Exploring Technology in Human Rights
Evaluating Opportunities through a Human Rights Lens

Problem Definition and Process Mapping
Risk and Threat Modeling
Responsible Technology
The video **Software through a Human Rights Lens** presents key considerations for organizations working in human rights to weigh in deciding if, when, and how to use technology. The video provides a high-level framework of essential questions organizations should ask when considering using or building new software.

The following exercises guide organizations to deepen this inquiry by defining the workflows and context in which they might implement a software solution as well as posing critical questions to ensure that implementation aligns with responsible technology and data practices.

Each set of exercises includes a list of additional resources. Together, these materials can help organizations formulate high-level requirements, research options that meet those criteria, and continue to apply a human rights lens as they engage technical partners.
Problem Definition and Process Mapping

This sheet presents activities to help your project team thoroughly define the challenges you hope to tackle with technology. The first activity will guide you through mapping out the processes currently in place that you might facilitate using software. By breaking workflow down into component steps, your team can define the needs they intend to address and clarify the requirements for a digital tool. The second exercise will help to extract a clear problem statement a software solution might address.

Prompt 1: Map the Process

• What is the workflow you hope to facilitate with a software solution?
• Draw a diagram of the relevant process(es) currently in place. Who are the actors involved?
• What are the inputs and outputs?
• What are the outcomes?

Tips:

• Use a whiteboard or large format paper to illustrate your workflows. Use multiple colors and symbols to indicate information flows, tools in use, bottlenecks, etc.
• This is your baseline for how the process currently works. It should reflect how work is actually done, even if it is not how you wish the process worked.
• Make sure you are documenting workflows related to achieving both “do no harm” and programmatic goals.
Prompt 2: Define the Problem

Write a problem statement that answers the following questions:

• Who is experiencing the problem?

• What task is that person trying to accomplish, and what’s standing in their way?

• Where does the problem present itself? What situation or context is the user in when they face this problem?

• Why does it matter? What value would a solution bring to the user, and to the process overall?

Your problem statement might read:

“As a rights activist in a rural area, I want to be able to send documentation of violations to colleagues in the district center in order to receive their support but I lack secure internet access to ensure the safety of the people involved and the documentation itself.”

Tips:
• Ask each team member to write their own problem statement(s), then compare and craft a final statement as a group.

Resources:
Additional design thinking exercises can help your team define the target problem, the users, and high-level requirements for a solution. These are particularly important if you are building software but also useful to generate criteria for adopting an existing tool:

• Zoom out from your process map to capture the context with an ecosystem map or situate your problem statement with a problem tree analysis

• Create user personas that reflect the types of stakeholders who will interact with your software solution

• Write user stories that describe the user’s role, what they want to accomplish with the tool, and why

• Draw a journey map to show how the solution would facilitate the ideal process
Operationalizing “Do No Harm” by analyzing how our human rights activities might attract or exacerbate threats often focuses on physical attacks. However, mitigating risks in the digital space is inextricably linked with physical security and thus just as relevant to consider. This sheet will help your team think about and document risks to the staff, partners, and community you hope to serve. This contextual information about safety concerns should inform the decisions made about the privacy and security measures built into any digital tool as well as complementary non-digital protocols.

**Prompt 1: Brainstorm Threats**

- What are the biggest risks to your project or the communities you work with?
- List all the threats you can think of—physical, psychosocial, organizational, and information security risks.
- How will using software affect those risks?
- Do digital tools introduce new concerns to add to the list?

**Tips:**

- Refer to your workflow map from the previous exercise and/or generic flows like the information lifecycle to spur thinking about risks at each stage.
- Technology like Tor or end-to-end encryption can mask your location or protect information transmitted. However, these tools can also flag your activity for anyone watching internet activity. Weighing these kinds of security tradeoffs are a common challenge for software designed for human rights work.
- If you are not familiar with the digital surveillance capabilities of adversaries, you may want to do some research and/or reach out to the internet freedom community for help.
Prompt 2: Prioritize with a Risk Matrix

• Which risks are most relevant to the workflow and information involved in the problem you hope to solve with software?
• Place the threats you identified in the brainstorming exercise on a risk matrix like the one below.
• Which threats are the most consequential? The most probable?
• Which risks should you prioritize addressing?

Sample Risk Matrix

<table>
<thead>
<tr>
<th>Likelihood of Threat</th>
<th>Severity of Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

- Account Hijacking
- Lost Device
- Phishing
- Disparaging Comments Online

Tips:
• There are nearly always tradeoffs between staying completely safe and achieving our human rights goals. This exercise is not intended to overwhelm or address all possible scenarios but can help teams identify the most important risks to mitigate.

Resources:
• Review typologies of online attacks and find definitions of information security terms
• Expand your threat model using Citizen Lab’s Security Planner or the threat model workflow (Spanish) from Asuntos Del Sur
• Learn basics of digital security for human rights with Security in a Box from Frontline Defenders and Tactical Tech, then dig deeper with their respective guides for risk analysis and protection planning and holistic security
• Reach out to other organizations that support civil society on digital security such as Access Now, Electronic Frontier Foundation, or Citizen Clinic
This sheet presents a list of questions project teams should ask about any software solution(s) that they are considering adopting. These are particularly important for teams building a new tool but also apply when using an existing product. There will inevitably be tradeoffs between the answers to these questions so teams will need to weigh them based on the project goals and the needs of the stakeholders involved.

Questions to ask when considering a new software:

• Does implementing this tool put users at risk? For example, does it make online activity suspicious where surveillance is present or teach risky digital security practices?
• How will you manage any data responsibly? Who will have access? Who will have ownership of or benefit from the value of the data itself? How long will you keep it? How will it be protected?
• Does the technology support the values of your organization? Who profits from your use of the software or the data generated?

Tips:
• Your project team might address these questions in internal discussions, with anticipated users, and the larger community with which you work. These conversations should also generate questions to pose to software providers/developers.
• Does adopting the software create or exacerbate unequal power dynamics? What are the implications for gender, disability, or inclusion of marginalized groups?

• How will you plan for training, user support, and documentation? What are the capacity building needs for users of the software?

• Who will manage this tool long term? Are there costs associated with hosting and maintenance? Will this tool need patches and updates?

• How can you build in feedback loops and redress mechanisms if the technology itself or intervention more generally has unforeseen consequences?

Resources:
• See DatNav for guidance on responsible use of digital data and tools in human rights research

• Find enterprise or consumer tech tools that might work for you at TechSoup or NTEN

• Learn more about tech used in international development projects at ICTWorks or TechChange

• Find open source tools designed for human rights work in lists curated by HURIDOCS, The Engine Room or Internews
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