This is a paper for the Panel on ‘Designing Peacebuilding Projects that Utilize Technology’ at the Build Peace 2014 Conference.

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“As with all technologies, these tools are just a means to an end. In order to effectively employ them, it’s crucial to start by thinking through the goals of your peacemaking efforts. What type of peace are you trying to build? With whom do you want to build the peace? Where do you want to focus your efforts? When is the most appropriate time to intercede? What do you want to achieve? How best can you reach your target audiences?”

Cole & Crawford (2007)

Introduction

As new technologies, specifically ICTs, have changed the way that humans interact with each other and share and access information, many programs in the fields of development and governance have tapped into and effectively used these technologies. While the use of technology in peacebuilding is promising, Helena Puig Larrauri (2013) notes that the field is “somewhat behind in this growing trend of technology use,” with the majority of technology-enabled peacebuilding projects focused specifically on data collection, analysis, and processing for early warning and response programs.

Several researchers and practitioners have begun to explore the use of ICTs for other purposes in peacebuilding. Puig Larrauri and Kahl (2013) note that one innovation of new technologies is the ability to empower community members to “participate in localized conflict management efforts,” while Sanjana Hattotuwa (2004) argues that ICT has the capacity to provide alternative spaces for ongoing dialogue between parties even as high-level peace process stagnate. Puig Larrauri and Kahl (2013) present a framework that provides examples and ideas for expanding the use of technology for peacebuilding from solely early warning and response programs.

As the peacebuilding field begins to more fully explore these uses, this paper argues that while more traditional project design good practice should be followed for tech-enabled projects, new technologies present specific challenges and considerations in the design process and for projects as a whole. These challenges and considerations form the focus of this paper. First it is important to remember that technology is not inherently a tool for peace or for violence. Local context, use of the technology, and stakeholders (among other things) influence the impact of technology on peacebuilding goals. It follows that the success or failure of tech-enabled peacebuilding projects will not relate solely to the technology itself, but to a wide variety of factors.

With an understanding of technology as a tool and not a goal, this paper outlines several key factors that researchers and practitioners have identified as important for the success or failure of technology-enabled peacebuilding projects, which as such need to be taken into account in the design process. The paper then outlines questions to be addressed by practitioners in the “Designing Peacebuilding Projects that Utilize Technology” panel and goals for the “Designing Peacebuilding Projects that Utilize Technology” working group as well as key overarching questions around which we hope to generate conversations at the Build Peace Conference.

The Dual Nature of Technology

Technology is not inherently helpful or harmful to peacebuilding programs – it can have both positive and negative impacts. Drawing on Kentaro Toyama, Charles Martin-Shields (2013) of TechChange writes that “technology magnifies human intent and capacity” and that technology can amplify a community’s desire to be peaceful, or to organize violence. There

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1Puig Larrauri and Kahl (2013) provide a framework of the ways that different types of technology can enhance different components of peacebuilding projects.
are many examples of the use of technology for negative purposes, including government surveillance and control, recruitment for violent activities, and the use of technology to organize violence.²

The context, users, stakeholders, and a variety of other factors help determine whether technology will be used towards peaceful or violent aims. As practitioners begin to use technology in the field of peacebuilding, it is important to remember that an exciting, interesting, or promising technology that helps organize communities around peace can also be used for other purposes. Design processes for technology-enabled peacebuilding projects need to recognize the dual nature of technology, and take this into account throughout.

**Goal-Oriented Project Design**

There is a tension in project design for technology-enabled peacebuilding projects between designing around a specific technology vs. designing towards a goal. Jim Williams, Principal of Raabta Consultants, a communications and research firm in Pakistan, distinguishes between “technology-oriented” design and “problem-oriented” design. In general, design processes for technology-enabled peacebuilding programs should be focused on the goals of the program and not on the technology itself.

Hattotuwa (2004: 1) notes that during the planning and design process around ICT “It must be remembered that ICT is a means to an end, not an end in itself.” Hattotuwa (2004: 2) further notes that ICT interventions must be used in combination with other programming and structures facilitating peacebuilding in order to be successful, and that used in isolation they “might even serve to exacerbate existing conflicts by creating new rifts within and between communities.” In order for technology to be used successfully towards peacebuilding goals, it generally needs to be used together with other interventions (Hattotuwa 2004: 16-17). It is therefore important to maintain focus on the goals and outcomes of a program, not on the technology.

The design process for a technology-enabled intervention should be integrated into an overall design process for the broader peacebuilding program in order to ensure that the intervention is designed based on programmatic goals and not on the availability of a specific technology. Tools such as Theories of Change can be used to identify and challenge assumptions around how technology can fit in to a broader peacebuilding project (White 2012; OECD-DAC 2012).

**Themes to Take Into Consideration**

This section outlines seven themes that can be considered when designing peacebuilding projects that utilize technology. Appendix A contains more extensive information on each theme.

1: Context

Researchers and practitioners have found that contextualizing technology-enabled interventions is crucial (Martin-Shields 2013; Mancini 2014; Hattotuwa 2004). In the design process, this means understanding the various aspects of the local context in which an intervention is taking place. This can be done through an analysis of factors including

² For example, recently published research found that mobile network coverage was related to increased collective violence (Pierskalla & Hollenbach 2013).
socioeconomic, demographic, and geopolitical context in an area; needs assessments and feasibility studies; the engagement of local populations in the design process; and use of an iterative design process that provides for ongoing local participation and input (Mancini 2014; Mancini & O’Reilly 2013; Hattutowa 2004).

2: Identifying Appropriate Technology

One important area for further discussion and development is how design processes can help identify appropriate technology for conflict contexts, stakeholders, and specific programmatic goals. Francesco Mancini notes that not every technology is right for every problem (programmatic goal). Similarly, not every technology is right for every population, and contextual factors determine which technology will be appropriate for specific populations and conflict contexts (Mancini 2014; Hattutowa 2004).

3: Understanding the Limits of Technology

It is important to remember that technology has limitations, and one potential outcome of a design process is figuring out that a specific technology is the wrong tool. Identifying and accepting when technology (or a specific technology) is not the right tool for a context, target population, and set of programmatic goals can be an important part of the design process.

Technology is also not a substitute for other interventions, and many researchers and practitioners have found that the use of technology for peacebuilding is most successful when used along with a variety of other tools. Design processes can identify the limitations of technology, and create projects in which technology dovetails with other interventions.

4: People-Centered Approach – Encouraging Online/Offline Interaction

One theme that has been widely discussed by practitioners and researchers is the importance of designing technology-enabled projects that enhance human interactions and engagement – in other words, interventions with ‘offline’ components as well as technology-based components. This generally means creating strong partnerships and relationships around an initiative; getting continual feedback from partners in the design and improvement of the project; analyzing whether the project has meaningful offline impact for target stakeholders; and ensuring that the project does not damage any positive offline relationships or foster passivity amongst participants (Mancini 2014; Martin-Shields 2013; Hattutowa 2004: 19; Puig Larrauri & Kahl 2013: 2-4; Mancini & O’Reilly 2013: 6).

5: Sustainability

As with any program, taking sustainability into account in the design process is important. The use of technology poses its own unique challenges to sustainability as it often includes ongoing recurrent costs (i.e. internet service or SMS). Some thoughts on how to design for sustainability include building on existing behaviors so that the target population does not incur costs that are unusual/above and beyond the costs of their daily activities; charging users; and working with providers to access technology at lower rates.

6: Risks and Ethical Implications

Again, technology is not an inherently positive or negative tool for peacebuilding processes, and just as with any peacebuilding project design process, technology-enabled interventions should “follow best practices applied to peacebuilding program design in general,” and ensure conflict sensitivity (Puig Larrauri 2013: 4).
There are many risks and ethical implications to consider in the design of technology-enabled peacebuilding projects. A Do No Harm framework can be used to assess risks and ethical implications, with a specific focus on preventing 1) putting participants at risk, 2) contributing to existing or creating new divisions and inequalities, and 3) having unintended negative consequences.

Additional ethical considerations that can be taken into account include thinking through ownership, access, use, and sharing of information generated through a particular project.

7: Measuring Impact

This paper will not delve into detail on measuring impact of technology-enabled programs, as a second paper and panel at the Build Peace conference will focus specifically on this subject. As with any peacebuilding program, measuring impact is important, and plans to measure impact should be included in the design process.

Build Peace Conference

1: Questions for the “Designing Peacebuilding Projects that Utilize Technology” Panel

The “Designing Peacebuilding Projects that Utilize Technology” panel will bring together practitioners with varied experience to discuss the following questions and themes:

1. What design approaches have worked well? What about them was particularly effective?
2. What are examples of successful programs and design processes, and what can we learn from them?
3. What are examples of programs and design processes that did not work well, and what can we learn from them?
4. Are there general guiding rules that practitioners have found with regards to designing technology-enabled/enhanced projects?
5. What are risk factors and areas to be careful of when designing for technology and peacebuilding?
6. What are contentious questions that need to be asked and explored about designing for technology and peacebuilding?

2: Goals for the “Designing Peacebuilding Projects that Utilize Technology” Working Group

The “Designing Peacebuilding Projects that Utilize Technology” Working Group will build on the panel and work to create a set of questions that can be incorporated into design processes to assess if and how technology can enhance or enable peacebuilding projects.

Specifically, the working group will seek to generate questions that should be asked in design processes around the following themes:

1. Embedding a technology-enabled/enhanced approach into peacebuilding goals and programming
2. Identifying appropriate technology
3. Identifying how to use a technology towards programmatic aims
4. Understanding the limitations of a particular technology/use of that technology
5. Predicting intended and unintended outcomes
6. Assessing risks
7. Assessing ethical implications
3: Overarching Questions for Participants

There are several overarching questions that we hope participants at the conference can keep in mind and discuss in order to create new ideas, insights, and suggestions:

1. Are there best practices for design in general that can be better applied towards designing technology-enabled/enhanced peacebuilding projects?
2. Is there a role for supply/technology-driven design? If so, when can this type of design be useful?
3. At what point in the overall design of peacebuilding programs should the use of technology be brought in? Should it be brought in on its own, or only if it is identified as a tool that could address a specific challenge or barrier?
References


