



Digital Peacekeeping

Partnering to enhance technological experimentation and innovation within UN Peacekeeping

BACKGROUND

Peacekeeping suffers from insufficient access to, and use of digital technologies (Fidler, 2015; Stauffacher et.al., 2005). Since, the Brahimi Report (Brahimi et al., 2000), which argues peacekeeping has to be brought into the information age, operations have used Information Communication Technologies (ICTs), but struggled to capture their full capabilities or keep pace with their rapid change (Fidler, 2015). Naturally, innovation is not just about ICTs, but about people and processes as well. New Ideas must percolate continually and R&D needs to be carried out. Although the UN is often criticized for being slow to transform, yet the Department of Peacekeeping Operations (DPKO) and Department of Field Support (DFS) have made remarkable progress toward becoming more technologically advanced in recent years (Dorn, 2016). A Panel of Experts on Technology & Innovation in UN Peacekeeping was formed (UN Performance Peacekeeping, 2014; UN General Assembly, Sep 2015) to help catalyse further action and since then DPKO/DFS created the Partnership for Technology in Peacekeeping to expand the UN's access to technology, technical expertise, and innovative design support. Along with other UN organs, UNU-CS is keen to explore ways to enhance the technological capacities of peacekeeping through research and innovation. Knowing that R&D can result in great gains, UNU-CS, in partnership with DFS/ICTD, has launched this Digital Peacekeeping project.

DIGITAL PEACEKEEPING

Peacekeeping operations are an essential but problematic instrument for conflict prevention, management and resolution (Dorn, 2011). All too often today, when UN peacekeepers are deployed, peace is waged by primitive or obsolete methods and devices. For example, shortcomings in information-gathering and early warning have accounted for many failures in

UN missions (Sigri and Basar, 2014). Nevertheless, digital technologies hold enormous promise to help peacekeepers realize their mission goals. Cost-effective technologies are available to increase the efficiency and effectiveness of peace operations so they can better achieve their ambitious mandates.

The Digital Peacekeeping project aims to encourage collaborative learning and innovation capacities across peace operations through an initiative in three phases (Fig 1): (i) a series of social scientific studies across 3-5 UN peacekeeping missions to develop a systematic baseline understanding of the promise and possibilities among peacekeeping missions to foster ICT innovations; (ii) based upon the findings of this first phase, a small number of specific ICT innovation research activities in partnership with DFS/ICTD and mission stakeholders; and (iii) an integrated understanding of the social, technical and institutional affordances and constraints towards ICT innovation and learning across peace operations and innovation capacities through programming and knowledge transfer activities.

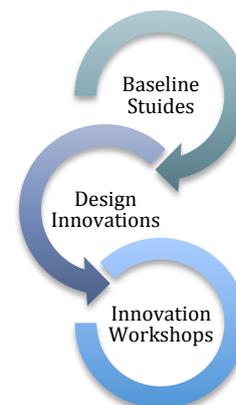


Figure 1. Digital Peacekeeping in a nutshell

THEORETICAL PREMISE

The best peacekeeping research both addresses practical problems confronted by the peacekeepers and advances the development of scientific theory (Castro, 2003). This project is partly factual (thus practical), as it



deals with what peacekeepers are experiencing with ICTs and how they are responding or adapting (Harris and Segal, 1985) to change and technological innovation. Furthermore, it also draws on normative theory as it seeks to introduce change into the existing situation, either totally or partially, in order to improve the well-being of the peacekeepers and the success of their mission (Bartone et al., 1998). These two general models apply to all successful peacekeeping research (Castro, 2003); it is impossible to recommend changes for improvement unless one knows the facts on the ground. Maslow’s Hierarchy of Needs Theory (Maslow, 1943) may offer valuable insights into the inner dynamics of peacekeeping, sources of conflict, and thus possible resolutions.

Applying this to the specifics of ICTs entails a communication frame that examines the: (i) channels of communication flows between the different entities; (ii) tools or platforms; (iii) spheres of activity; and (iv) functions that ICTs can play in promoting peace and preventing a conflict (Communication for Peacebuilding: Practices, Trends and Challenges, 2011; Weaver and Shannon, 1963). In addition, design thinking or design theory (Brown & Wyatt, 2010) can be used in collaboration with the stakeholders to innovate high-impact solutions, rigorous creativity and critical inquiry that bubble up from below rather than being imposed from the top. This research begins by articulating questions that are pertinent in the peacekeeping context and in the digital world (Table 1).

Table 1. Research Questions	
1.	How do peacekeepers envision the role of ICTs in peacekeeping operations?
2.	What are the most promising areas for innovation and experimentation in the peacekeeping space?
3.	What are creative ways in which ICTs for peacekeeping can be designed, test deployed, experimented with and scaled?
4.	How can UN Peacekeeping institutions be best organized for innovation and experimentation?

APPROACH

Each phase of this project is comprised of several activities producing an outcome that serves as an input to the next phase (Fig. 2). Phase I will use a process of appreciative inquiry (Bushe, 2013), which encourages positiveness, to ascertain What is the case? (scientifically verified factual theory) and What ought to

be the case? (scientifically verified normative theory). Qualitative stakeholder interviews will be analysed, using inductive and grounded theory, to reveal key emergent themes. One objective of this mapping is to identify specific ICT interventions that might be applicable to peacekeeping and the lessons that can be drawn from the process and impact.

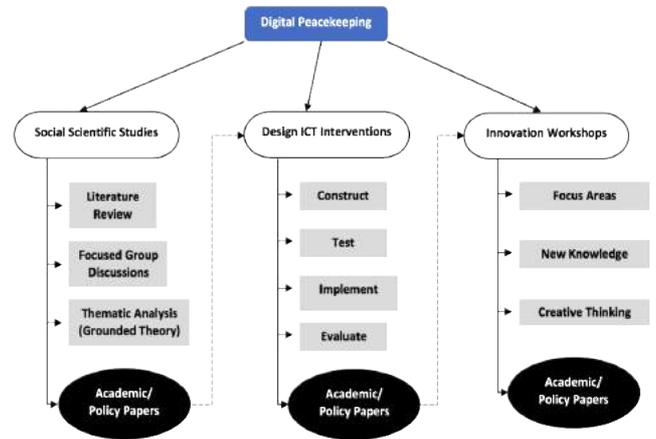


Figure 2. Work structure

Building on this analysis and the opportunities identified, Phase II will then be directed towards participatory and collaborative design of specific effective ICT innovations. Iterative usability testing will be carried out during the development of prototypes to determine whether the system is actually capable to deliver on its promises. User satisfaction questionnaires, field observations and focus groups will be used as diagnostic instruments.

In the final phase, we will take the previous results and develop an integrated understanding of the social, technical and institutional affordances and constraints towards ICT innovations and learning across peacekeeping operations. This will result in several innovation workshops bringing together key players for collective reflection and mutual learning on responsible research and innovation in the peacekeeping space. To measure success formative, summative and follow-up evaluations will be carried out.

NOVELTY & RELEVANCE

Due to the tremendous hype applied to ICT innovations, the overall practice in the ICTs and peace space has gotten ahead of evidence (Communication for Peacebuilding: Practices, Trends and Challenges, 2011). There is a need to look at the evidence realistically and

to see what has worked and how ICTs can be applied for the maximum advantage of peace operations. For this reason, it is an opportune time to develop a knowledge platform of evidence-based practice in this field. Digital Peacekeeping will do this through support for research, participatory design principles, evaluation and the facilitation of innovation-learning networks.

It also suggests that we are moving from a rigid top-down hierarchical approach to an increasing reliance on ICTs for bottom-up information gathering from peacebuilding communities (Stauffacher et al., 2011). This transformative switch to a more bottom-up approach, focusing on the individuals and communities in crisis and conflict areas, creates opportunities for improved real-time communication with a range of agencies, but also creates opportunities for greater self-sufficiency in times of crisis and conflict.

Another distinguishing aspect of this project is that through better collaboration and integration of ICTs into an overall strategy, peace operations could be more effective. This suggests that encouraging collaboration and learning across sectors and organizations should lead to improved conflict monitoring and participatory peacebuilding.

PROGRESS UPDATE

To date UNU-CS research teams, in partnership with DFS/ICTD and missions stakeholders, have conducted field visits to UNISFA in Abyei and MINUSMA in Mali. In Mali, team members carried out 12 qualitative focus-group meetings with 88 uniformed and civilian mission personnel stationed at Bamako and Gao (Fig 3). Focus group video data has been transcribed and is currently undergoing thematic coding unveiling various patterns in the dataset. These initial surveys will contribute to a broad baseline understanding of the potential of ICT innovations for improving the effectiveness and capacity of peace operations.

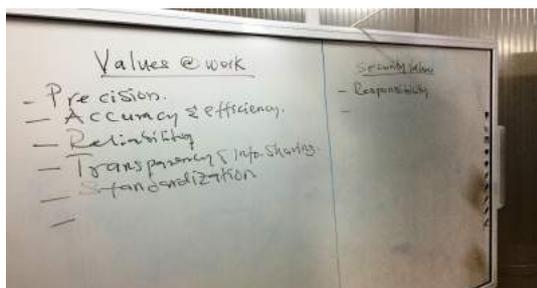


Figure 3. Focus group conversations at MINUSMA

TEAM

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LABS

This project is part of the Digital Peace Lab.

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