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Multitrack Digital Inclusion and Data-Driven Peacemaking

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Executive Summary

This policy brief fleshes out how data-driven approaches can be leveraged within an inclusive, multitrack framework. Digital technologies are increasingly viewed as a vehicle to enhance digital inclusion in peace processes. However, data-driven approaches may also constitute a risk to broad-based participation and inclusivity, particularly if data is collected, analyzed and used without the knowledge and involvement of conflict stakeholders. To safeguard the inclusivity of digitally enhanced peace processes, data should be co-produced by the stakeholders with the intention to inform the peacemaking effort. To this end, the policy brief presents a conceptual model for inclusive data-driven mediation support, consisting of two interrelated and complementary processes, namely vertical data sharing (between different tracks) and horizontal data dialogue (within the same track).

Policy Recommendations

⇒ When designing digital inclusion measures, do not solely think about what "tool" to use, but approach the task with a focus on the interplay of social and technical aspects – and especially how your own, your teams', and the participants' views on technology and data may shape peacemaking dynamics.

⇒ When planning to use data-driven approaches for inclusive peacemaking, check carefully if the data fit the minimum criteria for inclusiveness, namely that stakeholders have provided the data intentionally to influence the outcomes of the peace negotiations.

⇒ Approach digital inclusion efforts as part of the politics of peace processes. For instance, consider that unequal or limited access to digital platforms is an expression and consequence of the political context – and that participants will provide and interpret data in accordance with their own needs, views, and interests.

⇒ Attempt to combine data sharing and data dialogue measures in the peace process design. Depending on the objectives of the intervention, processes may play out differently. Carefully weigh the differences between top-down and bottom-up data sharing and ask if the data dialogue is meant to foster consensus and momentum for joint action (based on the data) or if it is intended to promote mutual understanding in support of transforming the relationships between the conflict parties.

Introduction

As the world slowly exits the COVID-19 pandemic, the repeated periods of social distancing, lockdowns, and travel bans have altered many professions. Peace mediation and mediation support are no exception. Faced with restrictions on in-person meetings, many diplomats, mediators, and facilitators have turned towards digital Information and Communication Technologies (ICTs) to maintain their peace efforts. Pre-pandemic, the perceived risks associated with digital technology, such as the confidentiality of digitally facilitated exchanges and the security of participants, often trumped the benefits. However, the pandemic changed these calculations, as taking increased risks associated with online communication became justifiable against the alternative of halting peacemaking efforts altogether. Moreover, the spiralling demand for online communication platforms spurred innovation, and many platforms are now much better suited to facilitate communication between groups and individuals, allowing for effective moderation and facilitation with increased data protection.

At the same time, peace mediation has also developed a stronger interest in **specialized and tailor-made tools that foster a culture of data-driven peacemaking,** such as applications drawing on remote sensing, machine learning and data sets. As a result, the past decade has seen the creation of many PeaceTech labs and initiatives, many of which also started to serve the interests of the peace mediation community. This has led to numerous data-driven applications to support peacemaking efforts, ranging from social media analytics (Build Up 2022) to satellite images to track troop movements or human displacement (Moaid-Azm Peregrina 2022). Intergovernmental and civil society organizations created dedicated teams, units or networks to spearhead the exchange on, as well as the research and testing of technological solutions, such as the UN Innovation Cell, the UN Global Pulse, the CyberMediation Network or the Digital Peacebuilding Community of Practice. There is now an increasing number of resources available to support mediation professionals in using digital technologies, such as the UN Peacemaker Digital Toolkit documenting use cases and best practices and online courses on digital process design. These resources bolster the view that the risks associated with digital technology can be controlled or mitigated while the possible opportunities and benefits are made increasingly visible.

Nonetheless, important challenges remain: How can we employ technologies in ways that remain human-centred so that they effectively support conflict parties and stakeholders in their efforts to find a peaceful settlement to their conflict? And how can we leverage new data gathering and analytics capabilities in manners that do not only enable processing more information but in ways that are participatory and inclusive? While there is an increasing body of research on the topic of digital inclusion (Hirblinger 2020), we know very little about how digital technologies can be leveraged to enhance the inclusivity of processes within a multitrack framework.

To address this question, the policy brief proceeds as follows. The first section suggests that when studying digital inclusion and data-driven approaches, we should shed light not only on digital tools but their embedding in socio-technical systems. The second section provides an overview of the emerging practices of digital inclusion, and the third section discusses how technologies tend to be employed across peacemaking tracks. The fourth section discusses the most important challenges that emerge from the use of digital technologies and data-driven approaches. Finally, the fifth section explores how practitioners can employ data-driven approaches while safeguarding the objective of inclusivity.

1. The effect of socio-technical systems on peacemaking

The digitalization of armed conflicts has also led to a radical shift in the profession: away from exclusively human-led approaches, in which the key to the settlement of disputes is viewed as in-person negotiations between representatives of conflict parties, towards a field in which digital technologies are increasingly viewed as part of the conflict design. However, digital technology is unlikely to replace the need for human agency – neither that of mediators nor that of conflict parties, in the search for political settlements. There exist techno-centric imaginaries of "supercomputers" that could replace human processes – for instance, in predicting armed conflict or drafting peace agreement provisions. However, these are driven more by popular culture than by realistic assessments of technological capabilities, including those powered by Artificial Intelligence (AI). Nonetheless, digital technologies are becoming increasingly necessary for core mediation tasks, not only because they provide critical communication infrastructure but also because they become embedded in analytical processes and knowledge production that inform peacemaking efforts – such as in the mapping of conflict parties, their positions, interests, narratives, and so on. Therefore, it is sensible to grapple with the fact that contemporary and future peace processes will depend on **hybrid human-machine constellations** in which mediators rely on digital technologies, including those powered by AI, to generate the information necessary for conflict resolution, such as on the underlying causes of conflict, the conflict parties' grievances, or the adherence to cease-fire agreements and security arrangements (Hirblinger 2022).

This suggests that the role of digital technology in peace mediation can no longer be ignored. But it shouldn't be overstated either. When grappling with the impact of digitalization on peacemaking, it is crucial that practitioners and policymakers do not focus on individual tools or applications but attempt to grasp how digitalization leads to new **socio-technical systems** in which both humans and machines have distributed agency. They should be concerned not only with the effects of single tools but with human-machine interactions and how they produce effects in peacemaking. For instance, conflict parties and stakeholders may hold certain views, which, in today's peace processes, are always mediated by technology – including through the everyday, ubiquitous uses of online media, social media and communication platforms that shape public opinion, and the employment of specialized technologies, such as earth

observations that document military developments and security incidents, or survey data that provides insights into their constituencies' needs and preferences. Digital infrastructures, analytical methods and data shape how conflict parties, stakeholders and third parties make sense of conflict. What is more, they can also shape the leverage and negotiating power of conflict parties. It is widely known that technological capacities – such as weapons systems and intelligence capacities, may tilt the balance on the battlefield – and that this may also affect high-level negotiations between political and military leaders on Track 1 (formal negotiations). But the same holds true in processes on Track 2 (i.e., informal high-level conversations) that involve experts and civil society and processes that aim to facilitate "people-to-people" diplomacy at the grassroots level. [1] Across all these tracks, a range of technologies that are not commonly viewed as weapons of war may influence negotiation dynamics. For instance, the participants may be able to affect – and are affected by – public opinions, narratives, and expressions of public support that, in most parts of the world, are now influenced by online and social media.

Technology thus has the capacity to alter human conduct – and this can affect peace mediation and dialogue efforts. However, it is similarly important to realize that our view on technology may affect peacemaking efforts as well. Technologies are not just mere tools with a pre-defined purpose. Their design and their use – in peace mediation and other fields – is determined by the problems that mediation professionals identify and the specific solutions technologies are thought to offer, and these claims shape peacebuilding dynamics and outcomes (Hirblinger et al., forthcoming). Very often, problems and solutions co-emerge. At times, technological innovation risks leading to solution-driven approaches. For instance, several actors currently experiment with the use of Virtual Reality (VR) applications to bring conflict-affected contexts closer to decision-makers, including in the UN Security Council. Such projects may be driven by the assumption that decision-making requires a view of reality that is as accurate as possible, something that VR promises to provide, so that decision-makers can act based on evidence – and develop empathy. However, decision-making at times may also require the opposite – the reduction of complexity and a focus on what matters most. For instance, foresight exercises may draw on large amounts of survey data but will, at some point, entail the production of relatively simple narratives about possible futures (United Nations 2021). Therefore, when engaging with the socio-technical nature of contemporary peacebuilding, and when asking how digital technologies and data can best be leveraged for peace, it is important that we do not only shed light on the technical impact of certain tools or data – but also on the social practices through which mediators and conflict parties shape views and stances on these tools and data. This policy brief focuses especially on the role of data – such as data collected in the context of online consultations or through social media analysis. It demonstrates that data is not a silver bullet for peacemaking efforts: its value for peace mediation depends on how conflict parties, stakeholders and third parties think about it – and how they use it.

2. Using data-driven approaches to enhance inclusion

This policy brief aims to flesh out how **data-driven approaches can be leveraged within an inclusive, multitrack framework**. 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" (UN Peacemaker 2012). Inclusion describes the process through which this is achieved. Importantly, while some would argue that inclusivity amounts to a norm in peacemaking – at least if mandated by the United Nations (Hellmüller 2020) – it is usually not an end in itself. A look into the existing policy and guidance documents suggests that inclusion is often associated with concrete strategic purposes – such as strengthening the legitimacy of a process, empowering and protecting specific groups, or contributing to longer-term conflict transformation (Hirblinger and Landau 2020).

Over recent years, there has been a growing interest in how digital technologies can support the inclusiveness of peace processes. There are many use cases that suggest that digital applications can contribute towards inclusion objectives through the gathering, analysis and dissemination of data, the amplification and diversification of stakeholder messages, and through connecting stakeholders and enabling coordination and collaboration between them (Hirblinger 2020). Importantly, all these objectives require the active participation of conflict stakeholders. For instance, to increase the legitimacy of processes, mediators may utilize online platforms to support public consultations or e-voting, thus building support for a peace agreement. Online dialogues may be designed to enable deliberation across the divide that would not be possible in offline settings, and this may help build trust between parties, change perceptions and reduce stereotypes, thus paving the way for a longer-term rapprochement(Hirblinger 2020). However, digital technologies, and particularly data-driven approaches, can also be a risk to political participation and democracy (Choi and Jee 2021; Theocharis and Lowe 2016; Helbing et al. 2019). Access to them can be unequal. Moreover, concerns can exist over the use of technology to facilitate conversation between protagonists if there are suspicions that such communication methods are not sufficiently secure for sensitive conversations. In peacemaking, these risks are particularly pertinent if digital technologies are primarily employed to support high-level mediators and conflict parties with conflict analysis, while little attention is paid to how the data underpinning the analysis is produced.

While digital technologies can undoubtedly be leveraged for inclusion, **we know relatively little about how digitalization affects the overall inclusivity of multitrack peacemaking efforts**. Commonly, a lack of inclusiveness results from process design and is influenced by the mediator's strategy and constraints

[1] For an explanation of the various tracks, see Snodderly (2011).

introduced by conflict parties, which lead to closed-door processes that merely involve high-level conflict party representatives on Track 1 or Track 1.5. In contrast, Track 2 and Track 3 processes are widely seen as vehicles to make peace efforts more inclusive and participatory. Track 2 processes bring an extended group of stakeholders to the table – including civil society representatives that hold expertise relevant to particular aspects of the process. These representatives are also often viewed as the "glue" between Track 1 and Track 3 – they may either hold direct contacts with high-level decision-makers or yield influence on them due to their technical authority on specific subject matters. As experts and members of civil society, they also commonly have the capacity to understand, analyze and represent the needs that emerge from the broader population (Palmiano Federer 2021). On the other hand, where Track 3 efforts are put in place to enable exchanges between ordinary citizens, these often serve objectives that are complementary to, but also independent from, higher-level efforts – such as building trust among different population groups. And where citizens are consulted during a peace process, these efforts may help to directly strengthen the legitimacy of outcomes by creating public acceptance. That said, there is a need to think more carefully about how digital approaches can enable better synergies between the tracks.

3. Digital technologies and multitrack peacemaking

It goes without saying that digital technologies and infrastructures do not inherently have tracks. Rather the opposite holds true: the expansion of digital access, first and foremost through increased connectivity to the internet, has been hailed as a process that deconstructs social and political barriers and divisions, including those resulting from the nation-state (boundaries), culture (language), or economy (class) (Berman and Weitzner 1997; Hofmann 2020; Castells 2015). On the other hand, digitalization is not the great equalizer either: while connectivity spreads, the global picture continues to be characterized by a digital divide and strong inequalities in digital access, digital literacy, and the power to shape technological innovation, including along geographical, class and gender dimensions (Pierce 2018; Fatehkia, Kashyap, and Weber 2018). Nonetheless, digital technologies have the potential to enable linkages, relationships and forms of interaction that would otherwise be impossible. Outside the field of mediation, efforts to promote citizen participation are well documented. For instance, online platforms enable new opportunities for citizen participation in public decision-making processes, ranging from public consultations to the co-creation of policy and participatory decision-making (Wilson and Tewdwr-Jones 2021; Lember, Brandsen, and Tõnurist 2019).

To understand how the increased use of digital technologies interferes with multitrack processes, it is important to consider how they affect peacemaking approaches *within* and *across* tracks.[2] There exists a range of applications used by mediators and their teams that do not adhere to the track framework and allow them to engage with all relevant stakeholders of a peace process – thus creating what can be understood as a "trackless" interaction. These include the vast variety of technologies utilized under the banner of strategic communication. For instance, social media posts by mediators and other third parties can be read by all parties and stakeholders. Nonetheless, specific platforms may be used to reach certain population groups. For instance, peacebuilding organizations that aim to support societal change commonly train volunteers to promote peaceful narratives and messaging on platforms such as Instagram and Tik Tok. Moreover, efforts to complement conflict analysis through social media analytics also target the population as a whole, while analysts may focus on influencers, official accounts, or accounts associated with conflict parties to understand their impact on the peace process. A further example would be messaging applications such as WhatsApp or Telegram that can bring together a large and heterogenous group of conflict stakeholders that may be formally associated with different Track 2 or Track 3 efforts, providing a platform to informally discuss issues related to an ongoing peace process.

However, the employment of digital technologies seems, by and large, still considerably influenced at what level and in what track practitioners aim to engage. Mediators facilitating high-level negotiations tend to express the biggest scepticism about the added value and feasibility of employing digital technologies. This pertains first and foremost to the hosting of meetings on online platforms such as Zoom or Microsoft Teams. Here, concerns about the confidentiality of such meetings, and particularly the possibility that other parties to the conflict might access or eavesdrop on the discussions, continue to outweigh the presumed benefits. Challenges of reading the room, building trust between conflict parties, influencing negotiation dynamics, and using informal encounters to move processes forward seem common. During the height of the COVID-19 pandemic, online communications were used to organize high-level encounters and keep processes alive, but many mediation initiatives painstakingly organized in-person meetings to bring conflict parties together, for instance, in the case of the Syria constitutional process. However, digital technologies continue an increasing role in the collection, analysis and sharing of data that mediators employ to design and facilitate high-level engagements.

In contrast, engagements on the other tracks – such as Track 2 expert workshops or Track 3 community-focused dialogues, have seen an uptake of digital technologies, including facilitating online encounters and maintaining regular exchanges with conflict parties and stakeholders via messaging services. Interestingly, data-demanding online conference platforms are also used in processes involving stakeholders in less well-connected parts of

[2] The following discussion is supported by the results of an online survey with mediators and mediation support professionals, conducted in the periods July-October 2022. A total of 42 participated. The participants worked for international and national governmental and non-governmental organizations, and reported on their use of digital technology to support mediation efforts and dialogues in a total of 28 countries.

the world. Concerns with the "digital gap", i.e., limited digital access due to infrastructural or resource constraints, are being addressed by proactive efforts to reduce this gap through infrastructural and financial support that can ensure the participation of less connected populations. At these levels, new data analytical methods, such as surveys, crowdsourcing, and analytical tools, provide innovative means to support dialogue efforts that involve a broad and diverse set of stakeholders. The spectrum of applications stretches from comparably low-tech solutions, such as WhatsApp groups, over the use of tailor-made online survey platforms, to technically demanding systems for mass online focus groups combining live conversations with hundreds of participants with AI-driven data analytics to generate statistically relevant insights into stakeholder preferences. The results of these activities – often in the form of data insights, reports, or advocacy products – can inform mediator strategies and process design. Moreover, they may also be leveraged to shape conflict party positions on Track 1. The somewhat surprising result is that the trend towards digitally enhanced peacemaking has benefited mainly Tracks 2-3, while Track 1 and Track 1.5 activities continue to be carried out predominantly in the conventional "offline" manner. While the digital gap and limited digital literacy among conflict-affected populations may reduce opportunities for digital inclusion, the secrecy and confidentiality needs of high-level negotiations further entrench gaps and disconnects between the tracks. This begs the question of how digital approaches can go beyond broadening participation at the lower tracks by making data about the needs and interests of all stakeholders matter at Track 1.

4. The challenges of using data for inclusive peacemaking

While digital technologies have been widely explored as a vehicle to enhance inclusion in facilitated peace processes, digitalization and increased participation often do not necessarily go hand in hand. Indeed, many digital technologies utilized in support of peace processes have also been criticized for their potential to undermine democratic processes and lead to a technocratization of decision-making (Mac Ginty 2012). Therefore, while mediators increasingly use data-driven approaches, they need to carefully consider whether that data indeed enables participation or whether it solely provides insights and analysis that do not allow conflict parties and stakeholders to actively voice their concerns. Particularly applications that rely on the remote collection of data may encourage conflict analysis and decision-making that remains largely unnoticed and unaffected by the broader population. This may include data provided by remote sensing technologies, such as satellite and airborne sensors, or data collected through the scraping of social media or online content through platform-specific Application Programming Interfaces (APIs) or analytical software such as CrowdTangle (Batrinca and Treleaven 2015). A further problem arises when such data is then analyzed with the help of Machine-Learning (ML) tools that often provide insufficient opportunity for human oversight due to the fact that inference methods are "black boxed" and "intransparent" (Azoulay n.d.). We are also seeing an uptake in behavioural social science approaches that aim to generate insights through "evidence-based psychological and behavioural techniques" (DPPA 2020). The use of such methods furthers not only the expertization of the field, as mediation efforts increasingly involve dedicated data or computer scientists. It also risks that policy proposals that form part of political settlements may be produced by an increasingly exclusive group of tech-savvy experts without the substantial involvement of conflict parties and stakeholders. This begs questions about the political support such proposals may generate from key conflict constituencies and, consequently, about their effectiveness as conflict resolution tools.

Finally, we should be sceptical about the merits of "hard" or "scientific" evidence that data-driven approaches promise to deliver. While there are undeniable advances in the capacity to collect information about conflicts and to use such data to forecast conflict trends (Hook 2021), the dynamics of civil wars and peace processes are constantly evolving and, therefore, rarely unfold according to generalizable rules (Bosetti et al. 2017). Moreover, we often lack detailed data from conflict-affected contexts that would be required by advanced ML systems to identify patterns in peace processes, for instance, to calculate the likelihood of an event to occur or to make recommendations that could inform the mediation strategy (Cederman and Weidmann 2017). Most of the information necessary for such choices often remains undocumented and tacit, and thus difficult for machines to read and use as input data to inform their models. But most importantly, peacemaking will always remain a political endeavour. There is also the challenge of dealing with misinformation and disinformation and the fact that scientific data is also commonly politicized and perceived as biased. That said, it makes sense to think of data as providing a view of the world that is always situated.

Even in peaceful political systems, scientifically generated insights are hardly a sufficient basis for decision-making. While contemporary policy is often evidence-based, it does also require going through institutional political processes where "facts" are matched with public "values", thus becoming means through which publics can imagine their collective futures (Jasanoff and Simmet 2017). In democracies, this usually requires some form of political debate and deliberation (Stark, Thompson, and Marston 2021). The same likely holds true in the context of peace negotiations and dialogue efforts, where "evidence" and "facts" contained in data will form part of the discussions about a possible political settlement. The negotiating parties will not only critically scrutinize any data inserted into the processes against the backdrop of their own viewpoints and positions. They will also present their own evidence, or selectively draw on the evidence presented by third parties, to support situated political views, positions, and demands. On the other hand, data and information shared via digital technologies can provide an object around which dialogical engagements between conflict parties become possible. Rather than containing "hard facts" that are taken for granted and the basis for a solution, data tends to become itself part of the negotiation – allowing the parties to negotiate positions indirectly by agreeing or disagreeing with it. That said, we should think of the data generated in support of peace mediation efforts not only in terms of its value as something that stores information relevant for peacemaking. Rather, the

participatory generation and use of data is part and parcel of any inclusive negation and dialogue process.

5. Harnessing the "data revolution" for inclusive peacemaking within a multitrack framework

Building on the previous discussion, the remainder of this policy brief outlines how data-driven approaches can be harnessed to enhance the inclusivity of peace processes within a multitrack framework. More generally, multitrack approaches are successful if they manage to foster linkages both vertically (across levels of society) and horizontally (between actors and initiatives at the same level) (Palmiano Federer et al. 2019). While a particular emphasis has been put on the question of how insights and ideas (broadly conceived) produced in the context of Track 2 efforts can be moved to the official Track 1 process, many would argue that there is a utility of transfers that happen downwards or sidewards to other audiences, efforts or spheres of influence (for an overview, see d'Estrée and Fox 2020). In contrast, the focus here is much narrower, namely on the sharing of data within and across tracks, driven by a concern with how such data sharing can contribute to strategic objectives such as strengthening the legitimacy of processes, empowering marginalized groups or transforming antagonistic relationships, The following discussion focuses particularly on the need to enabling vertical data sharing and horizontal data dialogues if data-driven approaches are to successfully contribute to the inclusivity of peacemaking efforts.

Inclusive and multitrack frameworks do not always squarely fit with one another. Yet, particularly Track 2 activities involving civil society representatives are widely seen as a vehicle to increase the inclusivity of processes by complementing high-level negotiations between formal party representatives on Track 1. Here, the idea of "transfer", i.e. the sharing of information containing the interests and demands of a wider group of stakeholders comes into play (Palmiano Federer 2021). Today, such transfer of information often takes place in the form of data – and this data is delivered by the participants on one track and then received by the participants on another. These dynamics can be understood as making up the vertical dimension of digital inclusion. In addition, most strategic purposes of digital inclusion, such as increasing the legitimacy of processes or empowering certain groups, will also require that stakeholders on the same track engage with data in a peer-to-peer, i.e., in a horizontal manner.

As will be explored below, digital inclusion requires two interrelated and complementary approaches to data, namely vertical data sharing (between different tracks) and horizontal data dialogues (within the same track). Track 2 dialogue activities are especially relevant for making this possible.

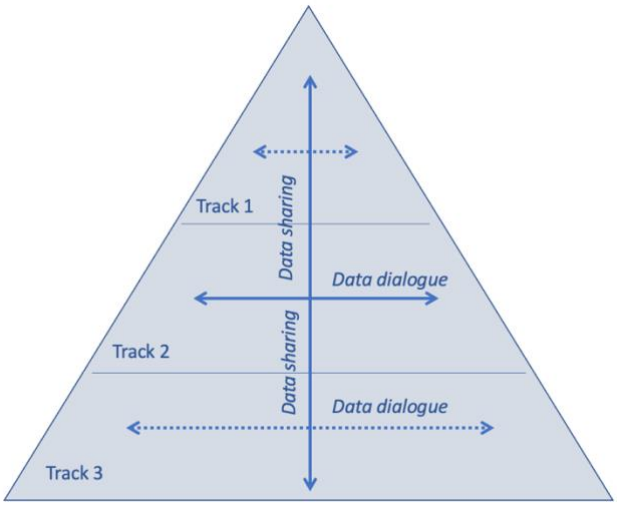

Figure 1: Data sharing and data dialogue in a simplified multitrack model[3]

Data sharing between tracks

The vertical aspect of the process entails that data containing information about the needs and interests of conflict stakeholders is generated on one track and then transferred to another. This usually involves data collection activities with participants on Track 2 or Track 3 and then sharing that data with the participants at Track 1 or Track 2, either directly or via a mediator or mediation support actor. Such data can be generated during synchronous and collective activities, namely online dialogues or workshops, or during asynchronous and individual activities, such as filling out an online survey. These activities have in common that the participants provide information about their personal views, interests, needs or preferences in ways that enable them to have a "voice" – because stakeholders share this information intentionally, with the aim to give an account of themselves in an attempt to influence the outcomes of the peace negotiations, steering them away from a state of affairs that they find objectionable (Hirblinger 2020, 14).

This process may involve data sharing that is initiated from the "top-down", which means that an actor with access to a track at a higher level will drive an effort to facilitate the inclusion of voices from lower-level tracks. This approach is used when digital inclusion is meant to strengthen the overall legitimacy of the process, where a broad-based engagement with a variety of stakeholder groups is necessary. For instance, mediation support actors may conduct consultations to inform ongoing peace negotiations or dialogue efforts using online survey platforms, text-messaging services, or dedicated chat software. These activities may be open to the public (in this case, data is generated from Track 3), or they may focus on a selected number of civil society representatives and experts. In this case, the data is

[3] This model is now often complemented by Track 1.5 – processes in which high-level representatives gather in an informal capacity. Notwithstanding these further differentiations, most important for data-driven approaches is that they combine vertical data sharing and horizontal data dialogue.

collected and analyzed by the mediation support actor, which means that those who provided the data in the first place will have little influence on how the aggregated analysis is presented and used. This means that the power to represent the data will usually be with the actor who introduces the data to the higher-level track – commonly the mediator or mediation support actor. Importantly, this data may be inserted formally into a process – for instance, as a report summarising the findings, or informally, for example, by tacitly informing mediator strategy or the process design.

In addition, data sharing can also be initiated from the "bottom-up". Such an approach is commonly chosen if a mediation support actor aims to empower certain constituencies by encouraging them to speak with a unified voice to have their views more strongly represented in the processes. In this case, the group in question will emphasize one specific commonality, such as their association with a marginalized demographic group or minority. In this case, a group of stakeholders at the Track 2 or Track 3 level will drive the effort to generate data, consolidate it in a specific output, and make it available to an entry point at a higher track. Commonly, a mediation support actor will support the effort at this track – and this actor may also facilitate the transfer of information. However, the main difference is that the authority to analyze, interpret and represent the data, and draw conclusions from it will remain with the participants at the lower track. In fact, what is transferred sometimes may no longer look like data – as is the case with a list of policy recommendations – but data will have been crucial for creating this output in the first place. For instance, dialogue workshops conducted with civil society representatives may be supported by participatory data collection and visualization tools. These tools may help aggregate information about the stakeholders' views and preferences. Notably, the results of such processes will be summarised in an output co-authored by the participants, such as a workshop report, a joint document, or an advocacy letter to the conflict parties or the mediating third party. In addition, such expert-led processes may also involve the generation or consultation of survey data collected from the broader public (Track 3) – thus fusing a "top-down" and "bottom-up" element.

Data dialogue within tracks

The horizontal aspect of the process entails that stakeholders on the same track engage with the data in a dialogical fashion. Such data dialogues may entail, for instance, scrutinizing and discussing to what degree the data accurately corresponds to the conflict context, to what degree it represents the interests and needs of all relevant stakeholders, and to what degree it is relevant for the negotiation process. The participants may also question the methods through which the data has been generated.[4] This could be data that has been transferred from another track or data that is generated by the participants themselves during the process. The data could also be introduced by one party as evidence to support a specific claim or position. Data dialogues are dialogues about data that complement the dialogues between the participants. They are "meta-dialogues" that aim to generate a common understanding of, and ideally acceptance of, the empirical information that underpins conflict party positions, their claims about the problems that characterize the conflict, and possible negotiated solutions.

Such dialogical engagements are most feasible among groups of experts commonly gathered in Track 2 initiatives as this group is most likely interested in methodological issues such as the representativeness and relevance of data. However, they are also possible and valuable at the other tracks. The participants' peer-to-peer engagement with the data has two major benefits: It can help strengthen the data's perceived quality and its acceptance by the participants, thus making it a legitimate basis for joint decision-making. In some cases, this could lead to the validity, representativeness, or relevance of the data being questioned or refuted by some of the participants – which is most important when the data has been introduced by a conflict party with the malicious intent to provide fabricated evidence in support of its agenda. Moreover, the discussion of the data can provide an opportunity for the participants to engage with diverging views on or contained in the data. This allows the participants to develop a mutual understanding of each other's positions and thus helps the participants to question established views and beliefs that form part of the conflict. To achieve these objectives, horizontal digital inclusion requires that participants exchange their views on the data – for instance, during online or in-person meetings, informal conversations, or written communication. Data dialogues often occur in organized settings, but they can also be stimulated between various initiatives.

This may entail that participants engage with data that is shared from another process (usually at a lower-level track - as mediators or facilitators will help transfer data from the bottom-up to enhance the inclusivity of processes) and introduced into the dialogue setting. For example, a group of experts may review survey data containing socio-economic indicators on the causes or drivers of conflict, data obtained from broad-based consultations as part of a National Dialogue process on public perceptions and preferences, or incident data collected from a cease-fire or peace agreement monitoring body. The participants will scrutinize the data provided to them with the aim of accepting or refuting it as part of the empirical basis for the process. The discussion may focus on the empirical soundness of the data (how has it been collected, is it representative, is there bias in the data), but also its relevance or merit for the peace process (what does the data tell, what are the implications?). From the facilitator's point of view, the aim of this process may be to have the data validated and accepted, to use it for a structured and "evidence-based" exploration of a specific issue, or to create momentum for joint action. To achieve this goal, facilitators may have to share insights into the data collection and analysis methodology and provide opportunities for the participants to provide feedback. Data sharing and data dialogue may be reiterative processes.

[4] The benefits of public engagement with data and evidence, as well as the data science and new technologies with which they are produced have been extensively explored in other fields (Burgess 2014; Schultz and Seele 2020).

Moreover, data dialogues also provide opportunities to work on the relationships between the participants. This is the case when digital technologies are used to gather, display, and compare the views and positions among the participants engaging in the respective track. This may be achieved through specialized or off-the-shelf participatory data-collection, namely mapping and visualization tools that help to document the participants' views, positions, or preferences, such as through word clouds or bar charts. The primary aim of the exercise is not to achieve consensus or a common view on the data but to use the data as a vehicle through which the participants can explore their divergent positions. Such kinds of data dialogues can have a transformative potential, as they can help to stimulate empathy among the participants, deconstruct and question pre-given views or stances, and provide a basis for exploring the narratives and beliefs that underpin such views.

Conclusion

The range of digital technologies employed in support of peace processes is constantly growing. Many of these technologies can be utilized to enhance the participation of a broad range of relevant stakeholders. The potential negative effects and risks of employing digital technologies have been widely acknowledged, including concerns with data protection, the security of participants and the confidentiality of processes, as well as the limits that current online facilitation methods pose for meaningful and trusted dialogue (Bramsen and Hagemann 2021; Hirblinger 2020; Jenny et al. 2018).

This policy brief has focused on one particular risk, namely that the increased use of digital technologies by peace mediators and support actors could further entrench division and disconnects between tracks. While online videoconferencing platforms, messaging applications and survey software seem increasingly used for Track 2 and Track 3 efforts, substantial high-level negotiations continue to take place in person. And while many digital platforms and social media are theoretically "trackless", third parties seem to make use of these tools largely within a multitrack framework, i.e., facilitating exchange within one track but less so across tracks.

Particular risks stem from new opportunities to collect data without the knowledge and direct involvement of conflict stakeholders. A significant difference is in whether digital technologies merely enable better connectivity between two or more actively communicating stakeholders or whether they do so through the collection and analysis of data where the data collection effort could go unnoticed. Of course, all digital technologies somehow work with data by collecting or generating data, or processing, storing or forwarding data. For third parties who aim to foster inclusion, however, the crucial criterion is that this data must have been produced or co-produced by the stakeholders with the intention to inform the peacemaking effort. It would have been impossible to be part of conventional, in-person inclusion efforts without one's conscious knowledge. While mediators and support actors may aim to enhance inclusion, actors who are included participate in the process intentionally and actively. The same must hold true for digital inclusion efforts, not least because political voice – and the desire to change the undesirable status quo that underpins conflict – cannot be thought of without intentionality.

Unfortunately, data-driven approaches do not always meet this criterion, and they may even curtail inclusion, where data is collected and used without the knowledge or consent of stakeholders or where it is processed, analyzed, and used in intransparent manners. Therefore, this policy brief has formulated a conceptual model for inclusive data-driven mediation support, consisting of two interrelated and complementary processes, namely vertical data sharing (between different tracks) and horizontal data dialogue (within the same track). Both data sharing and data dialogues entail that conflict stakeholders or parties actively and intentionally engage with the data that contains information about them and others that matter to the process. Therefore, the model describes an ambitious but necessary pathway that can help ensure that data-driven approaches ultimately support inclusive peacemaking.

Recommendations For Practitioners

- When designing digital inclusion measures, do not solely think about what "tool" to use, but approach the task with a focus on the interplay of social and technical aspects – and especially how your own, your teams', and the participants' views on technology and data may shape peacemaking dynamics.
- When planning to use data-driven approaches for inclusive peacemaking, check carefully if the data fit the minimum criteria for inclusiveness, namely that stakeholders have provided the data intentionally to influence the outcomes of the peace negotiations.
- Approach digital inclusion efforts as part of the politics of peace processes. For instance, consider that unequal or limited access to digital platforms is an expression and consequence of the political context – and that participants will provide and interpret data in accordance with their own needs, views, and interests.
- Attempt to combine data sharing and data dialogue measures in the peace process design. Depending on the objectives of the intervention, processes may play out differently. Carefully weigh the differences between top-down and bottom-up data sharing and ask if the data dialogue is meant to foster consensus and momentum for joint action (based on the data) or if it is intended to promote mutual understanding in support of transforming the relationships between the conflict parties.

About the Author

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Andreas' past research was amongst others concerned with how digital technologies can be leveraged to support digital inclusion in peace mediation, the opportunities and limits of data-driven peacebuilding approaches in contexts of uncertainty, and the use of Artificial Intelligence (AI) for peace mediation support. He has worked as a consultant, advisor and trainer for many international peace mediation, mediation support, and peacebuilding organizations. He holds a PhD from the University of Cambridge.

About Ottawa Dialogue

Established in 2009, Ottawa Dialogue is a university-based organization that brings together research and action in the field of dialogue and mediation. Guided by the needs of the parties in conflict, Ottawa Dialogue develops and carries out quiet and long-term, dialogue-driven initiatives around the world.

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