Ines Knäpper

@THEPortatCERN

Daniel Dobos

@HScienceAdvisor

Impossible Things at a Hackathon:

ORGANISERS - THE Port

Swiss not-for-profit association, based in the heart of International Geneva.

We foster need driven innovation in the humanitarian sector by combining creative minds from CERN, International Organisations, NGOs, Academia and the Private Sector to work in interdisciplinary teams on topics beneficial to society.

More about our work at: www.theport.ch

THE PorT

unite innovators · impact future · act today

OPEN Geneva Hackathon 2016

https://youtu.be/QQPJg1cuTRA

campus biotech

THE Belt Compass

THE BETTER BODY BAG

http://socialsolutionsresearch.com/

Kingdom of the Netherlands

Human Rights DIPLO HACK

26. - 27. February 2016
@ Impact Hub Geneva

www.diplohack.org

IMPACT HUB Geneva

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MISSION

At the Human Rights DiploHack 2016

hackers, human rights experts and diplomats joined forces for a 48-hour period

to tackle two challenges

presented by the Office of the High Commissioner for Human Rights

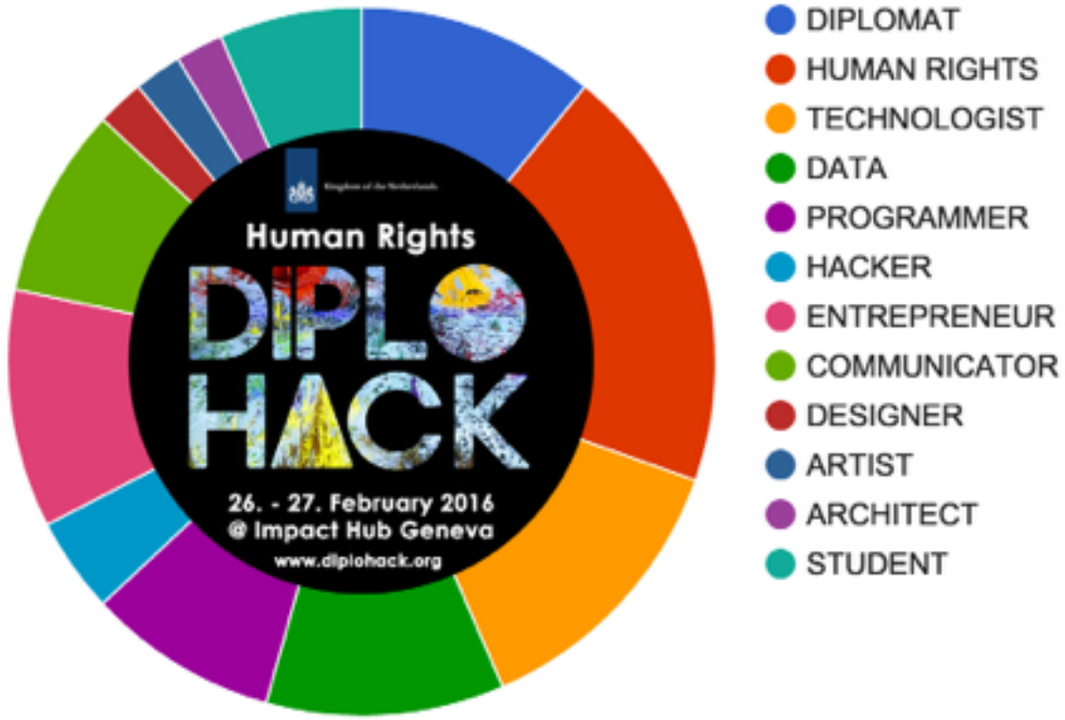
that directly impact people's lives from around the world.

DIPLOHACK Human Rights 2016

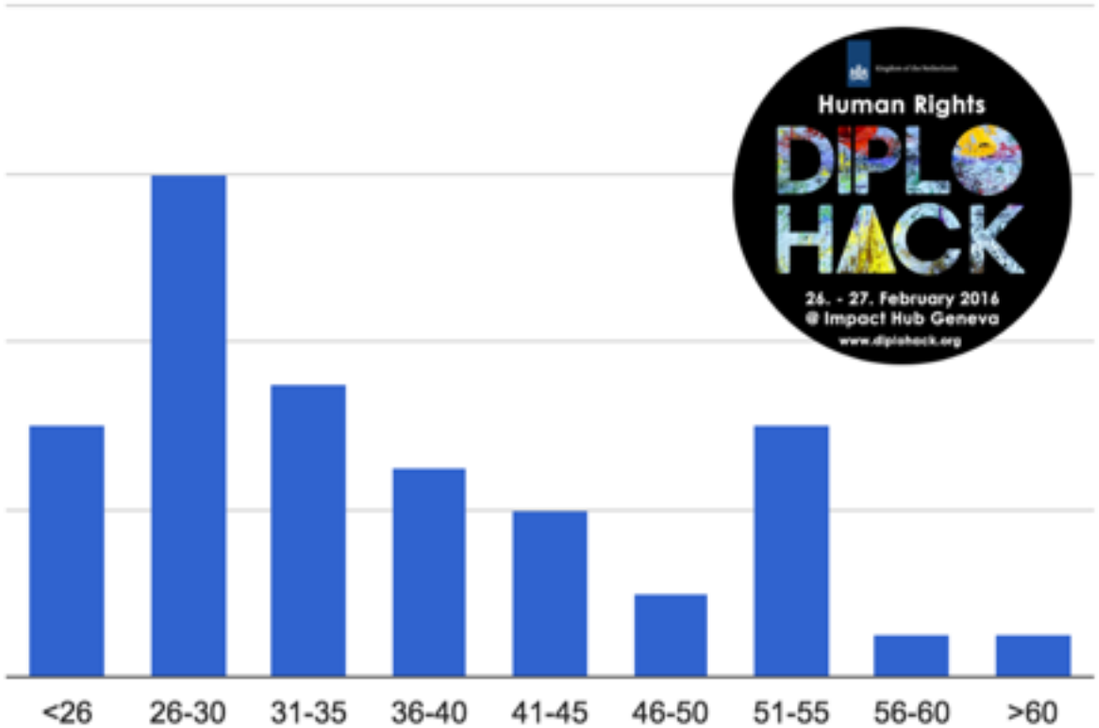
https://vimeo.com/157105819

STATISTICS - details

Human Rights DiploHack 2016 - Participants Background Distribution

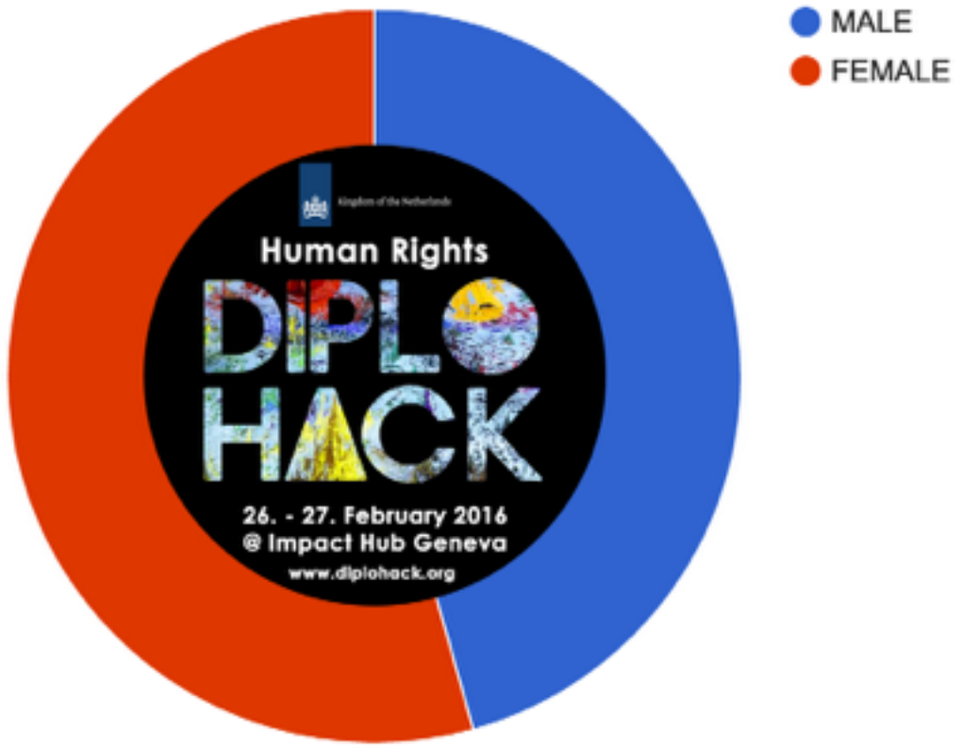


Human Rights DiploHack 2016 - Participants Age Distribution

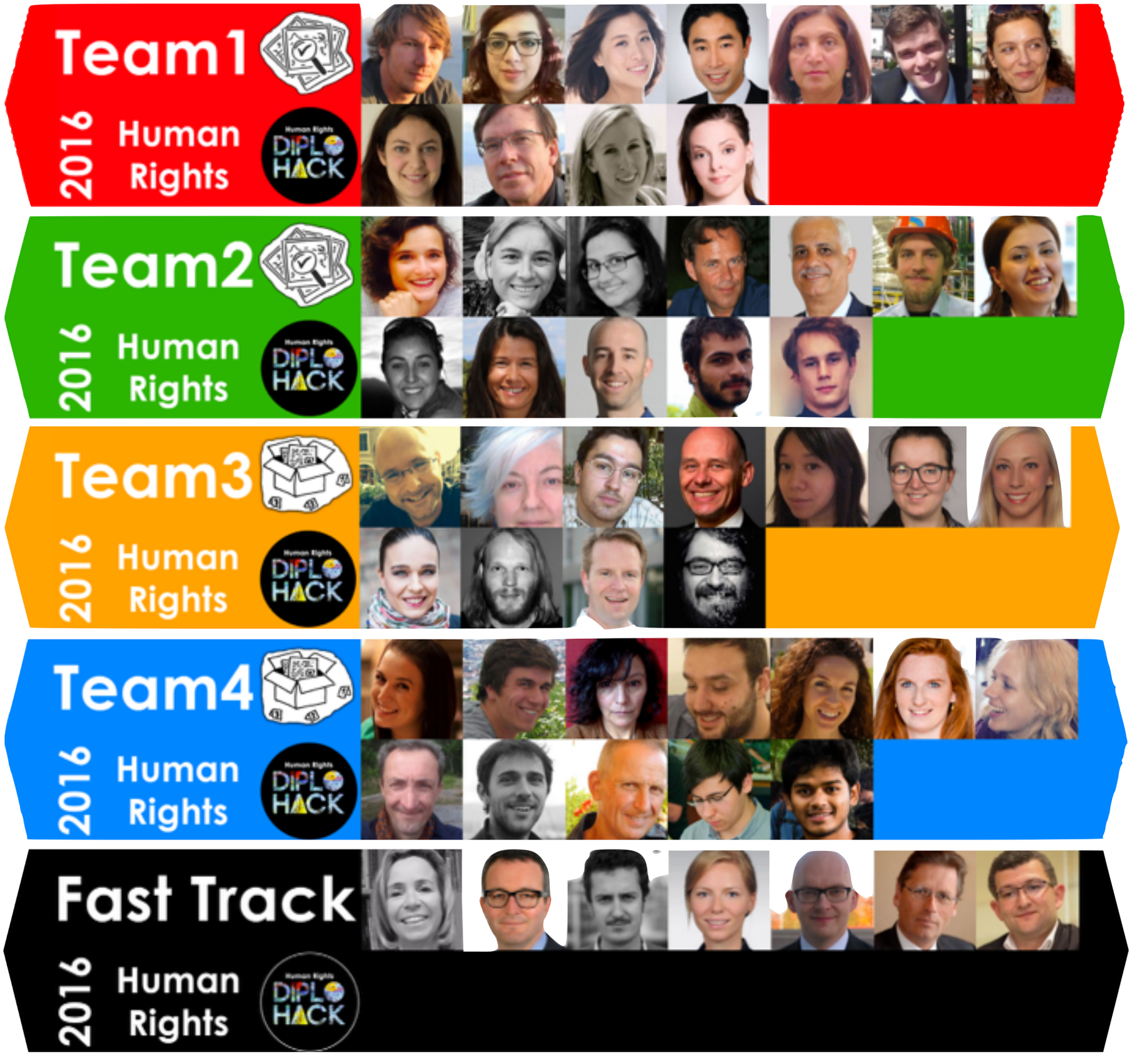


Human Rights DiploHack 2016 - Participants Nationality Distribution

Human Rights DiploHack 2016 - Participants Gender Distribution



PARTICIPANTS - teams



CHALLENGE - Big Verification Challenge

An improved way of using limited verification resources

Does a photo or video tell the ‘truth’? Methods and tools for verification of visual content are constantly improving, but the amount of content requiring verification for Human Rights purposes increases over-proportional – limiting its usability to a small and biased selection. Can improved creation, filtering, sorting and verification contribute to turn the tables on this volume problem?

CHALLENGE - Evidence Collection Box

UNITED NATIONS
HUMAN RIGHTS
OFFICE OF THE HIGH COMMISSIONER

A field-ready evidence collection & transportation tool

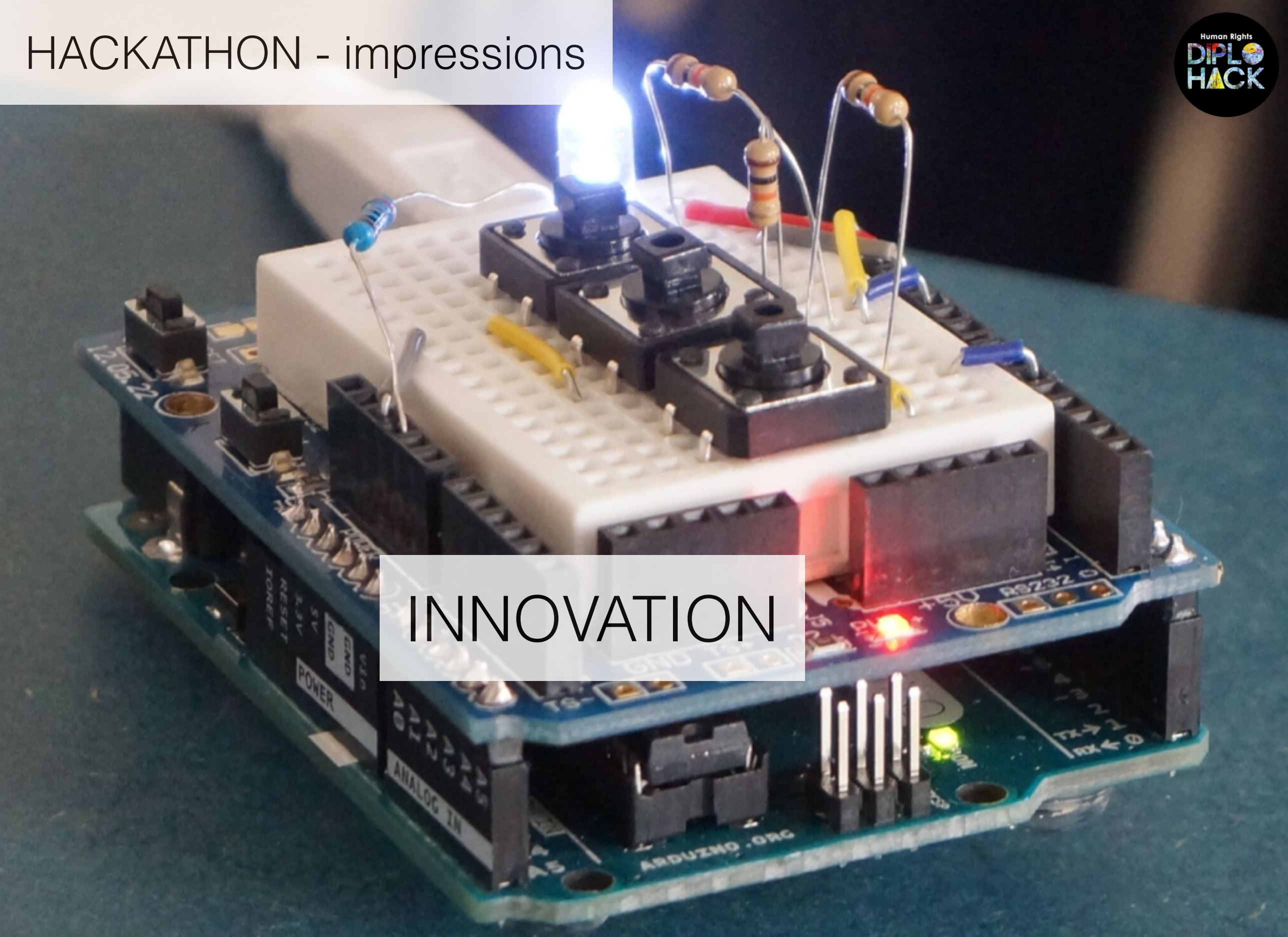
How can Human Rights Defenders collect and transport evidence in a safe way? New data transmission protocols, storage and verification methods open up new opportunities to improve towards a more trustworthy, and field-operation friendly evidence system. How can limited communication possibilities be used in the most effective way?

Human Rights

DIPLO HACK

HACKATHON

HACKATHON - impressions



INNOVATION

HACKATHON - impressions

COLLABORATION

HACKATHON - impressions

CO-CREATION

HACKATHON - impressions

Human Rights DIPLO HACK

CREATIVITY

HRC31
High Level Side-Event

DIPLOHACK - presentation

Informal presentation of Diplohack 2016 results on human rights evidence to human rights ambassador of the Netherlands

Kees van Baar

DIPLOHACK - high level side-event

Human Rights DIPLOHACK

UNITED NATIONS
HUMAN RIGHTS
OFFICE OF THE HIGH COMMISSIONER

Presentation of Diplohack Challenges

Christophe Peschoux

PICTRUE

-

machine learning algorithm identifies if & what kind of Human Rights violation happens on any picture & video

PICTRUE - result

Researchable evidence database

Self-learning Assessment Framework for Rights (SAFR)

- integrated tool **incrementally improves** filtering, sorting & verifying images
- based on previous data, tool **increases capacity** to corroborate evidence from as many data sets as possible
- shifts human rights framework **from reactive** model **to proactive** model

Machine Learning
Image Pattern
Recognition

99.99% child classroom
0.01% none
0.0% child classroom
0.0% child labour

58.2% child classroom
31.6% child soldier
8.1% child labour
1.9% none

Human Rights DIPLO HACK

GET THE PICTURE

-

photo/video verification with different levels of confidence in the hand of every Human Rights officer

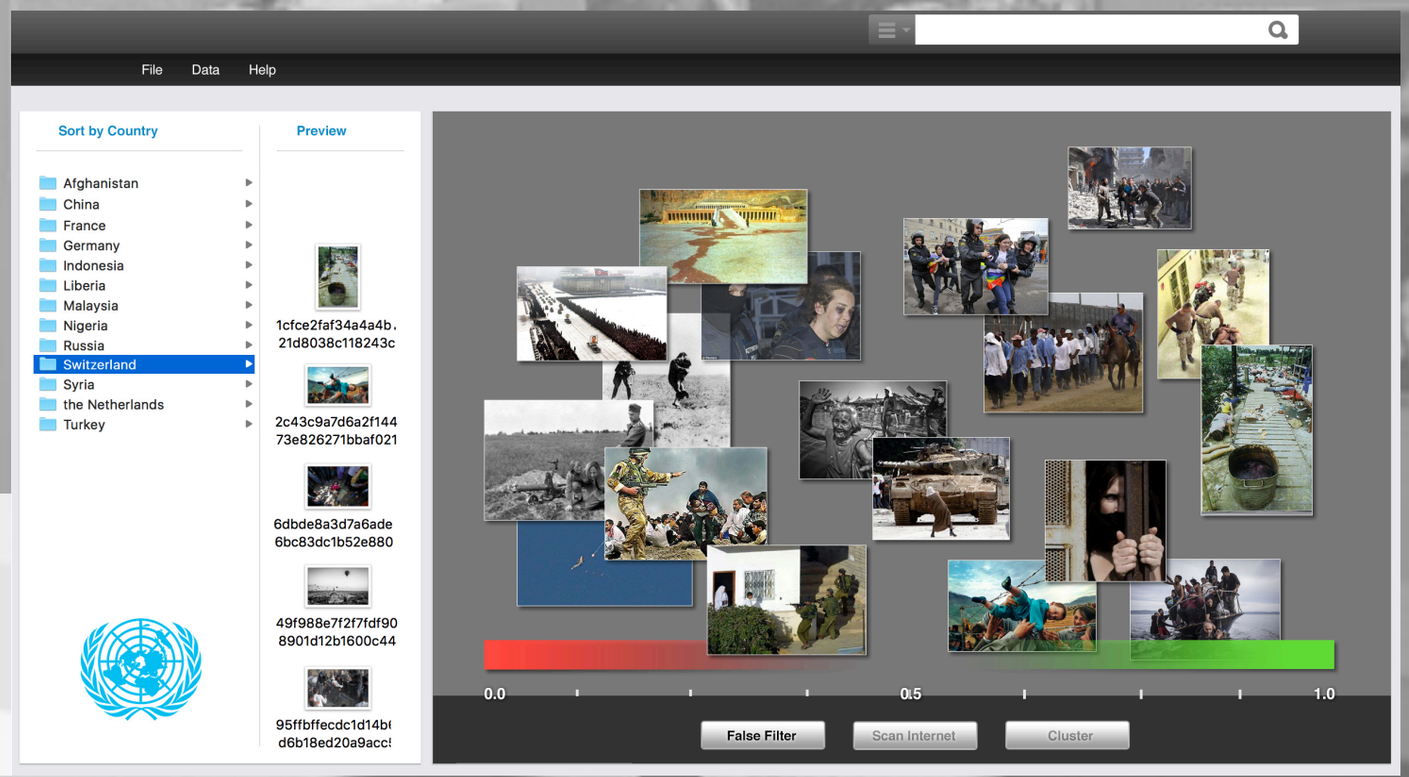
GET THE PICTURE - result

Tools for Verification

- *False Filter* - smart filter **identifies "false, tampered & manipulated"** data files
- *Clusterer* - (semi-) **automated content-based clustering** in **"cases"** (e.g. location & time)
- *Network of Helpers* - essence **crowd sourcing** of selected (prioritized) data sets
- **Ro(Bot)** – actively **scan Internet and social media** for case-related images & videos

Manipulated

Original



False Filter implemented in online file browser

FIRST DEFENDER TOOLKIT

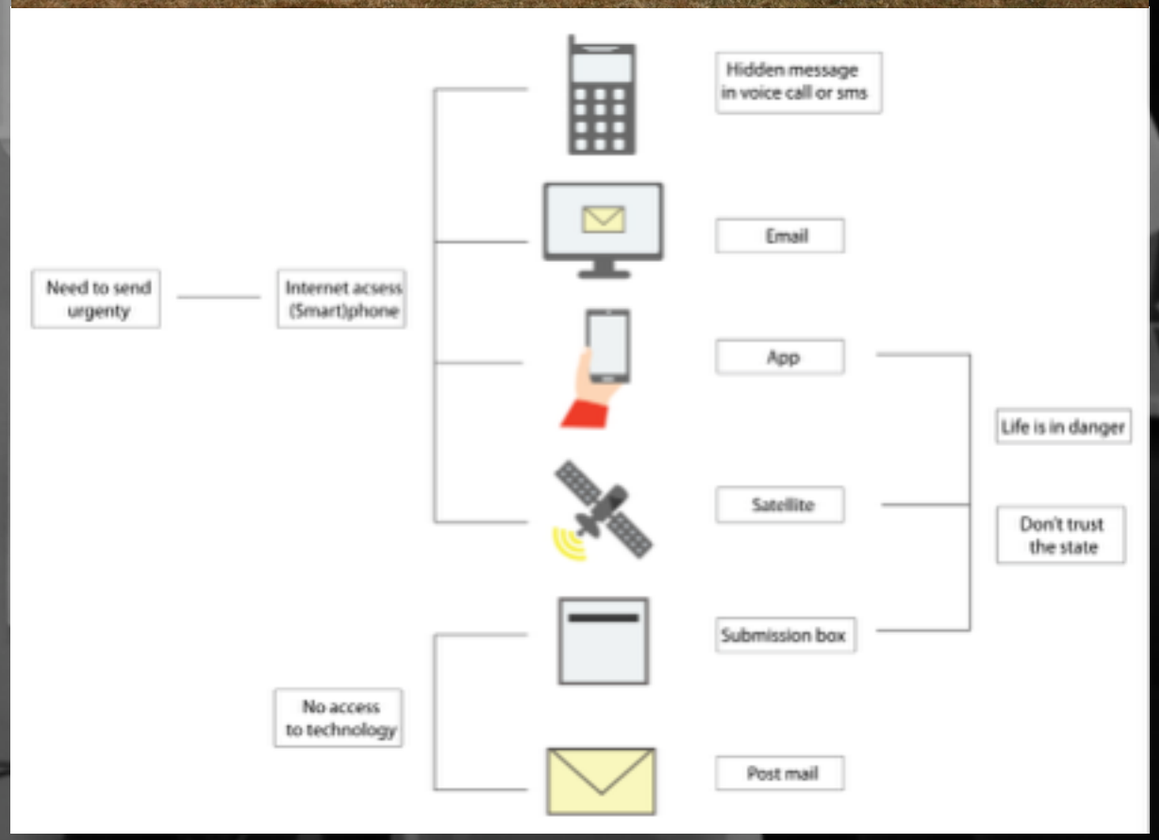
-

reporting Human Rights violation without technology expertise & leaving no trace of who it did

FIRST DEFENDER TOOLKIT - result

easy, high-tech & single-use satellite transmission box

low-tech classical mailbox - busy locations created by news boards allow anonymity



Human Rights DIPLO HACK

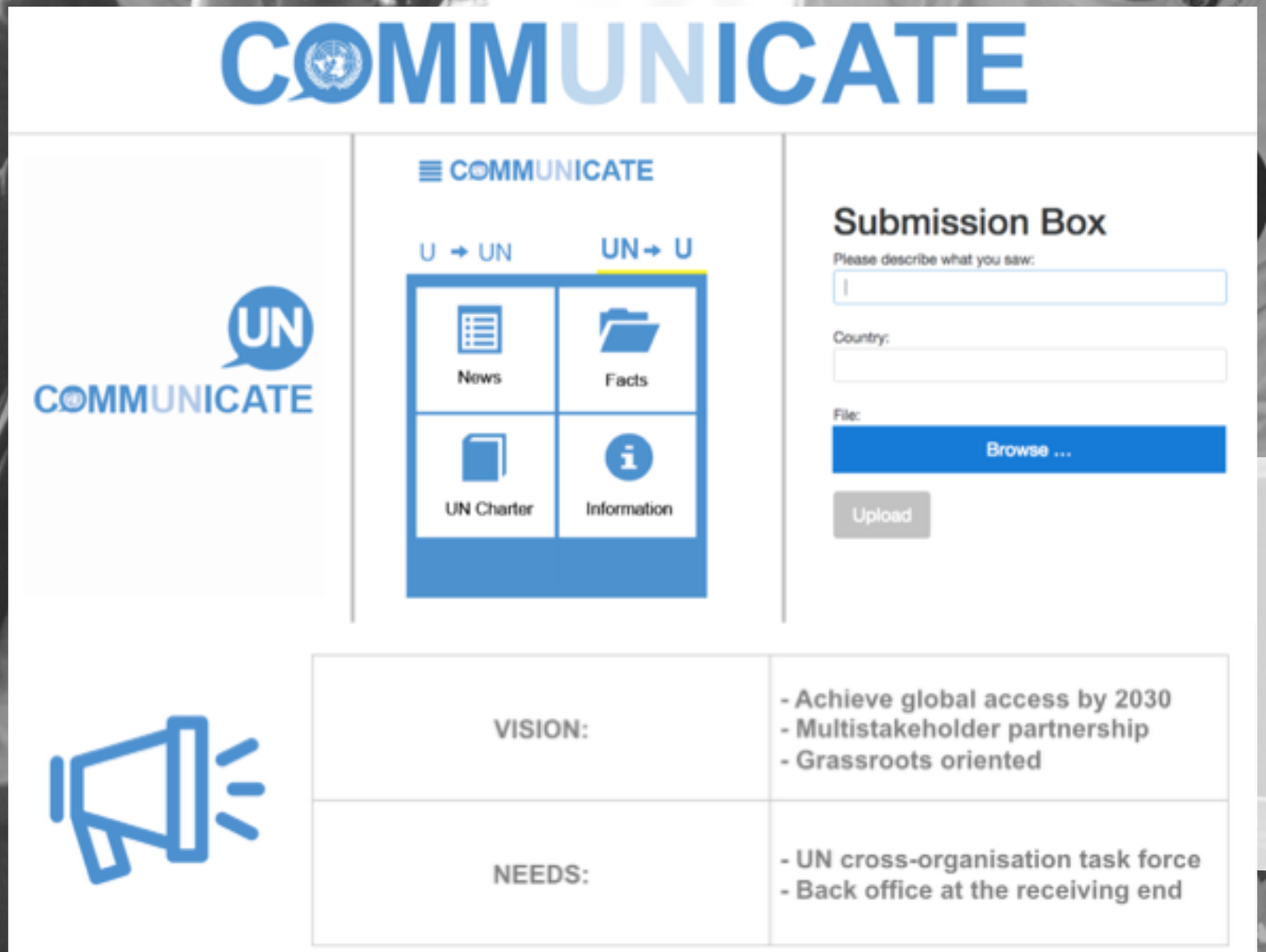
TEAM4EVIDENCE

-

CommUNicate will allow easy, safe, secure & anonymous communication with the United Nations

TEAM4EVIDENCE - result

easy & secure
drag-&-drop file
upload



secure communication
fully embedded in
general UN
communication website,
app & strategy

website & app allow anonymous easy-setup communication

DIPLOHACK - Bert Koenders & Kate Gilmore

"We have to innovate diplomacy."

Bert Koenders

"Human Rights 2.0"

Kate Gilmore

"Never forget, always share and act in solidarity."

Kate Gilmore

"We need you, we need innovation for the cause of human rights!"

Bert Koenders

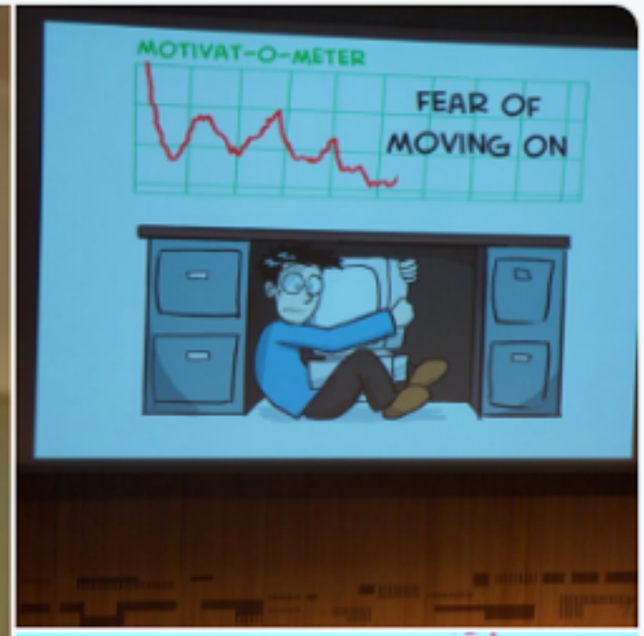
DIPLOHACK - Testimonials

"This small group of individuals hacked into the future where rights are respected."

Kate Gilmore

ESA Astronaut - Luca Parmitano

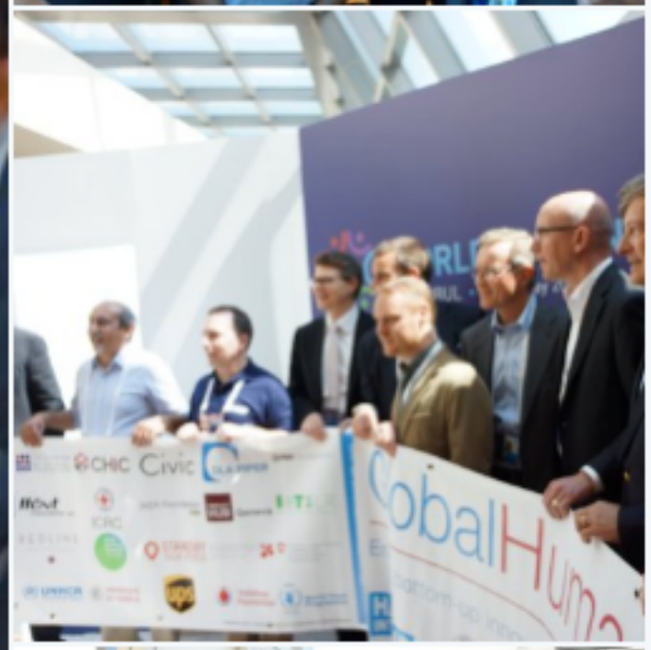
PHD Comics - Jorge Cham



World Humanitarian Summit - Istanbul

World Humanitarian Summit - Istanbul

Global Humanitarian Lab



Jack Steinberger - Nobel Prize Physics

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ICRC - Air Drop Food Bags

https://youtu.be/5vZqVgcIdZQ

Ines Knäpper

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Impossible Things at a Hackathon:

NONE - DREAM BIG!

M-E-D

T-E-C-H

H-A-C-K

THE PorT.ch

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