



KOFF Essential

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Information and communication technologies in peacebuilding

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KOFF

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1 Introduction

Introduction

- 1 Puig Larrauri, H. (2013) The Use of New Technologies: Expanding Opportunities for Peacebuilding? Critical Reflection, Center for Peacebuilding KOFF, swisspeace.
- 2 Puig Larrauri, H. (2018) Is technology a tool, or is it tooling us? Opening remarks for the Build Peace 2018 Conference. Build Up.
- 3 Ibid.
- 4 TechTarget network (2017) ICT (information and communications technology, or technologies).

“Technology provides new avenues for participation, enabling people to engage with the world and seek change in new ways”.¹

These were the opening words of a critical reflection by tech, peace and civic activist and co-director of Build Up, Helena Puig Larrauri, in 2013. At the time, the underlying assumption about information and communication technology (ICT) held that it was just a tool, and what mattered was how it was used. A few years later, at the 2018 Build Peace Conference, she asked: “Is technology a tool, or is it tooling us?”²

Over the past years, the interest in and knowledge on the strategic use of ICTs in peacebuilding has widened. However, the dawning realization that technology is more than just a tool - that in fact it shapes discourses, changes incentives and alters identities³ - has given rise to renewed skepticism. Thus, this Essential provides an overview of possible entry-points for the use of ICTs in peacebuilding, while also drawing attention to the risks and limitations from a peacebuilding perspective.

In this paper, ICTs refer to all technologies that provide access to information through telecommunications. They encompass the internet and wireless networks as well as cell phones, television and other communication media.⁴

There are two fundamental approaches to ICTs in peacebuilding. One approach, its popularity typically coinciding with new technological advances in the global North, holds that ICTs can radically transform peacebuilding in a positive direction. ICTs are seen to have the potential to revolutionize the nature of interactions and the speed of communication, thereby providing new opportunities for peacebuilding initiatives.

The other approach is more critical and highlights issues such as accessibility, associated costs, usability

and the need for literacy as well as appropriateness of technologies in the global South, particularly in conflict-affected regions. Moreover, it often argues that interaction mediated by ICTs do not hold the same power as face-to-face encounters and are not capable of changing deep-rooted attitudes and intentions.⁵

Both approaches make valid points. Peacebuilding activities with an ICT element tend to be most successful when they enrich existing processes of social transformation by giving an additional realm to pursue peace and change. When ICTs are sensibly integrated in more

- 5 Kalathil, S. et al. (2008) Towards a New Model: Media and Communication in Post-Conflict and Fragile States. The World Bank Communication for Governance & Accountability Program (CommGAP), p. 58.
- 6 Ibid.

“Getting past the hype surrounding ICTs and critically reflecting on the risks and opportunities they present needs to be the first step in adding them to the peacebuilding toolbox.”

conventional peacebuilding activities, they can enhance the scope and effectiveness of these activities. The sensible integration and appropriate role of ICTs is determined by context. Using a complex application to crowdsource information about security issues in a village without a computer-literate, or even literate, population, is unlikely to be a helpful tool in security data collection. At the same time, technologies that build on peoples’ (sometimes pre-existing) user abilities can be extremely useful in enabling people to access information quickly and use it productively.⁶ Getting past the hype surrounding ICTs and critically reflecting on the risks and opportunities they present needs to be the

7 OSCE (2012) Preparing for peace: Communications in conflict resolution.

first step in adding them to the peacebuilding toolbox.⁷ This paper is organized along the main areas of peacebuilding engagement. The lens applied to peacebuilding is one of sustaining peace at all stages of conflict and in all its dimensions. While some sections address the use of ICTs more generally, this paper mainly focuses on their strategic use for peacebuilding beyond providing a website, using email and social media. Each section highlights opportunities and risks - which are often crosscutting themes - presenting an overview of research in this area as well as practitioners' reflections. By no means exhaustive, this Essential seeks to provide thought-provoking impulses on how to work with ICTs in peacebuilding, and to promote sensitization and further discussions among peacebuilders and their partners.

2 Fragility and shrinking public space

International cooperation and peacebuilding mostly take place in fragile and conflict-affected contexts, where institutions are weak or even illegitimate, levels of violence are high and the social contract is often broken. Civil society organizations increasingly face authoritarian regimes, putting pressure on basic human rights and the public space to defend them. In circumstances like these, ICTs can provide alternative spaces for civil society to organize and collaborate. However, the use of ICTs also comes with a number of risks.

Enhancing collective action

ICTs can provide alternative spaces for civil society to coordinate action and organize discussions in a more network-like and dispersed manner. They allow for communication with a variety of actors without having to invest in physically bringing people into the same spaces, making collaboration more accessible. Virtual networks can easily be set up by anyone to discuss an issue with anyone interested in joining, assuming that all parties have an internet connection and a device to access it.

Technology reduces barriers to taking part in discussions, as people can access online political discussions remotely. Since some statements on the internet can be made anonymously, there is less fear of the social or political repercussions of stating one's opinions, and of potentially being prosecuted for having such opinions. ICTs can also provide spaces for debates and dialog where it might not be possible or safe to do so in person, for instance due to governmental oppression or generalized violence in the streets. They facilitate the creation of space where people can share their views and connect with others, thus easing the first step towards collective action.⁸ ICTs can also disseminate alternative points of view that might otherwise not reach larger audiences.⁹

8 Butler, M. (2011) Clicktivism, Slacktivism, or 'Real' Activism? Cultural Codes of American Activism in the Internet Era. Communication Graduate Theses & Dissertations, University of Colorado, Boulder.

9 Mirani, L. (2010) Sorry, Malcolm Gladwell, the revolution may well be tweeted. The Guardian.

10 Butler, M. (2011) [as n. 8 above].

11 Gere, C. (2002) Digital Culture. Reaktion Books Ltd. p. 218]

ICTs can ease the organization of in-person meetings with applications like Doodle or Facebook events, where like-minded people can be reached more easily and can participate in events without having to know the organizers personally. This allows a diverse range of people with overlapping interests to join alliances, whether fleeting or sustained.¹⁰ Since ICTs can help reach a broad audience without requiring a large financial investment, they can help expand the reach of small initiatives with minimal or no budgets. Messages can become amplified very quickly as they can be distributed amongst a variety of actors with the ease of a click.

The decentralized and interactive characteristics of ICTs can help foster a more distributed, networked, horizontally organized civil society. One of the hopes of those pro-ICTs is that online spaces are less confined by the notions of power within the physical world and therefore offer the possibility of a more bottom-up model of organization that can transcend, in part at least, hierarchies and existing power structures.¹¹

“The digital divide risks deepening already existing inequalities within a society, particularly along geographic, gender and socio-economic lines, as well as generational differences.”

Deepening inequalities through the digital divide

However, when it comes to online activism, it is important to consider, who can access the technologies needed to participate. The so-called digital divide has implications on whose voices are heard when ICTs are used.¹² While the use of the internet has grown exponentially in recent years, this process did not take place uniformly across all countries. In fact, it has led to a digital divide – a gap between those who have access to ICT resources and have the capacities to utilize them, and those who do not.¹³ The digital divide risks deepening already existing inequalities within a society, particularly along geographic, gender and socio-economic lines, as well as generational differences.¹⁴ The number of women who use the internet is up to 23 percent lower than the number of men, making the gender digital gap another significant factor to keep in mind when leveraging ICTs for peacebuilding.¹⁵ While many inequalities impact the access to ICTs, being left behind by the digital third industrial revolution is mainly a symptom of persistent poverty.¹⁶ In line with the “leaving no one behind” principle, this is an important factor to keep in mind when designing peacebuilding programs in areas with high levels of poverty. It also indicates the need to reflect on the long-term impact of the rise of digital technologies on inclusive societies and the right to access to information.

Initiatives must address both the skill gap and the gap of physical access to ICTs in order to overcome the digital divide, because “[w]ithout access to technology, it is difficult to develop technical skill and it is redundant to have access to technology without first having the skill to utilize it”.¹⁷

Much like in language, certain cultural ways of thinking and behaving can be ingrained in technologies, which can render the use of technologies developed in the global North problematic in other regions of the world. A common way to alleviate this risk is to use

12 United States Institute of Peace USIP (2011) The Impact of New Media on Peacebuilding and Conflict Management.

13 DiMaggio, P. et al. (2001) Digital Inequality: From Unequal Access to Differentiated Use. Russell Sage Foundation.

14 Horner, L. et al. (2010) Information and communication technologies and human rights. European Parliament.

15 Sambuli, N. (2018) Digitalisierung: Alle ans Netz. akzente: Das Magazin der GIZ.

16 Servon, L. J. (2008) Bridging the Digital Divide: Technology, Community, and Public Policy.

17 Kularski, C. M. & Moller, S. (2012) The digital divide as a continuation of traditional systems of inequality.

18 Mancini, F. (ed.) (2013) New Technology and the Prevention of Violence and Conflict. New York: International Peace Institute.

19 Find more information on the successes, failures, and practices of online activism at clicktivist.org.

20 Christensen, H. S. (2011) Political activities on the internet: Slacktivism or political participation by other means?

21 Butler, M. (2011) [as n. 9 above].

technologies that people in the region already use. This lowers the threshold to participate significantly. However, this strategy can also be dicey because not all software allows for easy adaptation to different cultural and political contexts. One way to mitigate this issue is to use open source software that can be adapted to fit user needs by users themselves, though not all users will have the capabilities to do so. Combining technologies already in use with newer technologies and accompanying the process with appropriate training is another viable option.¹⁸

Fostering fleeting and selective engagement

Since the cost of setting up and joining virtual networks is low, engagement on the internet can be thin and people can lose interest quickly. The so-called ‘clicktivism’, people only supporting and promoting a cause online without taking action offline, is certainly something to be mindful of when creating and implementing online initiatives for change.¹⁹ The related ‘slacktivism’ categorizes activities that make internet users feel good about themselves but have little impact and may even distract from other, more effective, forms of engagement.²⁰ Thus, virtual networks may appear and disappear quickly and only engage selectively. Notwithstanding ICTs’ flexibility and responsiveness to sudden events, not all online engagement sparks offline action like it did in the case of the Arab Spring or the #metoo movement.²¹ While online ‘clicktivism’ might in certain cases complement offline activism, or vice versa, it is not a given. Moreover, not all online movements are of relevance offline. As the effects of an online movement are difficult to predict, analyzing or working with virtual networks is a challenge. Therefore, it is important to contextualize the online movement and cooperate with technical experts who may be better situated to identify the risks associated with fleeting and selective engagement for collaborative action in peacebuilding initiatives and transformation processes. Nonetheless, even if some engagement online is thin, when sustained

over time, it can help raise awareness and contribute to more active engagement offline. In this context, the connection between disruptive events, the following emergence of political groups and discourses online and, ultimately, political change remains underexplored.²²

Risking increased surveillance and intelligence gathering

ICTs can provide a channel for more direct engagement with government officials or international organizations that can otherwise seem distant.²³ Conversely, governments and other powerful groups can manipulate and control online media for their own interests and purposes.²⁴ The restriction of liberal rights, control and censorship in cyberspace by authoritarian regimes can also limit the work of NGOs on the ground. The shrinking space of action for civil society is an issue that also applies to online spaces.²⁵

While ICTs have opened up new spaces for political engagement and organizing, they have also brought about increasingly sophisticated methods of government censorship and surveillance, which has allowed authoritarian regimes to gather intelligence on their citizens on a new scale. The use of ICTs may put participants at risk because data might be revealed that could compromise participants’ safety. For this very reason people may refrain from using ICTs. In countries where large-scale distrust in new technologies is very prevalent due to a history of state surveillance and censorship, it may make sense to move away from the internet and engage in offline bridge-building initiatives.

Particularly small NGOs are perceived to lack resources to effectively manage their cybersecurity in order to prevent being censored and surveilled. Yet, cybersecurity is of utmost importance as losing access to technologies, having funds stolen or suffering a data breach through a cyber-attack can be devastating, both

22 Interview with Senior Researcher Dr. Joschka Philipps, Peacebuilding Analysis and Impact, swisspeace [22.01.2019].

23 Tellidis, I. & Kappler, S. (2015) Information and communication technologies in peacebuilding: Implications, opportunities and challenges. In: *Cooperation & Conflict*. 51 (1), p.75-93.

24 The Digital Governance Initiative (n.d.) When governments “unlike” you?

25 Transnational Institute (2017) On “shrinking space”: a framing paper.

26 National Cyber Security Center (2018). [Cyber Security: Small Charity Guide](#).

27 [ace: The Electoral Knowledge Network. ICT Innovation Cycles and their Relation to the Electoral Cycle](#).

28 JustPeace Labs (2017). [Ethical Guidelines for PeaceTech](#).

financially and reputationally.²⁶ There are easy ways to improve an organization's cybersecurity that do not involve significant financial or time commitments, as well as resources that can help guide cybersecurity efforts.

For every project involving ICTs it is important to consider the exposure risk of its systems; how likely failure or various types of attacks are; what the consequences of such events are; and what security investments are necessary, possible and justifiable.²⁷ Additionally, the usability of each project also needs to be considered. Users, particularly those less experienced with ICTs, can easily become discouraged or confused by overly complicated security measures or privacy settings. It is important to strike an appropriate balance between usability and security.

Platforms and networks like KOFF, bringing different actors together to exchange their experiences, can be helpful in this process; they allow for joint risk assessment and sharing of best practices for cybersecurity in a particular context. As the cybersecurity and data protection risks and harms change over time, it remains important to assess continuously and act accordingly throughout a project to ensure no harm is done.²⁸

TOOLS: Cybersecurity resources

Cybersecurity concerns must take center stage during the design process. How can partner organizations be protected? What measures need to be in place to safeguard project participants' online engagement? There is a variety of resources and guides available online that can advise on cybersecurity, a small number of which are highlighted here:

[Security in a box](#) has issued a number of cybersecurity guides tailored to the needs of specific groups of human rights defenders. Moreover, the site also contains guides for safe and private behavior on social networks such as Facebook and Twitter.

The [Digital First Aid](#) kit aims to provide preliminary support for people facing the most common types of digital threats. It offers self-diagnostic tools for activists facing attacks themselves, as well as providing guidelines for digital first responders to assist a person under threat.

[Security Planner](#) is an easy-to-use guide with expert-reviewed advice for staying safe online. It provides recommendations on implementing basic online practices and pointers to where to go for further help.

[Security without borders](#) can assist with web security assessments, conduct breach investigations and analysis, and generally act as an advisor in questions pertaining to cyber security. They offer these services for free to organizations and people fighting against injustices.

The UK National Cyber Security Centre developed both a [guide and an infographic](#) that explains a few simple steps small charities can take to enhance the cybersecurity of their daily operations.

Cyber Security Ventures provides a [listing of Cybersecurity Industry Associations](#), particularly those who provide cybersecurity trainings, but also further resources.

While not directly a cybersecurity resource, the organization [Responsible Data](#) provides practical information, guides and further resources on the topic of using data for social change work.

3 Conflict prevention, early warning and conflict analysis

29 Conflict Sensitivity. The FAST International Early Warning Methodology. swisspeace & Virtual Research Associates.

The rise of ICTs has changed the information space around conflict by providing a growing number of people with the tools to record and share their experiences with the rest of the world. These new tools, in turn, have changed the kind of information that can be gathered and accessed as well as how individuals can participate in this process. ICTs have the potential to generate useful information for conflict prevention and early warning, as well as for conflict analysis, but can also promote the misuse of personal data, and create channels for hate speech and extreme, non-peaceful ideas to spread.

“Simply the speed at which ICTs transmit information allows for a much earlier warning of and response to rising tensions, since information can be circulated next to real time.”

Increasing speed and variety of information for early warning

Successful early warning initiatives depend on the timely collection of sufficient and relevant information, and on a timely analysis of this information.²⁹ Being able to collect relevant information on a conflict situation in a timely manner helps to better coordinate and tailor responses by peacebuilders. Simply the speed at which ICTs transmit information allows for a much earlier warning of and response to rising tensions, since information can be circulated next to real time. The velocity of information spread might also facilitate the emergence of online movements, for instance following disruptive, political events.

Conflict prevention, early warning and conflict analysis

ICTs have made it easier to retrieve information from remote or inaccessible areas, both from the people living there and geospatial data gathered by satellites.³⁰ Since more information is accessible, a larger variety of information can be included in early warning and prevention programs, particularly more locally sourced information. These projects can also be organized in a more collaborative manner. The interactive nature of ICTs allows, for example, for a variety of actors to crowdsource information and fill in interactive maps of conflicts, allowing organizations and individuals to be aware of them in real time and to filter the incidents for those relevant to them.³¹ This allows actors to identify and address emerging trends proactively, rather than to respond to incidents.³²

CASE EXAMPLE: Ushahidi

Ushahidi (Swahili for “testimony”) is a web-based tool that uses crowdsourcing for social activism and public accountability. It offers products that enable local observers to submit reports using their cell phones or the internet, simultaneously creating a temporal and geospatial archive of events. The Ushahidi platform is employed to plan crisis responses, for human rights reporting, and for election monitoring.

Ushahidi was developed in the aftermath of Kenya’s disputed 2007 presidential election by a number of local bloggers and software developers. It collected eyewitness accounts of violence that were reported by email and text message and then placed on a Google map. To date, the platform has been used more than 125,000 times in over 160 countries.

Other projects use aggregates of cell phone-based crowdsourced data to gain an understanding of local perceptions of violence risk.³³ Using locally designed indicators to analyze this data allows for analysis based on a more nuanced understanding of what constitutes a violence risk in a specific community.

- 30 Berglund, J. & Bruckert, D. (2017) Report on Technological Shortcomings in Early Warning and Conflict Analysis. EU-CIVCAP Report DL3.1.
- 31 Humanitarian Tracker (2018). The Syria Tracker.
- 32 Ushahidi (2013) What the red dots are for, or why we map.
- 33 Everyday Peace Indicators (n.d.). What are everyday peace indicators?

TOOLS: Early warning tools

Below is a list of software that can be used to deploy an early warning project using ICTs:

[RapidSMS](#) is a tool-set for rapidly building text message services for data collection and group coordination using basic cell phones. RapidSMS can then present information on the internet. End users do not need to install any software on their phone. RapidSMS is free and open source.

[FrontlineSMS](#) is a desktop software used to distribute and collect information via text messages. The software works without an internet connection by connecting a device with a local phone number. FrontlineSMS can send and receive messages, group contacts, respond to messages, and trigger other events. It is free and open source; users only pay the standard text message charges through their regular cellular service provider.

[Ushahidi](#) is a web-based mapping and content management system. Data can be collected from a wide variety of channels (SMS, email, Twitter, web forms, etc.). The platform then allows data to be filtered and visualized on a map by location, by category, and over time. The application is free and open source.

While ICTs open channels for an increased local and collaborative participation in early warning systems, there also comes an increased necessity or expectation to process and address the incidents reported.³⁴ There remains untapped potential in this area as many early-warning institutions lack the capacity to react to reports adequately. A way of addressing this lack of capacity is to enable those who report on incidents to take action themselves. There are a number of cases where NGOs and communities are collaborating to help prevent violence at the community level. For instance, by providing information and tools to counteract inflammatory rumors and hateful messages.^{35 36}

34 Puig Larrauri, H. et al. (2015) [New Technologies: The Future of Alternative Infrastructures for Peace](#). White Paper Series No.20. Geneva Peacebuilding Platform.

35 Peace Direct (2014) [ICTs in conflict early warning - possibilities and challenges](#).

36 Scaturro, G. (2016). [Tech for peace: Facts and figures](#). SciDevNet.

CASE EXAMPLE: Addressing hate speech online

In Switzerland, the organization Jass gegen Hass works against hatred in the cyberspace and promotes positive virtual dialogs. In 2017, they published a [report](#) on hate speech on the internet and its state in Switzerland. They point out that while hate speech can be directed at individuals, these individuals are usually perceived to be representative of a particular group. In the report, they also make suggestions as to how hate speech on the internet can potentially be addressed. They highlight the importance supporting counter narratives, increasing media competence and raising awareness of the effects of hate speech in the general population as well as with perpetrators, amongst other measures.

Further, the association #NetzCourage provides assistance in various forms, including legal help, to those affected by hate speech on the internet in Switzerland. Their initiative could serve as a model for implementing similar projects.

Enriching conflict analysis

The variety and speed of information accessible is also useful for conflict analyses for any type of project. People are posting more and more information online about what is happening to them, in their local environments. Increasingly, needs and perceptions are not necessarily

37 Berglund, J. & Bruckert, D. (2017) [as n.31 above]

38 Interview with Dr. Simon Mastrangelo, Associated Researcher, swisspeace.

39 Puig Larrauri, H. (2013) [as n.1 above]

40 Bollag, B. (2018) Q&A: Could Twitter help aid groups anticipate humanitarian needs? Devex.

41 Berglund, J. & Bruckert, D. (2017) [as n.31 above]

directly expressed to an organization, but through social media. This behavior is indicative of the growing importance for organizations and researchers to take online data into account in their analyses. Since ICT habits are traceable (SMS, social media usage), online data can also provide an opportunity to collect and analyze perception-based data, allowing for a better understanding of how people see themselves in their environment.³⁷ Moreover, crossing online and offline data offers insights into different types of representations of issues, attitudes and opinions.³⁸ So-called “big data” tools make it possible to scrape existing data produced by users for another purpose such as tweets or Google search terms, for insights.³⁹

In addition, ICTs can provide improved access to information, for instance in complex environments, such as refugee camps. The organization Fondation Hiron-delle is currently working in Bangladesh, in the Rohingya refugee camp of Jamtoli. The project includes the production of a daily audio program by a small group of refugees. On the one hand, the project provides important and practical information on camp life, awareness messages, and social life for refugees in the camp. On the other hand, it enables improved access to information on refugees’ needs and the situation in the camp for camp managers/humanitarian organizations.

The insight obtained through this sort of analysis should not be the only information gathered, but it can complement and enrich other sources of information to enhance the understanding of a context.⁴⁰ Further, the rapid rate of incoming data could lead to incorrect analysis or an organization being overwhelmed with the pace of big data information flow.⁴¹ Moreover, given the immense speed by which news can spread across the internet, few actually check the sources of their news outlets, which can lead to the spreading of false information. In addition, since the introduction of ICTs has lowered the barriers to promoting information online,

the risk of false or unverified claims reaching large audiences has increased significantly.

Since data is coming from the individuals that have access to ICTs and use them frequently, it can be difficult to estimate how relevant or pressing one issue is compared to others. Using ICT-sourced data runs the risk of pushing aside issues that are extremely important to those who are not ICT literate. As an example, poverty in old age is probably rather less mentioned in such data because of the generational digital divide. When using this type of analysis, understanding who is affected by the digital divide is particularly important.

“As results are tailored to a user profile, one rarely sees political posts that fundamentally oppose the user’s own viewpoint.”

Emerging online bubbles

The existence of so-called online bubbles bears the risk of gathering one-sided information.

Data on user behavior is collected to tailor the information displayed to a user online. The social media platform Facebook for instance employs an algorithm that scans and collects everything that has been posted in a given user’s network. Then, according to a highly secretive and controversial formula, the algorithm ranks all items posted based on what it believes each user might find the most worthwhile. Therefore, out of a wealth of posts, most users will only ever see the top

42 Oremus, W. (2016) [Who Controls Your Facebook Feed](#). Slate.

few hundred posts, meaning that this algorithm essentially controls which information a user sees in his or her Facebook feed.⁴²

While not all online platforms rely on algorithms as strongly as Facebook does, all of them use them to an extent. Google search results vary drastically from user to user and are strongly dependent on the location from where a search is conducted. Any online experience has been hyper-personalized to each individual user. The use of algorithms is particularly problematic with the rising use of online media for political information purposes. As results are tailored to a user profile, one rarely sees political posts that fundamentally oppose the user's own viewpoint. This leads to a segmentation of people with differing views, reducing opportunities for cross-cutting engagement online and making political mobilization across the political spectrum - and across conflict lines - difficult.

CASE EXAMPLE: The Commons: A pilot methodology for addressing polarization online

In 2017, the Commons, a project by BuildUp, MIT-Netherlands and the MIT PeaceTech Initiative, tested protocols for addressing filter bubbles and polarizing behaviors that had a destabilizing effect on civic conversations in the United States. The research cited by the initiative shows that cross-cutting encounters can moderate polemic views, and that automated protocols can initiate engagement processes. The Commons' pilot identified polarizing filter bubbles, then used automation (bots and targeted advertisements) to contact people in these bubbles, and deployed trained dialog facilitators to follow up with people who responded positively to the automated intervention. They believe that reflection on polarization have an effect on a user's general behaviors on social media, and may eventually encourage some to become active "connectors". They found that participants in their program began to appear more interconnected and drawn towards the center of the political sphere than non-participants.

Increasing misuse of personal data

Moreover, a practice called predictive profiling can exacerbate pre-existing inequalities and segregation in society. User data is frequently used to profile and predict a user's online behavior because most online platforms are financed through advertisement. Evidently, advertisers want to know as much as possible about the users of a particular website in order to target them most effectively. To this end, website providers collect a large amount of data about their users in order to tailor advertisements to their individual profile. Then, the data is aggregated, processed and used in behavioral models to predict user behavior online. The aggregation of online data can be used to put together a very intimate personal picture. Predictive profiling has become one of the most important and dominant practices in business⁴³ and increasingly finds its way into development projects, for example, by requiring cell phone data in order to apply for a microcredit.⁴⁴

“The aggregation of online data can be used to put together a very intimate personal picture.”

However, the information on how online behavioral data is processed or what predictive models are used is not easily discoverable and understandable. This can lead to 'predictive privacy harms', the risk of biases towards and discrimination of users based on the inappropriate aggregation of personal data. Since users do not know how they are being profiled, they also cannot know in what ways the aggregation of their data could be harmful to them. Therefore, when engaging online tools in peacebuilding, it is necessary to sensitize participants on potential risks when putting personal data online.

43 International Journalism Festival (2016) [Understanding Predictive Privacy Harms](#) [YouTube Video].

44 World Bank Group, Global Knowledge and Research Hub Malaysia (2017) [Revolutionizing Microfinance: Insights from the 2017 Global Symposium on Microfinance](#).

TOOLS: Obtaining informed consent from participants

Due to the permanence of online data and the relative newness of the tools used (participants might not be familiar with the implications of each tool), obtaining informed consent is crucial for any project, but particularly one that involves ICTs.) This includes ensuring that everyone involved understands cybersecurity and data protection measures, the ownership of the data and rights to deletion or correction of it. Nevertheless, having obtained informed consent does not void one from the responsibility to continuously assess risks.

WITNESS recommends the following questions when obtaining informed consent:

“Do you understand what we are doing? Please explain in your own words.”

“Do you consent to your data/information being included in this project (video, print, photos, website)?”

“Do you know who may see or access the information?”

“Are there any restrictions to using the data/information you provide us with that we need to be aware of?”

They also offer a variety of further resources: <https://library.witness.org/product-category/guide/>

4 Conflict transformation and conflict resolution

ICTs can help to strengthen inclusivity in peace processes by lowering the barriers to entering a dialog with an opposing group, including more difficult to reach groups, and by including diaspora communities. However, it can also be difficult to build trust through online interactions. Moreover, ICTs have altered the environment in which peace negotiations take place. As it has become easier for people to share information and take part in conversations about a peace process online, mediators need to be aware of the online climate around the peace process as it may influence attitudes.

Fostering inclusion in peace processes

ICTs can help to increase levels of participation in peace processes by mitigating some of the barriers that participants potentially face. For instance, ICTs offer possibilities for participants that live in remote areas to make their voices heard in negotiations. Furthermore, ICTs can play a powerful role in including civil society organizations as they may not always have the means to attend formal peace processes in person. As such, ICTs can challenge top-down peace processes. Through analyzing local perceptions of peace according to locally developed indicators, local actors are empowered to take increased ownership over peacebuilding at a local level. Including the reflections of local communities on what peace means to them, prioritizes local ideas and puts community priorities to the front of the agenda, which helps confer authority and responsibility over peacebuilding to local communities.⁴⁵ In contexts where peace processes are mainly negotiated by elites, transferring agency to local communities can be very powerful.⁴⁶

Peace negotiations often do take place among the elites in a country, thus excluding a majority of the people in a society. New technologies, such as social media (e.g. twitter), might provide a source for information on political and social issues and, most importantly, how people feel about them. This data could inform key

45 Ó Súilleabháin, A. (ed.) (2015). [Leveraging Local Knowledge for Peacebuilding and Statebuilding in Africa](#). New York: International Peace Institute, p. 48

46 Build Peace Report (2017) [Making Paper Count: New forms of citizen participation in peace agreements](#). Conference Report.

47 Interview with Dr. Nick Miszak, Program Officer, Peacebuilding Analysis and Impact, swisspeace

48 Sinatti, G. (2010) Key criteria of “good practice” for constructive diaspora engagement in peacebuilding. African Diaspora Policy Center.

49 Galipo, A. (2011) Diaspora and Peacebuilding in Post-Conflict Settings: Insights from Somaliland. Global Migration Research Paper.

50 Sinatti, G. (2010) [as n. 48 above]

51 Mohamoud, A. A. (2005) Mobilising African Diaspora for the Promotion of Peace in Africa. African Diaspora Policy Center.

actors who are working on a peace process on the sentiments and interests of their constituencies. The collection and analysis of online data might help to identify contentious issues and associated sentiment by group (e.g., women, young people, civil society, Diaspora) in order to assist peace practitioners and policy makers in making the peace process more inclusive of the views of those frequently left out.⁴⁷

The use of ICTs in peacebuilding also creates opportunities to extend the participation in peace processes to diaspora communities.⁴⁸ While there is no clear consensus in the literature on the effect of diaspora engagement in peacebuilding processes and the impacts of their participation are context-dependent⁴⁹, they can bring in a potentially more nuanced perspective on the conflict as it no longer directly impacts their daily lives. Yet, so-called ‘social remittances’ including attitudes

“ICTs can also provide a safe space for discussion of topics often avoided when a conflict is ongoing.”

that foster peaceful conflict resolution or democratic practices can only have a positive impact on the situation in the country of origin if they are firmly rooted in the diaspora.⁵⁰ Thanks to their experience abroad, diaspora communities are able to transfer new political practices and technical skills to their countries of origin. Even when they do not directly participate in the political process, diasporas can offer their expertise to peace negotiations as facilitators and mediators between the conflicting parties.⁵¹ These positive impacts presuppose the long-term commitment of diaspora communities to fostering change.

Enabling online mediation and negotiation

Holding discussions online provides mediators with additional tools to lead discussions, such as allocating each party speaking time as well as the topic of the discussion. Further, holding discussions through an online platform can mitigate some of the emotions two or more parties in conflict have harbored against each other, which would make face-to-face meetings more difficult. ICTs can also provide a safe space for discussion of topics often avoided when a conflict is ongoing.⁵² The barriers to entering a dialog online can be lower than committing to a personal meeting with someone from an opposing group, because it can also eliminate some of the safety concerns that can come along with in-person meetings.

swisspeace is part of an initiative exploring the role of cybermediation in the prevention and resolution of violent conflict. The initiative looks at how digital tools can be used by peace mediators and what safeguards are needed to protect the integrity of the mediation process. This initiative was launched in partnership with the UN Department of Political Affairs, DiploFoundation, the Geneva Internet Platform, the Centre for Humanitarian Dialogue, and researchers from Harvard University. In December 2018, swisspeace published a policy brief on key insights from the work in the framework of the #cybermediation initiative. It assessed how the increasing social media penetration influences peace mediation and how, in turn, parties and mediators use social media tools. Recommendations for mediators include taking social media seriously by incorporating social media in their communication strategy and making use of social media as part of their efforts to broaden participation and promote inclusivity. Further, mediation support units might benefit from setting up reflection spaces allowing senior mediators and tech experts to jointly think through risks and opportunities. Finally, the authors emphasize the need for

52 Build Peace Report (2017) [as n. 46 above]

53 Lanz, D. & Eleiba, A. (2018) The Good, the Bad and the Ugly: Social Media and Peace Mediation. Policy Brief 12/2018. swisspeace.

54 Young, O. & Young, E. (2015) Technology for Peacebuilding in Divided Societies: ICTs and Peacebuilding in Northern Ireland. Transformative Connections.

peace mediation practitioners, as well as peacebuilding as a field, to learn from other fields, which are more advanced in their thinking about adverse effects and opportunities of social media.⁵³

Another issue to consider in regards to the use of ICTs in mediation and peacebuilding initiatives is trust building, which is tricky between parties in conflict, but even more so if all communication takes place online or using ICTs. Face-to-face meetings, and the more infor-

“Thus, ICTs cannot not replace offline and in-person meetings to discuss peace processes, but they may be able to supplement them, for example by alleviating some of the safety concerns and travel costs for parts of the meetings.”

mal exchanges that come along with them, are important to build trust. Moreover, there is a risk that crucial information cannot be disclosed online, as it is too sensitive due to cybersecurity concerns or because people prefer not to communicate certain things online.⁵⁴ ICTs may also not be as conducive for the kind of long-term engagement needed to be able to discuss deeply held beliefs and to be able to address them. Thus, ICTs cannot not replace offline and in-person meetings to discuss peace processes, but they may be able to supplement them, for example by alleviating some of the safety concerns and travel costs for parts of the meetings.

5 Post conflict reconstruction, reconciliation and dealing with the past

A crucial part of reconciliation consists in building and rebuilding relationships that are “not haunted by the conflicts and hatreds of yesterday.”⁵⁵ In this area of writing new narratives that acknowledge the truths of the past,⁵⁶ fostering dialog and community cohesion in a post-conflict setting, ICTs have great potential. For one, ICTs can considerably facilitate communication channels between those separated by conflict. For another, they support the construction and dissemination of alternative narratives about the conflict and the strengthening of shared identities. ICTs can also help with truth seeking and reconciliation efforts through artistic projects, since they can make the products and messages more widely accessible. However, obstacles such as the digital divide must be taken into account when designing such initiatives.

Enabling truth seeking and dealing with the past

Since, with the rise of ICTs, an increasing amount of information and a diversity of experiences is recorded during a conflict, potential war crimes can be better evidenced for prosecution. Moreover, people’s experiences are better documented and thus may be used in transitional justice and reconciliation processes. In the aftermath of gross human rights violations and serious violations of international humanitarian law, preserving archives and records concerning human rights violations is often underestimated and forgotten. On the one hand, the documentation of human rights violations during conflict might provide important data for the archives, on the other hand, ICTs could be used to preserve and manage archives.

Having evidence of the conflict in a variety of media also allows for dissemination of narratives in a more accessible way, for example, as a video for illiterate populations.⁵⁷ Incorporating ICTs into the work of truth and reconciliation initiatives can broaden their reach by helping to publicize their work, disseminating their

55 Hayner, P. (2002) Unspeakable Truths: Facing the Challenge of Truth Commissions. New York and London: Routledge.

56 Naidu-Silverman, E. (2015) The contribution of art and culture in peace and reconciliation processes in Asia. Denmark: Centre for Culture and Development.

57 Office of the United Nations High Commissioner for Human Rights (2006) Rule-of-law tools for post-conflict states: Truth commissions.

58 infoDev & the World Bank (2013) Cables, Commissions, and Cybercafés: ICTs in Post-Conflict Liberia.

59 Best, M. L. (2013). Reconciliation and the Web: A case study of the design and use of Liberia's Truth Commission website. Presented at the IFIP 12th Int. Conf. on the Social Implications for Computers in Developing Countries, Kingston, Jamaica.

60 Puig Larrauri, H. (2013) [as n.1 above]

61 Background paper for the UNDP Oslo Governance Centre media and conflict prevention research and policy roundtable (2017). How media can be an instrument of peace in conflict-prone societies.

62 Galtung, J. et al. (2000) Searching for Peace: The Road to Transcend. London: Pluto Press.

findings and help them to interact with their constituencies. Drawing inspiration from the Truth and Reconciliation Commission in Liberia, employing participatory web tools can provide a platform for victims to tell their story and an opportunity for all affected parties to interact and engage in dialog.⁵⁸ Moreover, ICTs also allow diaspora communities to be incorporated in reconciliation processes, allowing them to process their own experiences of the conflict, despite no longer residing in the country.⁵⁹

Building alternative attitudes towards the “other”

ICTs have opened up opportunities for people to shape their own narratives and stories by allowing them to share their experiences. This opportunity can be used as a tool to counteract mainstream narratives about a particular group and an opportunity to build new, positive narratives about inter-group relations.⁶⁰ These initiatives can also reinforce shared identities between opposing groups rather than their differences.⁶¹

A tool that can strengthen the social ties in a society is online dialog. Dialog is an important and necessary tool for building relations between groups and contributing to long-term peacebuilding processes.⁶² ICTs are particularly relevant for dialog in societies where different groups live geographically dispersed, or where there is stigma attached to interactions between particular groups. In these contexts, dialog can help foster a more positive attitude towards diversity, combat stigmatization and foster mutual understanding, which can ultimately contribute to a more peaceful and inclusive society. The Sharing Perspectives Foundation, for instance, provides trainings in online dialog facilitation and offers virtual exchange programs for youth on current socio-political issues. Thus, their virtual exchange programs combine intercultural exchange with the broad reach of new media technology to allow an increasing number of young persons to have an intercultural experience as part of their education.

A report by Transformative Connections, an organization based in Belfast, Northern Ireland that focuses on the role of technology in promoting peacebuilding and positive social change, finds that particularly for organizations working with limited resources, ICTs can provide additional approaches to changing attitudes towards the “other”.

63 Build Peace Report (2017) [as n. 46 above]

64 Puig Larrauri, H. (2015) Our Films, Our Peace. Build Up.

CASE EXAMPLE: Desarmados in Colombia

Desarmados is a digital transmedia project to reconstruct the memory of the armed conflict in Colombia. It offers an interactive map, with a timeline, that shows animated videos that explain the relevant events of the armed conflict. The virtual platform shows messages and letters of correspondence of the so-called protagonists and makes use of different kinds of media such as audiovisual pieces, animations and infographics. These testimonies are complemented by a more interactive section where users can co-create and add to the narrative: users can record their own message, upload an image and share their testimony of the conflict. Desarmados was founded by three students in the Master program in Transmedia Communication of EAFIT University in Medellin with the goal to sensitize the population about the war and to help create lasting peace in the country.

Promoting reconciliation through digital art

Participatory art projects, where a community jointly creates a piece of art, can allow for people to share their own narratives and experiences of the conflict. Many projects engage populations through digital art, ranging from participatory photography to video game development.⁶³ One of the main strengths of the participatory art approach is being able to engage marginalized groups that are hard to reach and include them in reconciliatory processes.⁶⁴ Participatory projects can put forward their voices and experiences without requiring the participants to be literate or tech-knowledgeable. These types of projects can help empower marginalized groups because they raise awareness about their

65 Ibid.

66 Sundar Harris, U. (2015) Bridging the Divide with Participatory Video. *Fijian Studies* 6 (1&2). P. 145-164.

experiences and identities and foster the coexistence of a multiplicity of narratives.⁶⁵ The creative process of making the art piece itself can become a “dynamic site for community building and reconciliation”.⁶⁶ ICTs can also broaden the reach and effectiveness of non-ICT art initiatives by adding online exhibitions, filming or streaming theatre performances and recording musical projects so that they can be accessed from any location in a particular country.

“One of the main strengths of the participatory art approach is being able to engage marginalized groups that are hard to reach and include them in reconciliatory processes.”

6 Concluding thoughts

This paper looks into possible entry-points for the use of ICTs in peacebuilding. Most importantly, it highlights the importance of a sensible use of ICTs in peacebuilding and an appropriate design of peacebuilding initiatives that work with ICTs.

To determine more practical steps on how to integrate ICTs into peacebuilding, there is a need for more practice-oriented research. However, a number of tools and resources are already available to help guide through designing a project using ICTs. Here, ICTs in peacebuilding can learn from ICTs for development, for which a consortium led by UNICEF has developed nine digital guiding principles. The German Development Agency (GIZ) has also developed a toolkit that can give further practical guidance, as well as some useful checklists, on project design with ICTs.

ICTs represent a valuable new tool for peacebuilding, but one that comes with its own risks and potentials. Considering the digital divide is a thread that weaves through all the different phases of conflict, along with concerns about cybersecurity and data protection. Nevertheless, the inclusion of a bigger variety of perspectives and individual perceptions through ICTs has the potential to enhance any peacebuilding initiative. When ICTs are carefully integrated in projects that work more conventionally, ICTs can enhance the scope and effectiveness of those projects. Striking an appropriate balance between risks and potentials remains the most important task, one that platforms like KOFF can assist with, in form of exchange and joint learning about risks, strategies and practices.

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About swisspeace

swisspeace is a practice-oriented peace research institute. It analyses the causes of violent conflicts and develops strategies for their peaceful transformation. swisspeace aims to contribute to the improvement of conflict prevention and conflict transformation by producing innovative research, shaping discourses on international peace policy, developing and applying new peacebuilding tools and methodologies, supporting and advising other peace actors, as well as by providing and facilitating spaces for analysis, discussion, critical reflection and learning. swisspeace is an associated Institute of the University of Basel and member of the Swiss Academy of Humanities and Social Sciences. Its most important partners and clients are the Swiss Federal Department of Foreign Affairs, the State Secretariat for Education, Research and Innovation, international organizations, think tanks and NGOs.