of** a larger number of voices, because the use of

45 Sebastián Valenzuela, Teresa Correa, and Homero Gil de Zúñiga, ‘Ties, Likes, and Tweets: Using Strong and Weak Ties to Explain Differences in Protest Participation Across Facebook and Twitter Use’, *Political Communication* 35, no. 1 (2 January 2018): 117–34, <https://doi.org/10.1080/10584609.2017.1334726>.

46 Øystein Sæbo, Jeremy Rose, and Tom Nyvang, ‘The Role of Social Networking Services in EParticipation’, ed. Ann Macintosh and Efthimios Tambouris, *Lecture Notes in Computer Science (International conference Electronic Participation, Springer Berlin Heidelberg, 2009)*, 46–55.

47 Øystein Sæbo, Jeremy Rose, and Leif Skiftenes Flak, ‘The Shape of EParticipation: Characterizing an Emerging Research Area’, *Government Information Quarterly* 25, no. 3 (1 July 2008): 400–428, <https://doi.org/10.1016/j.giq.2007.04.007>.

48 Sæbo, Rose, and Nyvang, ‘The Role of Social Networking Services’ (footnote 46), 48.

49 Fabro Steibel and Elsa Estevez, ‘Designing Web 2.0 Tools for Online Public Consultation’, in *Impact of Information Society Research in the Global South*, ed. Arul Chib, Julian May, and Roxana Barrantes (Singapore: Springer Singapore, 2015), 243–63, https://doi.org/10.1007/978-981-287-381-1_13.

digital technologies can lower the cost of participation and thus make it easier for citizens to take part in the drafting of new laws, for instance by providing comments.⁵⁰

Digital technologies can strengthen the legitimacy of processes and their outcomes by providing a platform for negotiation that enables debate and discussion, through which more acceptable solutions can be negotiated. In particular, it has been suggested that digital technologies strengthen the legitimacy of policy-making processes if they enable **deliberation**, i.e. a communicative behaviour that promotes thorough group discussion, in which participants carefully weigh the reasons for and against the proposition presented by others.⁵¹ Importantly, deliberation does not always require direct interaction between those participating in a process. It can be enabled through **gathering data** via crowdsourcing, for instance, in the context of constitutional reform processes or National Dialogues.⁵² As part of development projects, digital technologies have enabled debates about gender-based violence and how social change is possible.⁵³ One important caveat is that deliberation is very context-dependent, for example when it comes to whether it provides equal access to the conversation. However, if deliberative processes take place on established social media platforms, their design can have an impact on the quality of conversations.⁵⁴

Digital technologies have proven useful in efforts to promote democratic change. Studies of social movements and protest movements have pointed to the utility of social media in demanding government accountability and more legitimate politics, often in combination with “offline” forms of participation. Importantly, the use of digital technologies goes beyond merely **connecting actors** and **coordinating** offline activities,⁵⁵ and extends to the **political expression** of demands or opinions, and the **amplification of messages**. For example, when engaging in online activism, users can **collaborate** through online groups to **mobilize** around a common cause.⁵⁶ The use of social media for online activism can enhance the political support for the activists’ claims, and thus contribute to the legitimacy of the political outcomes of protest movements.⁵⁷

50 Stephen Coleman and Peter M. Shane, eds., *Connecting Democracy: Online Consultation and the Flow of Political Communication* (Cambridge, Mass. ; London: MIT Press, 2012).

51 Daniel Halpern and Jennifer Gibbs, ‘Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression’, *Comput. Hum. Behav.* 29, no. 3 (May 2013): 1159–1168, <https://doi.org/10.1016/j.chb.2012.10.008>. See also Dennis Friess and Christiane Eilders, ‘A Systematic Review of Online Deliberation Research’, *Policy & Internet* 7, no. 3 (2015): 319–39, <https://doi.org/10.1002/poi3.95>.

52 Tanja Aitamurto, *Crowdsourcing for Democracy: A New Era in Policy-Making*, Publication of the Committee for the Future, 1/2012 (Helsinki: Parliament of Finland, 2012).

53 O’Donnell and Sweetman, ‘Introduction: Gender, Development and ICTs’ (footnote 27), 218.

54 Halpern and Gibbs, ‘Social Media as a Catalyst for Online Deliberation?’ (footnote 51).

55 Zachary C. Steinert-Threlkeld et al., ‘Online Social Networks and Offline Protest’, *EPJ Data Science* 4, no. 1 (December 2015): 19, <https://doi.org/10.1140/epjds/s13688-015-0056-y>.

56 Sebastián Valenzuela, ‘Unpacking the Use of Social Media for Protest Behavior: The Roles of Information, Opinion Expression, and Activism’, *American Behavioral Scientist* 57, no. 7 (1 July 2013): 920–42, <https://doi.org/10.1177/0002764213479375>.

57 Francis L. F. Lee and Joseph Man Chan, ‘Digital Media Activities and Mode of Participation in a Protest Campaign: A Study of the Umbrella Movement’, *Information, Communication & Society* 19, no. 1 (2 January 2016): 4–22, <https://doi.org/10.1080/1369118X.2015.1093530>.

Snapshot: Colombia – Digital Agenda-Setting

In 2012, in the course of the peace process between the Revolutionary Armed Forces of Columbia (FARC) and the government of Colombia, digital technologies were used to consult with the public to shape the agenda of the peace negotiations. These efforts entailed a dedicated web page and a smartphone application. The platform was managed as a joint effort by the mediation parties in collaboration with the government. However, the information collected through the process was too vast to be systematically analyzed. As a result, it remains unclear how it actually informed negotiations. The initiative also struggled with a high percentage of SPAM and fabricated submissions, which had to be differentiated from authentic submissions. There were attempts to systematically analyze the submissions, for instance using Natural Language Processing (NLP). Reports about this consultative process were published in 2013. The final peace agreement text acknowledges the impact of the digital consultations, in parallel to workshops with civil society across the country, and mentions that the public made more than 17,000 submissions. Following the 2014 elections, the use of digital technologies became much more politicized. Social media, in particular, turned into a battleground for supporters and opponents of the peace process. This became especially pronounced after the peace agreement had been reached in August 2016. During the preparations for the public referendum on the peace agreement, various political stakeholders used social media to campaign for or against it. After a thin majority rejected the peace agreement in the referendum, peace activists used social media to campaign for a re-negotiation of the agreement.

Digital technologies can also be used to foster transparency by pushing government agencies to **disseminate data** and “open up”.⁵⁸ Increasingly, governments proactively provide **better information** in order to increase transparency around specific policies, for instance through the use of social media and the storage or sharing of information on digital platforms.⁵⁹ However, civil society-led initiatives also play a strong role in enforcing transparency and a democratization of information.⁶⁰ Several studies indicate that digital technologies can help to promote a culture of openness that enhances government accountability. In effect, this can enhance state-society relations, characterized by trust and reciprocity.⁶¹

The potential of digital technologies to democratize processes has also been discussed in the humanitarian field. Here, **amplifying** relevant **messages** from the population can guarantee that those most affected can take part in decision-making processes and **assert influence** in the design and implementation of interventions. The participatory use of digital technologies can also reduce the role of powerful intermediaries, minimizing the risk of power abuse and corruption common in the aftermath of disasters.⁶² The networks through which humanitarian responses are created and coordinated become more horizontal, with the effect that opportunities for participation are spread more equally.⁶³ Importantly, the experience of the humanitarian field suggests that the potential of technologies to redistribute power and support democratization can already be leveraged during short-term interventions.

58 Paul T. Jaeger and John Carlo Bertot, ‘Transparency and Technological Change: Ensuring Equal and Sustained Public Access to Government Information’, *Government Information Quarterly*, Special Issue: Open/Transparent Government, 27, no. 4 (1 October 2010): 371–76, <https://doi.org/10.1016/j.giq.2010.05.003>.

59 *Ibid.*

60 Sæbø, Rose, and Flak, 47; Stefan Baack, ‘Datafication and Empowerment: How the Open Data Movement Re-Articulates Notions of Democracy, Participation, and Journalism’, *Big Data & Society* 2, no. 2 (2015): 11, <https://doi.org/10.1177/2053951715594634>.

61 Mark Thompson and Geoff Walsham, ‘ICT Research in Africa: Need for a Strategic Developmental Focus’, *Information Technology for Development* 16, no. 2 (1 April 2010): 112–27, <https://doi.org/10.1080/02681101003737390>.

62 Madianou, Longboan, and Ong, ‘Finding a Voice Through Humanitarian Technologies?’ (footnote 41).

63 Róisín Read, Bertrand Taihe, and Roger Mac Ginty, ‘Data Hubris? Humanitarian Information Systems and the Mirage of Technology’, *Third World Quarterly* 37, no. 8 (2 August 2016): 1314–31, <https://doi.org/10.1080/01436597.2015.1136208>.

Use Cases

There are various ways in which digital inclusion can foster the legitimacy of peace processes and their outcomes. In the early phases of a process, **participatory peace campaigns** can be supplemented through a social media component. This could involve civil society groups that demonstrate progress in the peace process and pressure conflict parties to join the formal negotiation process. For instance, mediation support actors could **share** multi-media content that documents progress in the peace process. Once a formal negotiation process is established, the campaign would **disseminate data** that inform the public about tangible achievements. It would also ask the public to **express** their **political** demands and lobby their political representatives to commit to a peaceful settlement. The campaign would **amplify the messages** of peace activists, increase **mobilization**, and support them to **assert influence** on the conflict parties. The participants could also sign up for more confidence-building measures. These activities could be continuously documented and disseminated on social media.

Various variants of **rapid polling** applications can be used to **collect data** critical to the peace negotiations. Rapid polls could be run during on-going negotiations, for example to collect key peace indicators that are relevant to the mediation. Such indicators could be defined in a participatory process, for instance through consultations with track 2 actors. These indicators could capture attitudes and opinions vital to the negotiations, such as towards specific power- or wealth-sharing provisions, reintegration or resettlements, disarmament, or specific political reform processes. The information would be **collected**, classified, **analysed**, and conclusions shared with the mediation team. The polls would thus **amplify the messages** of stakeholders without direct access to the negotiation table. The results of the polls could be used to incentivize compromise among negotiating parties, shared back to polling participants, and distributed among a wider set of organizations involved in the peace process. Rapid polls would lead to **better information**, help stakeholders **express** their political demands, and **assert influence** at the negotiation table. The **data collection, analysis, and dissemination** could be done through WhatsApp messages, dedicated polling apps, online forms, or SMS systems.

In the course of negotiations, **public digital consultations** could be held to involve a broad cross-section of the population. These could be conducted on a dedicated online discussion forum that allows back-and-forth, interactive communication between the mediator and the population during the on-going peace process. The consultations could be focused on specific and tangible elements of the negotiations. The online forum would **gather relevant data**, as well as **amplify and diversify the messages** of diverse stakeholders in the peace process. The results of these consultations would contain **better information** about the population's needs and interests, and could be used by the mediator to inform the negotiation process. It would enable a broad range of stakeholders to **express** their political opinion and **assert influence** on the process. The collected data could also be analysed and synthesized using text analysis tools that leverage artificial intelligence. Furthermore, a social media campaign could be run to **disseminate** the results of the consultations and invite people to the online discussion forum that enables **deliberation** between them.

Towards the end of negotiations, digital inclusion could be used to strengthen the public acceptance and support for an agreement. Key stakeholders could be invited to **a digital review of the draft agreement text** or key provisions of a possible agreement. This could involve a selected number of qualified participants, who would be able to view an entire text and comment directly on the document. This would **amplify and diversify** the messages that inform a final agreement text. The mediation team would then **analyse** these comments and incorporate them into the next version of the agreement. Alternatively, digital technologies could be used to gather **public feedback on an agreement** through a large-scale campaign to **gather** inputs on a draft text and raise awareness and support for it. The agreement would be **disseminated** through a range of communication forms that enable a lay public to understand the contents of provisions, such as videos or infographics. Feedback is then **gathered** from participants through a range of mechanisms, including through surveys administered by trained enumerators on smartphones.

6.2 Empowering Women and Marginalized Groups

Recent research has explored how information and communication technologies can contribute to the empowerment of marginalized or vulnerable groups. In relation to peacemaking, many efforts have focused on the empowerment of women, following UN Security Council Resolution 1325. However, a need for empowerment exists for many parts of a population affected by conflict. This need is often closely linked to both the causes of conflict and the dynamics of violence. Therefore, when discussing empowerment, this means also asking how digital technologies can contribute to political and social change in the contexts in which they are used, both on the level of perception and in more tangible ways.

Digital technologies can be understood as enablers that empower users to make informed decisions, enlarge their opportunities, and strengthen their capacities.⁶⁴ Specifically, social media plays an increasingly pivotal role in shaping public opinion, as well as in changing attitudes, beliefs, and interests of those who use it. When utilizing digital technologies for purposes of empowerment, a strong focus has therefore been on their role in creating awareness around political agendas and development challenges, by **sharing** relevant **data** and information, and enabling **political expression**. Feminist organizations have for instance used digital technologies in their fight against structural disadvantages, unequal gender relations, sexual harassment, and gender-based violence.⁶⁵ In development contexts, digital technologies are used to create and share **better information**, including to raise awareness with regard to public health challenges in a participatory manner.⁶⁶

In governance more broadly, digital technologies can strengthen representation of otherwise marginalized groups in decision-making processes, by enabling their participation. For instance, WhatsApp groups have been used to **connect** urban-based elected representatives and their rural constituencies and enhance their communication. These messaging groups not only provide a medium through which **data** about on-going political debates and policy-making processes can be **shared**, but constituents use these channels to **amplify** their **messages** that contain views and opinions, thus holding elected officers to account.⁶⁷ The empowerment potential of digital technologies has also been discussed in development contexts, where they can enable civic engagement and help overcome social exclusion by **connecting** remote populations.⁶⁸ They also enable marginalized groups to **coordinate** amongst themselves and **collaborate** on joint activities.⁶⁹ Studies in the humanitarian field suggest that the spread of digital technologies changes the role of crisis-affected populations from mere “beneficiaries” to active participants in relief efforts, and that this ultimately leads to a change in power relations.⁷⁰

64 Shana R. Poneis and Marlene A. Holmner, ‘ICT in Africa: Building a Better Life for All’, *Information Technology for Development* 21, no. 2 (3 April 2015): 163–77, <https://doi.org/10.1080/02681102.2015.1010307>.

65 O'Donnell and Sweetman, ‘Introduction: Gender, Development and ICTs’ (footnote 27), 217.

66 Richard Heeks, ‘The ICT4D 2.0 Manifesto: Where next for ICTs and International Development?’, Working Paper Series (Manchester: Institute for Development Policy and Management, 2009).

67 Naima Hafiz Abubakar and Salihu Ibrahim Dasuki, ‘Empowerment in Their Hands: Use of WhatsApp by Women in Nigeria’, *Gender, Technology and Development* 22, no. 2 (4 May 2018): 164–83, <https://doi.org/10.1080/09718524.2018.1509490>.

68 Maung K. Sein et al., ‘A Holistic Perspective on the Theoretical Foundations for ICT4D Research’, *Information Technology for Development* (21 August 2018): 1–19, <https://doi.org/10.1080/02681102.2018.1503589>.

69 Thompson and Walsham, ‘ICT Research in Africa’ (footnote 61), 118.

70 Read, Taithe, and Ginty, ‘Data Hubris?’ (footnote 63), 1321.

The utility of digital technologies as a means of empowerment has also been explored in participatory development **approaches and humanitarian action**.⁷¹ **For example, it has been argued that the increased access to better information**, and relatedly, transparency, which results from participation through digital technologies, leads to “enlargement of choices” and thus contributes to development.⁷² These empowerment efforts often entail the development of communication infrastructures such as telecentres, which increase the populations’ access to information and helps to bridge the “gap” between “underdeveloped”, “rural” populations, and “advanced”, “industrial” societies.⁷³ Once infrastructure has been put in place, digital technologies help deliver specific services and thus contribute to specific development goals, such as improved health.⁷⁴

Snapshot: Offline and Online Consultations in Preparation for the Libya National Dialogue

The Centre for Humanitarian Dialogue (HD Centre) conducted a series of local consultations in Libya to support the ongoing high-level political process in 2018. These consultations constituted the first phase of the National Conference Process (NCP), which was followed by the National Conference itself. The consultations were an integral part of the UN Action Plan for Libya and designed in close collaboration with the UN Special Representative of the Secretary-General (UNSRSG) in Libya, as well as all major Libyan stakeholders. The objective of the initiative was to consult citizens from all sections of the Libyan society, especially those who had been left out of the elite political dialogue. The initiative aimed to identify elements of consensus in Libya’s fragmented political landscape, with regard to key issues of the conflict and the future of the Libyan state.

The main element of the process was offline consultations. Throughout April and July, 77 town-hall-style meetings were held in 43 locations, including 39 in Libya. This process was supported through online campaigning, involving a dedicated website and social media channels, which provided an alternative means of participation in the process. The campaign aimed in particular to engage with politically and geographically marginalized groups that were unable to exchange in public events, such as women, youths, and minorities. The website provided information about the nature of the process and the different options for engagement. It also informed about upcoming events and published reports and visual content from past events. Libyans who were unable to attend offline events could contribute to the consultative process through an online questionnaire. In order to reduce barriers, the website was in Arabic and used simple language and design.

Further, a Facebook page and a Twitter account were set up to promote the consultations, to enable direct communication with participants and encourage participation when options for offline consultation were limited. For instance, during the month of Ramadan, the “And you? Participate!” campaign was launched on Facebook and Twitter. The campaign presented visuals of quotes drawn anonymously from participants on themes such as government priorities, national reconciliation, security and defense, as well as distribution of resources to incite other Libyans to share their perspectives via the NCP’s digital platforms.

All the collected digital data entailing substantive information was analyzed qualitatively and informed the final report, which was shared with the UN Security Council, as well as with the highest echelons of the Libyan political sphere. The contributions made through online engagement constituted over 30% of the total contributions to the process. While the online and offline elements of the consultation were characterized by similar patterns of participation (shaped by prevailing social and cultural norms), the digital platform helped to increase the participation in the NCP.

71 Linus Kendall and Andy Dearden, ‘Disentangling Participatory ICT Design in Socioeconomic Development’, in *PDC '18 : Proceedings of the 15th Participatory Design Conference* (PDC '18 : Proceedings of the 15th Participatory Design Conference, Hasselt, Belgium: ACM, 2018), <https://doi.org/10.1145/3210586.3210596>; Thompson and Walsham ‘ICT Research in Africa’ (footnote 61); Madianou, Longboan, and Ong, ‘Finding a Voice Through Humanitarian Technologies?’ (footnote 41).

72 Sein et al., ‘A Holistic Perspective’ (footnote 68), 8.

73 Avgerou, ‘Information Systems in Developing Countries’ (footnote 24), 39.

74 Kendall and Dearden, ‘Disentangling Participatory ICT Design’ (footnote 71), 3; Thompson and Walsham, ‘ICT Research in Africa’ (footnote 61), 120.

Particular attention has been paid to the empowerment of women and the question of how technology can contribute to gender equality.⁷⁵ Despite the fact that in many parts of the world women continue to have less access to digital technology than men, digital technologies can contribute to challenging social norms and gender roles, by creating new spaces where women (and men) can **express** themselves, **amplifying** a more diverse set of messages.⁷⁶ The proactive use of digital technologies can contribute to women's empowerment in various additional ways: it can help **coordinate** women-led human rights campaigns, for instance through common hashtags.⁷⁷ Digital technologies can facilitate the **sharing** of **data**, information and knowledge resources, on the basis of which feminist activists can attempt to reshape the public sphere and dismantle patriarchal **structures**.⁷⁸ **Technology can also provide tools to enable the expression of political demands and assert influence** in efforts to lobby for the adherence of human rights in cases specifically relevant for women, for instance in order to counter gender-based violence.⁷⁹

Use Cases

*To support the empowerment of specific groups, digital technologies can be used for data collection and analysis, to both identify these groups and their needs or interests. For instance, a social media analysis tool could be applied for **mapping voice on social media**. The tool would identify voices on social media platforms that relate to significant constituencies of a mediation process, but who are not the “usual suspects” (i.e. representatives of political parties or armed factions) and therefore not part of the offline activities of the peace process. This could help identify marginalized sub-groups within the constituencies that do not have a strong representation at the negotiation table. The analysis tool would help mediators develop a formula for inclusion that does justice to the increasing role of social media in peace processes. The **data collection and analysis** would be conducted by political analysts manually curating seed pages or handles. Thereafter, keywords or hashtags could be identified from those. The search would then be expanded to looking at both who is connected to the seed pages or handles, and to who uses similar keywords or hashtags. The results from the social media analysis could be cross-referenced with **data collected** from focus group discussions in order to identify differences between online and offline representation.*

*Mediation support actors could also bolster **online collaboration in support of the peace process**, around specific initiatives relating to the peace talks. For example, a dedicated website could connect participants from different stakeholder groups, and enable exchange between them by identifying common concerns and building coalitions around key issues. The website could further facilitate **collaboration** through the planning of joint actions that support the mediation. Members of the public could use the site to **coordinate** activities happening in their locality or relevant to their objectives. Results of the online collaborations could be fed into the negotiation, for instance by collective contributions to agenda-setting, joint action to advocate for specific outcomes, and **exercising influence** on parties at the negotiation table by demonstrating public support for peace.*

75 O'Donnell and Sweetman, 'Introduction: Gender, Development and ICTs' (footnote 27); Thompson and Walsham, 'ICT Research in Africa' (footnote 61), 118.

76 Shannon Philip, 'Youth and ICTs in a “New” India: Exploring Changing Gendered Online Relationships among Young Urban Men and Women', *Gender & Development* 26, no. 2 (4 May 2018): 313–24, <https://doi.org/10.1080/13552074.2018.1473231>.

77 Divya Titus, 'Social Media as a Gateway for Young Feminists: Lessons from the #IWillGoOut Campaign in India', *Gender & Development* 26, no. 2 (4 May 2018): 231–48, <https://doi.org/10.1080/13552074.2018.1473224>.

78 Faheem Hussain and Sara N. Amin, "I Don't Care about Their Reactions": Agency and ICTs in Women's Empowerment in Afghanistan', *Gender & Development* 26, no. 2 (4 May 2018): 249–65, <https://doi.org/10.1080/13552074.2018.1475924>.

79 Sara Baker, "We Want That for Ourselves": How Girls and Young Women Are Using ICTs to Counter Violence and Demand Their Rights', *Gender & Development* 26, no. 2 (4 May 2018): 283–97, <https://doi.org/10.1080/13552074.2018.1473229>.

In addition, the **rapid polling** methodology as described above could be used to reach out to specific population groups that do not have a strong voice in the public sphere. This could be done through a purposive, targeted sample, in order to reach specific demographics, for example along identity markers such as gender, age, ethnic affiliation, or geographic location. During early stages of negotiation, **data** could be **collected** and **analysed** to understand the interests, needs, and concerns of these specific population groups. The results of the poll could then be used for agenda-setting and to inform the design of the negotiation process.

Finally, digital technologies could also be used to conduct **online focus groups**, using virtual exchange. These focus groups could involve experts and representatives from specific vulnerable or marginalized demographic groups. The virtual exchange platform could create a safe space in which specific policy options debated at the negotiation table and relevant to the group could be **deliberated**. The groups could comment on and advise on more complex questions, such as administrative reforms, decentralization, or resource governance, and thus **assert influence** on the negotiation process. The group could also discuss **data collected** through other forms of digital inclusion, such as from rapid polling. The results of this group could be used by the mediator to inform track 1 negotiations. In addition, capacity-building measures could be conducted, which strengthen in-country expertise that supports the peace process in the long term.

6.3 Transforming Relations

Digital technologies can help improve and transform relationships within and between communities. It must be noted that the term “community” is somewhat ill-suited for understanding social interaction through digital technologies. This is because the networks created through technology are less bounded and clear-cut than conventional forms of social organization, such as political parties, trade unions, or civil society organizations. “Intra” and “inter” in this context is thus primarily used to differentiate between groups with joint interests or agendas. In the context of peace negotiations, these groups can be associated with different conflict parties or stakeholders.

Digital technologies can enhance and build social cohesion and a shared sense of communal identity among dispersed and heterogeneous populations, for example by **connecting** members of social movements, civil society organizations, or trade unions.⁸⁰ Studies show that digital technologies have been used to strengthen cohesion within communities, as well as alignment and trust among community members. They provide the “social capital” required for **collaboration** and collective action.⁸¹ For instance, the use of social media has contributed to an enhanced sense of belonging among members of religious or cultural groups, and an increased commitment of members to work together and solve problems.⁸² Among members of protest movements, the use of digital technologies has led to increased awareness – and thus **better information** – about joint concerns and struggles.⁸³ Development organizations have found that digital technologies can improve the quality and depth of relations between traders, as well as help build new commercial

80 Heeks, 'Information and Communication Technology' (footnote 23), 270; David E. Alexander, 'Social Media in Disaster Risk Reduction and Crisis Management', *Science and Engineering Ethics* 20, no. 3 (1 September 2014): 717–33, <https://doi.org/10.1007/s11948-013-9502-z>; Francis L. F. Lee and Joseph Man Chan, 'Digital Media Activities and Mode of Participation in a Protest Campaign: A Study of the Umbrella Movement', *Information, Communication & Society* 19, no. 1 (2 January 2016): 4–22, <https://doi.org/10.1080/1369118X.2015.1093530>; R. Kelly Garrett, 'Protest in an Information Society: A Review of Literature on Social Movements and New ICTs', *Information, Communication & Society* 9, no. 2 (1 April 2006): 202–24, <https://doi.org/10.1080/13691180600630773>.

81 Sein et al., 'A Holistic Perspective' (footnote 68), 8.

82 Abubakar and Dasuki, 'Empowerment in Their Hands' (footnote 67), 175.

83 Garrett, 'Protest in an Information Society' (footnote 80), 205.

relationships.⁸⁴ In addition, the humanitarian field has recognized the potential of social media to enable new forms of **coordination** by altering communication patterns. On social media, information flows in multiple directions, which enables more parties to initiate and maintain communication.⁸⁵

Digital technologies can also increase **empathy** between different communities. Social media, in particular, can serve as a channel through which users can express their emotions about an event or process, such as concerns and grievances.⁸⁶ Online resources can provide alternative information channels to conventional “mass media”, for example, to spread warning messages in the context of humanitarian crises. **Better information** can help the population understand and cope emotionally and cognitively with the crisis.⁸⁷ Furthermore, social media has been used in many ways to create sympathy with victims and **collaborate** around support and relief activities.⁸⁸

Digital technologies also have the potential to play a supporting role in fostering reconciliation. Social media can help to deal with the past, including as a place of mourning on Facebook profiles of victims of violence. By **connecting** affected populations that are located in geographical distance from the actual event, social media enables a dispersed group to express their emotions. This can be an important contribution to societal healing.⁸⁹ Social media has also been used in support of truth and reconciliation processes and community reconciliation efforts, for instance, as part of larger peace education campaigns that further a mutual understanding of conflict causes.⁹⁰

Snapshot: The Donbas Dialogue in the Ukraine

The Donbas Dialogue is a virtual dialogue platform created in April 2015. The peacebuilding initiative is based in the Donetsk region of Eastern Ukraine. Through the dialogue platform, the initiative seeks to reconnect members of divided communities amid the on-going armed conflict, including citizens from the government-controlled area and non-government-controlled area. To this end, the project uses a methodology that combines online dialogues and offline elements. Through a closed Facebook group with more than 400 members, the team crowdsources dialogue topics by posting questions or statements of mutual concern. In a next step, the team gathers and analyses user responses, to identify relevant topics. These topics are then addressed in detail during a weeklong dialogue marathon, which takes place twice per year. The dialogue participants are recruited from both conflict areas and include community and civil society representatives, internally displaced persons (IDPs), as well as members of the Facebook group. In addition, international experts are invited to present on specific topics. Participation is possible in a physical location, as well as through a dedicated video conferencing platform that uses peer-to-peer technology (WebRTC), which allows anonymous connection. This creates a “safe space” for all dialogue participants, independent of their physical location. The Donbas Dialogue publishes results of the online and offline meetings on its website. In the absence of strong linkages to high-level political processes, the Dialogue has made important contributions to enabling engagement across the conflict's major fault lines and the promotion of more amiable community relations.

84 Heeks, ‘Information and Communication Technology’, 621.

85 Bruce R Lindsay, ‘Social Media and Disasters: Current Uses, Future Options, and Policy Considerations’ (Congressional Research Service, September 2011), 4.

86 J. Brian Houston et al., ‘Social Media and Disasters: A Functional Framework for Social Media Use in Disaster Planning, Response, and Research’, *Disasters* 39, no. 1 (2015): 1–22, <https://doi.org/10.1111/disa.12092>.

87 T. Vihalemm, M. Kiisel, and H. Harro-Loit, ‘Citizens’ Response Patterns to Warning Messages’, *Journal of Contingencies and Crisis Management* 20, no. 1 (2012): 13–25, <https://doi.org/10.1111/j.1468-5973.2011.00655.x>.

88 Alexander, ‘Social Media in Disaster Risk Reduction (footnote 80), 720.

89 Houston et al., ‘Social Media and Disasters’ (footnote 86), 14.

90 Jason Miklian and Kristian Hoelscher, ‘A New Research Approach for Peace Innovation’, *Innovation and Development* 8, no. 2 (3 July 2018): 189–207, <https://doi.org/10.1080/2157930X.2017.1349580>; C. Vrasidas et al., ‘ICT as a Tool for Environmental Education, Peace, and Reconciliation’, *Educational Media International* 44, no. 2 (April 2007): 129–40, <https://doi.org/10.1080/09523980701295125>.

Digital technologies can also help efforts to restore relationships and promote justice. For instance, social media can play a role in “post-disaster community **deliberation**”, by connecting those who have caused suffering and those affected by it.⁹¹ For example, oil companies have used social media platforms to restore their public image by disseminating factual information about their response efforts and promising “corrective action”,⁹² after causing environmental crises that prompted an overwhelming public outcry on social media, which amplified the voices of those affected by the disaster. Following the 2010 Haiti earthquake, non-profit organizations also used social media to **assert influence** and create a sense of responsibility among media users, thereby increasing their participation in the reconstruction effort.⁹³

Digital technologies can also be used to reduce stereotyping and scapegoating and thus help prevent violence. For example, as part of larger conflict prevention efforts, the Uwiano Platform in Kenya uses digital technologies to **disseminate** “peace messages” to persons located in “hot spot” areas affected by armed conflict. This helps to influence popular discourse and prevent conflict “boiling over” into violence.⁹⁴ In addition, social media has been used to **analyse** extremist narratives and to proactively construct and **disseminate** counter-narratives to fight extremist ideologies, in order to dissuade users from supporting or engaging in terrorism.⁹⁵ Counter-messaging seems particularly effective if it involves “informal actors”. These “amateurs” can create more credible and authentic content and **disseminate** it in collaboration with formal campaigns and actors.⁹⁶

Use Cases

*When used in efforts to transform relationships, digital technologies can help provide a better overview of the major narratives that shape a given peace process. For instance, an analysis tool could be designed for **understanding narratives in digital qualitative media**. This tool would identify key narratives about the “Other” that shape the relationship between the conflict parties. To this end, the tool could **collect** and **analyse data** from a broad selection of digital media, including social media. A mediation support actor could curate sources that feed into the analysis tool and a network of volunteers could support the data collection and analysis. If large enough amounts of data are available, the analysis of social media content could be supported by Artificial Intelligence. The tool would provide **better information** to mediators and their teams. It would also help identify relevant stereotypes and provide a basis to foster more positive community relations at the negotiation table and beyond.*

*In addition, digital technologies can be used to directly support a change in perceptions among conflict parties and their constituents. For example, in the early phases of a mediated process, a **digital campaign to build empathy between conflict parties** could encourage citizens to share positive experiences of interacting with other conflict stakeholders, in order to encourage a change in community relations that can build momentum for the peace process. The campaign could start with short video clips that demonstrate*

91 Houston et al., ‘Social Media and Disasters’ (footnote 86), 15.

92 Sidharth Muralidharan, Kristie Dillistone, and Jae-Hwa Shin, ‘The Gulf Coast Oil Spill: Extending the Theory of Image Restoration Discourse to the Realm of Social Media and beyond Petroleum’, *Public Relations Review* 37, no. 3 (1 September 2011): 226–32, <https://doi.org/10.1016/j.pubrev.2011.04.006>.

93 Sidharth Muralidharan et al., ‘Hope for Haiti: An Analysis of Facebook and Twitter Usage during the Earthquake Relief Efforts’, *Public Relations Review* 37, no. 2 (1 June 2011): 175–77, <https://doi.org/10.1016/j.pubrev.2011.01.010>.

94 Ben Lumsdaine, Trixie Akpedonu, and Aminata Sow, ‘Keeping the Peace: Lessons Learned from Preventive Action towards Kenya’s 2013 Elections’, Paper (Geneva: Geneva Peacebuilding Platform, 2013).

95 Kurt Braddock and John Horgan, ‘Towards a Guide for Constructing and Disseminating Counternarratives to Reduce Support for Terrorism’, *Studies in Conflict & Terrorism* 39, no. 5 (3 May 2016): 381–404, <https://doi.org/10.1080/1057610X.2015.1116277>; Jan-Jaap van Eerten and Bertjan Doojsje, *Challenging Extremist Views on Social Media: Developing a Counter-Messaging Response* (London: Routledge, 2019), <https://doi.org/10.4324/9780429287145>.

96 Benjamin Lee, ‘Countering Violent Extremism Online: The Experiences of Informal Counter Messaging Actors’, *Policy & Internet*, accessed 27 November 2019, <https://doi.org/10.1002/poi3.210>.

empathy with people who have different and opposing views and experiences. For instance, these videos could be created during offline mediation activities and then **disseminated** on social media. The campaign could also launch an open call for submissions by citizens to create and **disseminate** their videos, as part of a nation-wide competition. Videos would then be shared regularly, demonstrating the value of human stories across the divide. Targeted workshops and outreach activities could accompany such a campaign.

Digital technologies can moreover be used to facilitate **virtual exchange between conflict parties**, in support of an incipient or on-going peace process. The virtual exchange could be conducted prior, or in parallel, to the formal negotiation. Through the process, participants would begin to build **empathy** towards each other, thus contributing to an enabling environment for peace negotiations. A mediation support actor could invite cohorts of 8-12 people to a series of online exchanges that reflect the views and perceptions of different conflict party constituencies. The results of these exchanges would be shared with principal negotiation parties to help to **diversify** and **amplify** the voices around the negotiation table. It would also help create an atmosphere in which **deliberation** can take place and thus improve the conditions for the mediation.

6.4 Risk Mitigation and Protection

Digital technologies have been used to reduce risks or threats as an integral element of early warning and early response mechanisms. They help to **collect** and **analyse** timely **data** that allows for a prediction of trends and developments to serve as indicators for increased risks of crisis or violence. Based on this data, such mechanisms may also support the coordination of preventive measures. In humanitarian action and disaster relief, digital technologies have been utilized to detect threats and **disseminate** warning messages to the population, including useful information about how to behave, for instance in advance of Tsunami-triggered flooding. Besides, digital technologies have been used to provide an overview of the current situation and formulate adequate responses.⁹⁷ Prior to crisis events, **better** and **faster information** shared through social media can help increase the preparedness of the given population.⁹⁸ Studies thus show that digital technologies help to reduce losses that result from a natural disaster.⁹⁹

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- 97 Peter M. Landwehr et al., 'Using Tweets to Support Disaster Planning, Warning and Response', *Safety Science*, Building Community Resilience to Global Hazards: A Sociotechnical Approach, 90 (1 December 2016): 33–47, <https://doi.org/10.1016/j.ssci.2016.04.012>; Houston et al., 'Social Media and Disasters' (footnote 86), 9; Michael F. Goodchild, 'Citizens as Sensors: The World of Volunteered Geography', *GeoJournal* 69, no. 4 (1 August 2007): 211–21, <https://doi.org/10.1007/s10708-007-9111-y>; Peter M. Landwehr and Kathleen M. Carley, 'Social Media in Disaster Relief', in *Data Mining and Knowledge Discovery for Big Data: Methodologies, Challenge and Opportunities*, ed. Wesley W. Chu, Studies in Big Data (Berlin, Heidelberg: Springer Berlin Heidelberg, 2014), 225–57, https://doi.org/10.1007/978-3-642-40837-3_7.
- 98 Houston et al., 'Social Media and Disasters' (footnote 86), 8; Tomer Simon, Avishay Goldberg, and Bruria Adini, 'Socializing in Emergencies—A Review of the Use of Social Media in Emergency Situations', *International Journal of Information Management* 35, no. 5 (1 October 2015): 609–19, <https://doi.org/10.1016/j.ijinfomgt.2015.07.001>; Lindsay, 'Social Media and Disasters' (footnote 85), 3; G. Rive et al., 'Social Media in an Emergency. A Best Practice Guide' (Wellington: Wellington Region CDEM Group, 2012), <https://idisaster.files.wordpress.com/2012/07/social-media-in-an-emergency-a-best-practice-guide-2012.pdf>.
- 99 Maura C. Allaire, 'Disaster Loss and Social Media: Can Online Information Increase Flood Resilience?', *Water Resources Research* 52, no. 9 (2016): 7408–23, <https://doi.org/10.1002/2016WR019243>.

Snapshot: Kenya – Violence Prevention through Digital Youth Networks

Impart Change, a local non-for-profit organization, uses digital technologies to connect and coordinate youth leaders based in Nairobi's informal settlements. The organization uses social media groups, for instance on WhatsApp, to enable dialogue between youths to prevent violent conflict in the context of Kenya's recurrent electoral crises. The core membership of these social media groups is composed of leaders of local youth groups, selected in partnership with local authorities, who have undergone training as "community ambassadors" or "community peace champions". These youth leaders then recruit additional youths into the social media groups. This method has proven effective in guaranteeing membership from specific locations that identify with different ethnic groups and political parties. The organization also invites women to join these groups to foster their empowerment and achieve a gender balance. At times, these groups are also created as a follow-up of offline dialogue activities and consultations. The organization then facilitates online exchanges among the group members. Besides, the groups are used to monitor levels of youth mobilization, spread messages to counter online hate speech and misinformation, and enable group members to vent their grievances. At times, the organization also facilitates an exchange between youth representatives and high-level political leaders who are involved in formal dialogue efforts. In addition, Impart Change engages in other public social media groups, such as on Facebook, including the personal walls of political leaders, as well as around specific Twitter hashtags. The organization is also a member of various social media networks with representatives of peacebuilding and human rights organizations. These groups are used to share information about ongoing developments and coordinate joint initiatives. The various social media activities are largely disjoint and driven by local dynamics and demands.

In the field of conflict early warning, digital technologies **collect** data that can help determine conflict trends and possible outbreaks of violence. Conventional conflict early warning systems often operate vertically, by feeding information into a central unit, such as a government entity or international organization. However, citizen reporting systems can establish horizontal networks through which early warning and response can be driven and **coordinated** from the "bottom up".¹⁰⁰ For instance, crowdsourcing applications have been discussed as a method to **gather** and **disseminate** relevant **data** promptly and to coordinate responses. The information collected can encompass a broad range of indicators, such as on commodity prices, citizen perceptions, or migration patterns.¹⁰¹

Moreover, digital technologies can be used to document actual violence and security incidents. In efforts to prevent electoral violence, digital technologies play a growing role in reporting and detection of rumours and incitements of violence.¹⁰² Digital technology is also increasingly used to support the reporting and documentation of security incidents, violence, and human rights violations. For instance, the eyeWitness project developed a dedicated mobile application through which citizens can **collaborate** in documenting and sharing footage about human rights violations.¹⁰³ In peacekeeping missions, digital technologies are applied to establish alert systems that can **disseminate** information about

100 Robert Muggah and Gustavo Diniz, 'Using Information and Communication Technologies for Violence Prevention in Latin America', in *New Technology and the Prevention of Violence and Conflict*, ed. Francesco Mancini (New York: International Peace Institute, 2013), 28–41.

101 Luke Kelly, 'Uses of Digital Technologies in Managing and Preventing Conflict', K4D Helpdesk Report, University of Manchester; William Tsuma, Anne Kahl, and Christy McConnell, 'Crowdsourcing as a Tool in Conflict Prevention', *Conflict Trends* 2012, no. 1 (1 January 2012): 27–34

102 Patrick Mutahi, Brian Kimari, and England) Institute of Development Studies (Brighton, 'The Impact of Social Media and Digital Technology on Electoral Violence in Kenya', Working Paper (Institute of Development Studies, 2017), https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/13159/Wp493_Online.pdf?sequence=3.

103 eyeWitness to Atrocities, 'What We Do', EyeWitness to Atrocities: eliminating doubt, aiding justice, accessed 22 November 2019, <https://www.eyewitness.global/our-work.html>.

imminent attacks, such as through the use of mobile phones.¹⁰⁴ Finally, social media-based applications can also create participatory environments in which potential security threats can be discussed and evaluated. This supports the planning and implementation of community responses.¹⁰⁵

Use Cases

*To reduce the risks to a given process and protect vulnerable groups, digital inclusion can enable both early warning and early response activities. Technologies can, for example, be used to enable a digital civilian monitoring of security incidents. This can take place through a reporting system that allows trained voluntary civilian monitors to **collect data** about security incidents on the ground, on ceasefire violations, for instance. Individuals would be able to provide input through SMS, through a mobile application, or a dedicated website. All reports would be triangulated and verified by a team of validators before being published. The data would then be **disseminated** to mediators and peacebuilding organizations that can react "on time", and thus contribute other existing information on the security situation across the country.*

Snapshot: Syria – Monitoring of Security Incidents

After the Cessation of Hostilities (CoH) agreement had been negotiated by the International Syria Support Group (ISSG) in 2015, mediators and mediation support actors facilitated efforts to track potential violations of the agreement. In the absence of a formal observer mission mandated by the United Nations Security Council (UNSC), the idea was to use digital technologies to increase international ceasefire monitoring capacities. This included efforts to obtain information by monitoring social media. The mediation team also collected reports through a decentralized platform. Informants were invited to message mediators individually or send data such as pictures to contact centres based in various countries allied to the conflict parties. The information was used for the monitoring and analysis of ongoing events, internal reporting to the UNSC, and the verification of the CoH agreement.

Moreover, digital technologies could be used to reduce risks associated with fabricated information that is shared on social media, by **countering misinformation about the negotiations**. A reporting and analysis system could **collect data** that helps to monitor the spread of rumours and possible misinformation. This could involve the automatic monitoring of specific keywords on popular social media platforms, and regular or ad-hoc reports from key informants, such as civil society organizations or journalists. The misinformation might include rumours about security incidents, or the negotiation process, as well as any other information that mediators consider might derail peace talks. Once a rumour relevant to the negotiations has been reported, the system would **analyse** its factual validity, source, spread, and impact on public opinion. This is conducted through trained experts but could be supported through a range of social media analysis tools. This information could be used by mediation support actors to counter the rumour with targeted messaging.

¹⁰⁴ John Karlsrud, 'Peacekeeping 4.0: Harnessing the Potential of Big Data, Social Media, and Cyber Technologies', in *Cyberspace and International Relations*, ed. Jan-Frederik Kremer and Benedikt Müller (Berlin, Heidelberg: Springer Berlin Heidelberg, 2014), 141–60, https://doi.org/10.1007/978-3-642-37481-4_9.

¹⁰⁵ Abubakar and Dasuki, 'Empowerment in Their Hands' (footnote 67), 178.

7. The Context of Digital Inclusion

Effective digital inclusion requires that a use case fits the environment in which it is applied. It is also important to consider potential challenges in the development and implementation of the use case. This final chapter discusses the most important factors that influence the effective use of digital technologies when fostering digital inclusion along three interrelated dimensions: *technological*, *socio-cultural*, and *political*. The chapter also sheds light on important risks and unintended consequences associated with various factors, and highlights selected risk mitigation strategies.

7.1 Technological Factors

The first set of factors is related to the technologies chosen to facilitate digital inclusion, as well as the technological landscape in which they are embedded. The overall ICT infrastructure defines what technologies can be used in a given context, in addition to when and how. At a fundamental level, this includes the **availability of electricity**, such as the spread and reliability of the electricity grid, occasional or regular power cuts, as well as alternative local sources of electricity, including electric generators, solar panels, or power banks. In many developing and fragile contexts, public electricity infrastructure may be unreliable. However, mobile power solutions have become much more affordable and available to many households, particularly for professional organizations operating in these contexts. Nonetheless, electricity continues to be unevenly provided in many conflict-affected areas. Major discrepancies often exist between urban and rural or peripheral settings that are relatively far from major infrastructure hubs.

Similarly, the **availability of ICTs** differs not only from country to country, but also within countries. Most relevant is the penetration of internet services, including cable and mobile phone networks, as well as the speed of data transmission. In addition, the cost of data varies greatly across contexts, which means that digital inclusion is varyingly expensive for those who participate. Electricity and access to communication infrastructure may become unavailable as a result of their destruction during armed violence. Inclusion efforts that operate through digital technology risk becoming more dependent on the availability of ICT infrastructure, in settings where general infrastructure is vulnerable. With a continued danger of attacks against infrastructure, the mediator's reliance on technology for facilitating inclusion may risk reducing opportunities for participation. Therefore, it is pivotal that digital inclusion is not used as a stand-alone approach, but that it is complemented by offline participation. Mediators may also work with other actors, including peace operations and development organizations, to maintain or improve sufficient ICT infrastructure.

Finally, **platform popularity and usage** vary from one peacemaking context to another. While Facebook is used by large parts of the population in Libya and Myanmar, other social media platforms may be more prevalent in other countries. For example, political elites in Burundi widely use Twitter. Platform usage also differs between urban and rural areas, correlating with the general availability of ICTs. Further, there is a variation in each platform's demographic. For instance, Twitter is likely to be more heavily used by social and political elites, in comparison to Facebook. Other social media platforms, like Snapchat, target younger user groups. When relying on pre-designed social media platforms, mediators always risk being confronted with limited inclusion. Investing in better knowledge about context-specific usage patterns, and using multiple platforms, can reduce this risk.

The **technology design** influences the functions that a given technology can carry out. For example, none of the conventional social media platforms are currently well suited

to facilitate deliberation, as filtering and ranking effects structure the communicative interaction between users. The ability to pursue a moderated discussion is also limited on many platforms. Word limits, the embedding of multimedia content, and options to encrypt data and enable anonymous participation are a few among many additional factors that influence the functions that the technologies can enable. The technology design also affects the degree to which deliberation is possible, and dissent is responded to by other users.¹⁰⁶ Besides, the degree to which social media sites are public- or private-oriented also influences the degree to which users engage politically.¹⁰⁷ In sum, technology design is thus always purposeful: it informs what functions some technologies can fulfil better than others. When using pre-designed technologies, mediators thus risk that these may not be entirely suited to deliver on the specific strategic purpose. Designing technologies for inclusion with the users in mind can reduce this risk. However, this means considering the needs of both mediators and those who they aim to involve through technology. One way of doing so is through plotting the “user stories” in the process of technology development. Participants of the project’s online course created such user stories for some of the use cases presented above.¹⁰⁸

7.2 Socio-Cultural Factors

Digital inclusion is conditioned by the social and cultural environment in which technologies are designed and utilized. This influences the type of available technology, behaviour of individual users, but also the user demography. One crucial factor in this regard is the level of **digital literacy** of those included through technology. Digital literacy refers not only to the necessary skills needed to use the various features of digital technology, but it moreover involves the user’s ability to utilize technology safely, to evaluate the data that a user obtains and processes through the use of technology, and to use it critically.¹⁰⁹ While digital literacy varies across important social markers such as gender and age (see below), it is challenging to assess digital literacy across whole populations. There is thus a risk that specific approaches to digital inclusion may not match a population’s capacity to participate in a safe and reflexive manner. Besides, more demanding forms of digital inclusion likely lead to a selection bias, such as online consultations or monitoring activities. This is because only those parts of the population with the respective skill set are able to participate meaningfully.

There may also be **barriers to ICT use**, along a variety of dimensions. Insufficient economic resources continue to be a key factor for limited access to digital technologies, for instance if hardware remains unaffordable or costs for data usage cannot be covered. Prevailing **gender roles** limit women’s access to digital technologies in most contexts, or shape how women can use them. For instance, women may engage less in visible political behaviour online.¹¹⁰ This suggests that particular strategies are necessary if digital technologies are used for women empowerment. **Linguistic barriers** are likely to continue to be a challenge for many multi-lingual settings, despite the rise of machine-enabled

106 Christopher M. Mascaró and Sean P. Goggins, ‘Brewing up Citizen Engagement: The Coffee Party on Facebook’, in *Proceedings of the 5th International Conference on Communities and Technologies - C&T ’11* (the 5th International Conference, Brisbane, Australia: ACM Press, 2011), 11, <https://doi.org/10.1145/2103354.2103357>.

107 Chris Chao Su, Francis L. F. Lee, and Gongcheng Lin, ‘Does Site Architecture Matter? The Political Implications of Public- versus Private-Oriented Social Network Sites in China’, *Asian Journal of Communication* 27, no. 2 (4 March 2017): 134–53, <https://doi.org/10.1080/01292986.2016.1235593>.

108 See www.digitalinclusion.com for examples.

109 David Buckingham, ‘Defining Digital Literacy’, in *Medienbildung in neuen Kulturräumen: Die deutschsprachige und britische Diskussion*, ed. Ben Bachmair (Wiesbaden: VS Verlag für Sozialwissenschaften, 2010), 59–71, https://doi.org/10.1007/978-3-531-92133-4_4.

110 Leticia Bode, ‘Closing the Gap: Gender Parity in Political Engagement on Social Media’, *Information, Communication & Society* 20, no. 4 (3 April 2017): 587–603, <https://doi.org/10.1080/1369118X.2016.1202302>.

translation. In many contexts, **increasing age** also means less digital literacy and access to technology.¹¹¹ Elderly people are also likely to be more technology-resistant, despite efforts to further their access to digital technology, online resources, and social media.¹¹² Various demographic factors create possible barriers of digital technology use and risk leading to new forms of exclusion. This risk can be controlled through the collection of corresponding demographic data on digital technology use. The idea of merging different technologies that cater to various demographic groups, in combination with offline participation, can help to reduce such barriers to inclusion.

Digital technology may also be conditioned through **hierarchies** that exist in social media networks, as specific types of users enjoy a stronger reach, authority, and trust than others. These hierarchies can mirror social and political hierarchies that exist offline, for instance, reproducing the knowledge authority of specific experts and think tanks.¹¹³ However, digital technology, and especially social media, can also erode trust in conventional authorities, including government actors. Conventional hierarchies may also be challenged and re-shaped by the rise of new "influencers".¹¹⁴ However, social media can also increase or decrease the visibility of dissenters in public debate, which makes it difficult to determine when these have an effect on the status quo.¹¹⁵ Importantly, hierarchies exist in most forms of social organizations and do not necessarily constitute a problem for digital inclusion. However, they may be an unintended consequence that is important to keep in mind.

Finally, variations in the **culture of digital technology use** likely affect for what purpose digital inclusion can be used and how. For instance, the size and composition of individual social media networks may differ from context to context, and may influence to which degree social media can be used for political mobilization and for democratic engagement, both online and offline.¹¹⁶ Context-specific experiences with the use of digital technologies in politics are generally a good indicator of how and to what degree they can be used to foster digital inclusion in peacemaking. In many contexts, however, such information is not readily available. Mediators should thus accompany digital inclusion with efforts to better understand context-specific technology use patterns. Better conclusions could then be drawn about what digital technologies can be used where and for what purpose.

7.3 Political Factors

Finally, the properties of the political system and behaviour of governing institutions form a third relevant category of factors; this is arguably the category most acknowledged and discussed by mediation professionals. It is composed of visible and less visible factors, which nonetheless inform the behaviour of technology users and produce specific risks. Among these are **political surveillance** by domestic and foreign government agencies, as well as agents operating on behalf of non-state conflict parties. These actors may aim to

111 Tobias Olsson, Ulli Samuelsson, and Dino Viscovi, 'At Risk of Exclusion? Degrees of ICT Access and Literacy among Senior Citizens', *Information, Communication & Society* 22, no. 1 (2 January 2019): 55–72, <https://doi.org/10.1080/1369118X.2017.1355007>.

112 Filomena Papa et al., 'Engaging Technology-Resistant Elderly People: Empirical Evidence from an ICT-Enabled Social Environment', *Informatics for Health and Social Care* 42, no. 1 (2 January 2017): 43–60, <https://doi.org/10.3109/17538157.2016.1153477>.

113 Nick Anstead and Andrew Chadwick, 'A Primary Definer Online: The Construction and Propagation of a Think Tank's Authority on Social Media', *Media, Culture & Society* 40, no. 2 (1 March 2018): 246–66, <https://doi.org/10.1177/0163443717707341>.

114 *Ibid.*

115 Mascaro and Goggins, 'Brewing up Citizen Engagement (footnote 107).

116 Hsuan-Ting Chen, Michael Chan, and Francis L. F. Lee, 'Social Media Use and Democratic Engagement: A Comparative Study of Hong Kong, Taiwan, and China', *Chinese Journal of Communication* 9, no. 4 (1 October 2016): 348–66, <https://doi.org/10.1080/17544750.2016.1210182>.

obtain to intercept information about the negotiations, about negotiation parties' interests, preferences, or strategies, as well as information about specific actors, including their movements, activities, and physical location. Surveillance poses multiple risks to the mediation: mediators may lose control over the negotiation process if information can no longer be shared selectively. The negotiation process may be less driven by conflict parties' efforts to find a mutually acceptable common position, than by efforts to manipulate the other's interests and bargaining power. Negotiation parties, conflict stakeholders and mediators may also become susceptible to blackmail, or their physical security may be at risk, if location information is disclosed. Perceived threats of political surveillance also influence the degree to which mediators, conflict parties, and stakeholders will be willing to use digital technologies, and how. Many professional mediators operate under the assumption that all information shared online is potentially public information. This, however, severely hinders mediators' ability to facilitate meaningful dialogue through digital means.

Moreover, **state oppression of control** of ICT infrastructure has a potentially significant effect on digital inclusion. Among these are governments' capacities to "black out" the internet in specific locations or the whole country. Additionally, government agencies may be able to block specific applications and social media platforms, such as Skype or Twitter, and hinder access to particular websites.¹¹⁷ Capacities to control ICT infrastructure also depend on the distributed hardware, through which government agencies may be able to use "backdoors" to conduct mass-surveillance, or spy on individual users.¹¹⁸ In some contexts, weak statehood and fragmented ICT infrastructure means that various actors can control the infrastructure in specific parts of the country. There is a risk that national or foreign agencies may block specific populations from participating in the peace process through digital media. Mediators who aim to employ digital technology must therefore require consent of those actors who control the communication infrastructure. Conventional efforts to foster inclusion, through for example workshops or consultations, could frequently be held independently from a specific location, by flying participants to a foreign country. However, digital inclusion aiming to involve large parts of the population usually requires reaching the users where they are based. In consequence, mediation professionals have to negotiate free access to the communication infrastructure.

Technology users are not defenceless against political surveillance and control, however. The **cyber resilience of civil society organizations** plays a critical role in enabling digital inclusion. Cyber resilience refers to the ability to maintain functional use of digital technologies in the face of adverse political events or conditions.¹¹⁹ Cybersecurity – a state in which ICT infrastructure can be fully protected without failing – is unlikely achieved in many conflict-affected contexts. However, cyber resilience emphasizes a capacity of organizations to continuously deliver their outputs under adverse conditions. This includes civil society's ability to prepare for, respond to, circumvent, and recover from shocks to the information ecosystem through surveillance, hacking, or blackouts. This requires skills and technical capacities among civil society organizations to protect themselves from cyber-surveillance. This includes being able to identify vulnerabilities and security breaches, and to create and maintain critical ICT infrastructure that enables autonomous communication networks. Organizations that support building cyber resilience among civil society organizations can play a meaningful role in creating an enabling environment in which digital inclusion can take place despite existing political risk factors.

117 See, for instance, <https://netblocks.org/reports> for specific country examples.

118 Mieke Eoyang, 'Beyond Privacy and Security: The Role of the Telecommunications Industry in Electronic Surveillance', *Journal of National Security Law and Policy* 9, no. 2 (2017): 259–82.

119 Fredrik Björck et al., 'Cyber Resilience – Fundamentals for a Definition', in *New Contributions in Information Systems and Technologies*, ed. Alvaro Rocha et al. (Cham: Springer International Publishing, 2015), 311–16.

Importantly, the technological, socio-cultural, and political dimensions are closely interrelated. Individual factors discussed above can either be mutually reinforcing or counterbalancing each other. While mediation professionals should carefully consider all factors in the planning and implementation of digital inclusion efforts, it is essential to develop a more nuanced and evidence-based understanding of each of these factors and the interactions between them. One vital step to increase the effectiveness of digital inclusion, and controlling for risks and unintended consequences, is to invest into the mediation team's analytical capacities. There are several databases that can help with assessing country contexts, including household data related to digital technologies provided by UN agencies and the World Bank,¹²⁰ databases on internet freedom,¹²¹ and internet inclusivity.¹²² There also exist individual indicators that capture the democratic qualities of the internet and social media, on for example the diversity of online media, social media censorship and monitoring, and internet shutdowns.¹²³ However, for many of the factors mentioned above, comprehensive and comparable data is still lacking. Mediation teams should therefore pro-actively invest in their in-house capacities and technology partnerships to collect and analyse such data.

120 See, for instance <https://data.worldbank.org/indicator/IT.CEL.SETS.P2> , <http://wdi.worldbank.org/table/5.11> and <http://wdi.worldbank.org/table/5.12>.

121 See, for instance <https://freedomhouse.org/report/countries-net-freedom-2018>.

122 See, for instance, <https://theinclusiveinternet.eiu.com>

123 See, for instance, the Varieties of Democracy Project's Digital Society Variables, <https://www.v-dem.net/en/analysis/MapGraph/> .

8. Outlook

As digital technologies play a growing role in peace processes, efforts to broaden participation beyond the main conflict parties will increasingly be carried out through digital means. Contemporary mediation efforts are already considerably dependent on various types of digital technologies, such as messaging applications, social media, and websites. While the notion of a technology-free, and thus controllable, environment persists, many mediation professionals could not effectively carry out their work without the use of technology. At the same time, conflict parties and stakeholders increasingly use digital technologies. This report presents the first comprehensive attempt to respond to these trends through a systematic approach to digital inclusion.

The conceptual framework presented in this report details different strategic purposes that digital inclusion can serve, as well as the functions and outputs that digital technologies have to deliver to contribute to these purposes. The framework is not prescriptive, but provides a heuristic resource, through which mediation professionals can consider how to use digital technology, and for which purposes. However, if inclusion – and digital inclusion – is meant to support a peaceful settlement of conflict and contribute to a sustainable peace, the challenge of transforming relationships between those involved in violent conflict cannot be ignored.¹²⁴

The use cases developed in the course of this project provide a first compendium of possible applications for digital inclusion. It is important to note that they are intended as learning examples. If digital inclusion is to be effective, all applied use cases must be carefully tailored to the specific context of a peace process, as well as to the requirements of those who include and those who are included. A more comprehensive and interactive illustration of digital inclusion process designs, including use cases along various peacemaking scenarios, can be found on the project's online resource on www.digitalpeacemaking.com.

Digital inclusion in peacemaking, both as concept and practice, is still in its infancy. There is a need for careful discussion about the added value and the strategic purposes of digital inclusion, to which this project has aimed to contribute. While many mediators and mediation professionals contemplate the use of digital technology, initiatives that go beyond ad-hoc uses by mediation team members have often proven difficult to implement. Yet the field can only learn through actual experience. Research can support such efforts by building a knowledge base that is grounded in practice and lessons learned, including through the aggregation of existing data and the development of new analytical tools that help to assess the most important context factors.

Digital inclusion can only become relevant when it is purposeful – i.e. when it helps mediators and their teams achieve specific strategic objectives. By definition, this requires that possible negative effects are kept at acceptable levels. In the short-term, however, innovation may require taking bigger risks, to enable learning. This is because innovation cannot take place on the drawing board alone, but requires an iterative design processes, through which technologies can be tailored to a changing context. Through such as process, the effect is that the benefits of digital inclusion can be steadily maximized. Such efforts will likely require a close collaboration between mediators, technology experts, and researchers that can plan, guide, and analyse these innovation processes.

An additional challenge is to enable effective learning in a professional community that

¹²⁴ Hirblinger and Landau, 'Daring to Differ?' (footnote 32).

continues to be characterized by the paradigm of secrecy. Most mediation initiatives adhere to high standards of confidentiality, which reduces the mediation community's ability to exchange information, develop synergies, and advance common knowledge. In practice, this means that experiences in using digital technology are not widely shared, or only with considerable delay. At best, some success cases are referenced more widely. However, innovation also requires learning from past failures. The mediation support community should thus consider how to build innovation processes that can immediately benefit individual mediation initiatives, while contributing to a more aggregated, global body of knowledge on digital inclusion.

Inclusion – and digital inclusion – are not a panacea for peace processes. However, as conflict parties and conflict stakeholders increasingly rely on digital technologies, so should mediators. The turn to digital inclusion can provide a much-needed response to the increasing digitization of peace processes. When designing digital inclusion, mediators must give up the illusion that they can control the environment in which peace negotiations take place – at least its digital dimensions. In return, they will increasingly be able to shape it.

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