

# Building Internet Freedom Tools for Real People

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Yatanarpon Teleport







- Yet, the most common request we heard:
  - “When will the Myanmar language be available in MS Office?”
- Full Report: [bit.ly/OTF-Burma](http://bit.ly/OTF-Burma)



# Today

- Overview of our project: A User-Focused Approach to Guiding the Development and Impact of Internet Freedom Tools.
- Share who the Open Technology Fund and SecondMuse are, and why are we involved.
- Explain our process and share some of the emerging learnings.
- Invite you to participate.



# How are Internet Freedom Tools Developed?



**Technical  
Approach**

“I see a technical threat to privacy or security. I will develop a tool to address this threat. Others who have the same threat can use my tool to address it as well.”



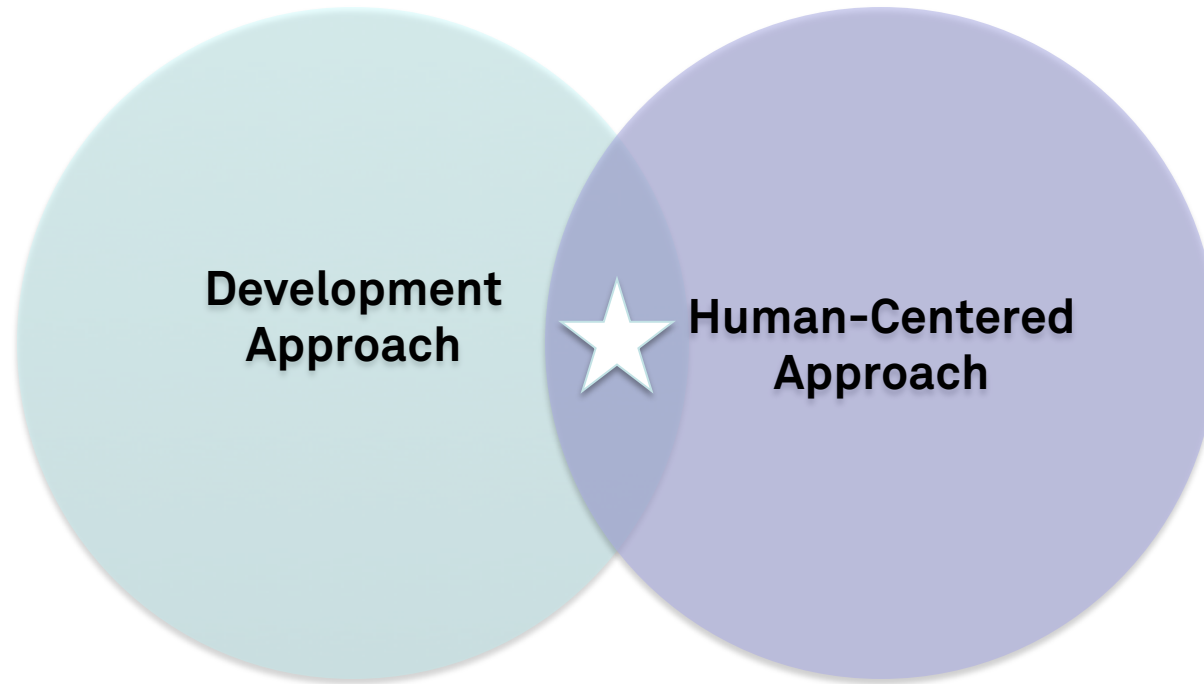
# How are Internet Freedom Tools Developed?

“I have studied and assessed the privacy and security needs of a user community. I have built a tool for this community which addresses those needs specifically. I will examine other communities and translate this tool if they have similar privacy and security needs.”



**Human-  
Centered  
Approach**

# Opportunity to bring together both approaches





# Defining a user-focused approach

- **Internet Freedom Tool (IFTs)**  
Technologies that circumvent repressive censorship and surveillance, or increase communication access and safety.
- **User Community**  
A group of users (or potential users) of IFTs that can be defined by geography, culture, shared experiences, or shared set of challenges.
- **Ethnography**  
The study of culture and human motivation through qualitative (subjective) research.

### Project

Through this project, we seek to better understand the internet freedom tool development process, the context under which users employ IFTs, and how the needs of users can better inform the creation and deployment of IFTs.

### Objectives

- To create a framework\* that will increase the ability of developers to effectively assess the needs of users and integrate those needs into the development process.
- To find and support more intersections between developers, users, funders and intermediaries so they can work together in creating more robust tools.

### How

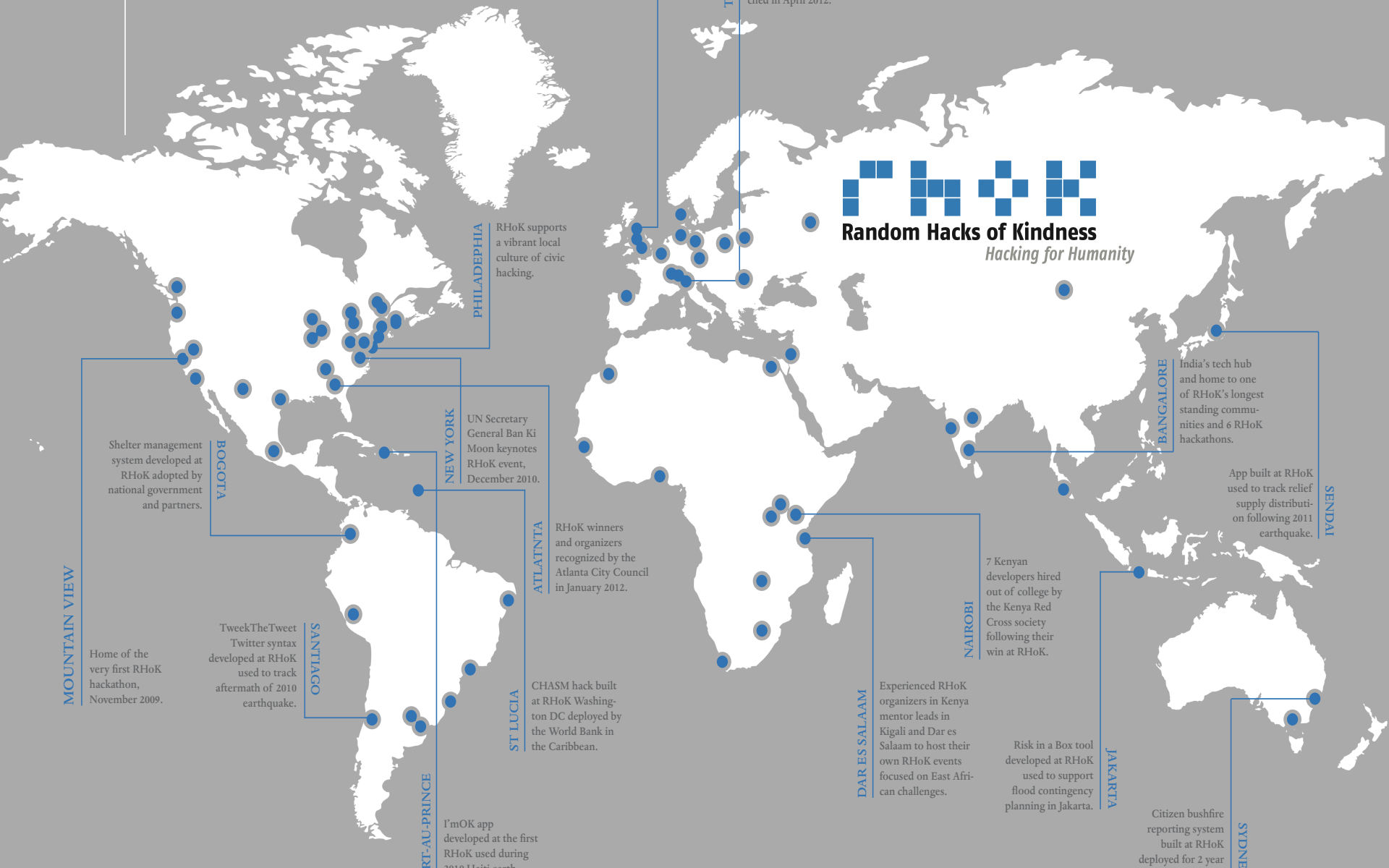
- Conduct a thorough analysis of developers, intermediaries, funders, and users in the realm of “Internet Freedom Tools.”
- Develop a research approach grounded in ethnography, design thinking, and the practice of research-based product definition.
- Conduct an on-the-ground study putting this framework to the test by engaging with and assessing the needs of real users facing a real threat.
- Produce a useful framework in a form that is valuable to developers creating Internet Freedom Tools - that they can use and want to use!





OPEN TECHNOLOGY FUND

SECONDMUSE 



# Random Hacks of Kindness

*Hacking for Humanity*

MOUNTAIN VIEW

Home of the very first RHoK hackathon, November 2009.

TweekTheTweet  
Twitter syntax developed at RHoK used to track aftermath of 2010 earthquake.

BOGOTA

Shelter management system developed at RHoK adopted by national government and partners.

NEW YORK

UN Secretary General Ban Ki Moon keynotes RHoK event, December 2010.

PHILADELPHIA

RHoK supports a vibrant local culture of civic hacking.

ATLANTA

RHoK winners and organizers recognized by the Atlanta City Council in January 2012.

ST LUCIA

CHASM hack built at RHoK Washington DC deployed by the World Bank in the Caribbean.

PORT-AU-PRINCE

I'mOK app developed at the first RHoK used during 2010 Haiti earthquake.

NAIROBI

7 Kenyan developers hired out of college by the Kenya Red Cross society following their win at RHoK.

DARES SALAAM

Experienced RHoK organizers in Kenya mentor leads in Kigali and Dar es Salaam to host their own RHoK events focused on East African challenges.

JAKARTA

Risk in a Box tool developed at RHoK used to support flood contingency planning in Jakarta.

BANGALORE

India's tech hub and home to one of RHoK's longest standing communities and 6 RHoK hackathons.

SENDAI

App built at RHoK used to track relief supply distribution following 2011 earthquake.

SYDNEY

Citizen bushfire reporting system built at RHoK deployed for 2 year



Who

# SecondMuse's commitment to this work

**Free speech is a fundamental ingredient of open innovation.**

Innovative ideas are often disruptive to the established order.

**How can we help empower open innovation, especially through technology?**

By supporting the R&D of more effective Internet Freedom tools.



Our Team

## Process





# A Landscape Analysis Allows Us to Understand Before We Act.



## Landscape Analysis

- Before recommending anything, we need to understand where things are and what is needed.
- Our main mechanism for this is interviewing experts representing a diversity of roles in this space.
  - Interviewing experts who represent developers, funders, intermediaries, researchers.
  - Comprehensive interview guide which is tailored to each interviewee.
- We have conducted ~20 interviews up to this point.

# Landscape Analysis Questions

- **Everyone:** How would you define the IFT/IFS? Who are the key participants and stakeholders in the space?
- **Developers:** How do the needs of your end users affect the development process?
- **Intermediaries:** Do you validate the threats that users perceive? If so, how?
- **Users:** What are the concerns or worries on the front of your mind when using the Internet or other forms of communication?

# What Are We Learning?

# Personas Are Underused

- The space can afford more generalization regarding creation and use of personas.
  - Big debate on acceptable level of granularity of personas.
  - Concerns of over-generalization prevent acceptance of basic personas which can be systematically used.



# The IFT Space Lacks Definition

- Interviewees point to lack of cohesion in the space as a barrier to collaboration. But there is a desire for collaboration.
  - “nascent”, “splintered”, “non-existent,” “undefined.”
- Developers create and design tools for themselves as the target user, rather than an external set of users.

# Training Effectiveness Often Unclear

- Training is an important method for engaging users, and an important part of adoption of tools.
- Effectiveness of these trainings is not measured, and anecdotal evidence of value are not clear.

# Funders Want to Fund!

- But they are treading carefully until they have more certainty.
- Funders are skeptical of effective usage of IFTs.
  - “The elephant in the room is how well are on the ground activists going to use privacy or circumvention tools. They won’t do it well unless they are trained or born digital activists.”
- Funders are mission driven, and it is not clear what tools will help them achieve their mission.
- Communication between “techies” and non-technical funders is a challenge.

# Usability: “Use” vs. “Usefulness”

- When examining usability, there is an important difference between “use” and “usefulness.”
  - “For many, ‘use’ is top of mind when thinking of ‘usability’ – did the user click in the right place? Did they enter their password? Perhaps a better understanding is ‘usefulness.’”
- Usefulness: Is this tool relevant to the end-users daily activities? Is this helping me achieve my mission?



# Value to Developers

- A user-centric approach needs to complement the work of developers, not just create more work for them.
  - It has to fit into the development process in a meaningful way.
- The value of incorporating a human-centered design approach into the development process must be clear.

# Spending time with users on the ground allows us to practice human-centered design principles.



## On-The-Ground Research

- Create a research plan for studying a specific user community.
  - We will be spending 2+ weeks in **Dharamsala**, India.
- We will employ ethnographic methodologies to understand the needs of current and potential users of communication tools and IFTs.
- We will examine both the results of our methods and the efficacy of the methods themselves in obtaining meaningful data.

# Dharmasala is an ideal location for our project.

Range of User Groups

Well-tread ground

Known Threat Models

RFA Interest

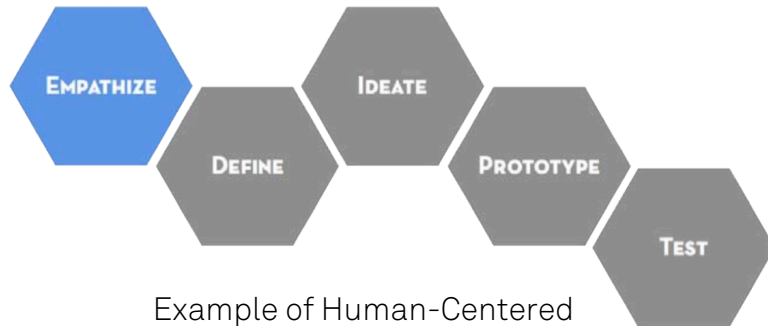


photo credit: lukexmartin / Flickr

# Taking a human-centered design approach in Dharamasala...

## What is Human-Centered Design?

- Understanding of the needs, hopes, and aspirations of potential users and the lives they live yields - leads to more effective solutions.



Example of Human-Centered Design Framework

## What is Ethnography?

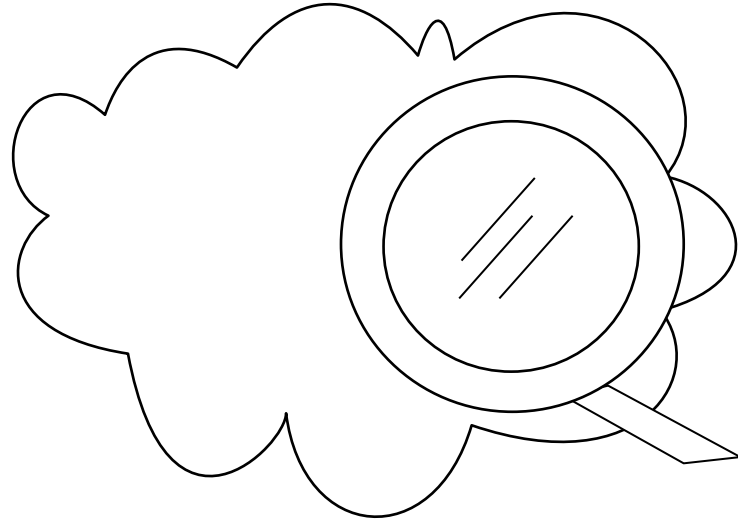
- The study of culture and human motivation through qualitative research.
- Part of the HCD process.
- Ethnography complements usability studies by giving the "why" behind their actions.
- Ethnography includes interviews, observing specific behaviors and understanding the material culture and surroundings of a target group or user.



# Lots of ethnographic methods can be applied.

## Here are some examples:

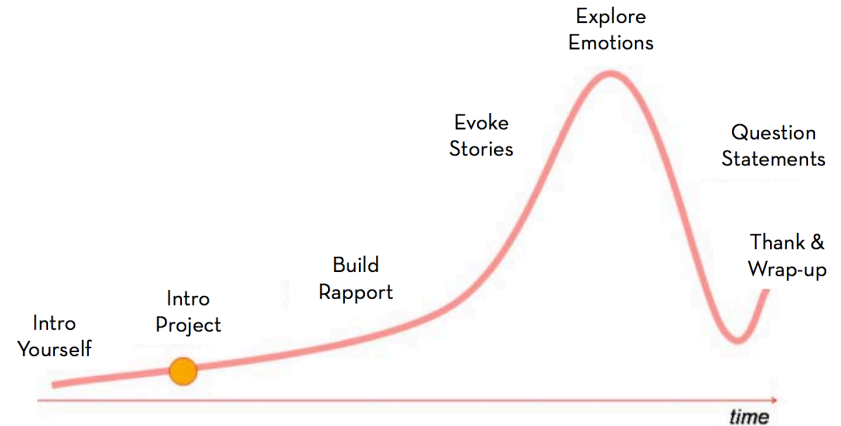
- Interviews
- Shadowing
- Experience Sharing
- Solution Analysis
- Co-Design



# In a human-centered design approach interviews allow us to not only understand, but to innovate.

## Why Interview

To understand a person's thoughts, emotions, and motivations, so that we can determine how to innovate for him or her. By understanding the choices that person makes and the behaviors that person engages in, we can identify their needs and design for those needs.



## Interview Approach

- Ask why.
- Encourage stories.
- Look for inconsistencies.
- Pay attention to nonverbal cues.
- Ask questions neutrally.

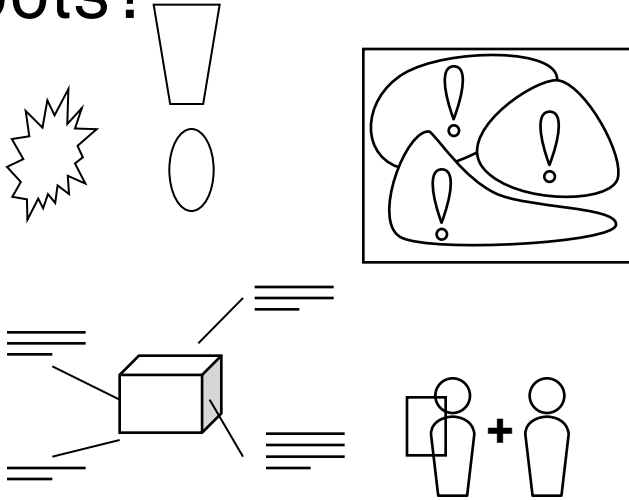
# Bringing it together all together so we can help design better Internet Freedom Tools.



## Analysis & Output

- Now what? Understand, analyze, and distill meaning.
- Translate what we found into:
  - A series of actionable take-aways for developers of IFTs who are intend to serve the needs of users in Dharamsala.
  - Best practices on applying ethnographic techniques to assessing needs of IFT users.
  - Instruments that can be employed by developers to gain insights for their own projects.

# How can we best support human-centered approaches to building Internet Freedom tools?



What can we create that will be most useful to developers of IFTs? What will make our work meaningful?

- A report outlining best practices?
- Showcasing value that comes from a more user-centric development process?
- Something else entirely?

# We invite your input...

Q:'s how does this affect your work? What is relevant to you? What is not?

Many of you represent those who design, build and deploy these tools. We want your feedback, and your ideas:

- [bit.ly/IFT-Feedback](https://bit.ly/IFT-Feedback)
- Michael.brennan@secondmuse.com













# Thank you

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