moz://a

# Mapping the Internet Health Movement

DATE

**DESIGN AND RESEARCH** 

15.06.2018

Calibro & Mozilla Foundation

## Introduction

The Mozilla Foundation has committed to 'fuel a movement that brings together a global force of people willing to stand up for and build the open internet together'. This project focus on experimenting a mix of methodologies to <u>observe</u> and <u>analyse</u> the Internet Health space.

### **GOALS OF THE PROJECT**

The main goal of the project is to provide <u>data</u> and <u>visual tools</u> to the Mozilla Foundation team to understand which organizations are involved in the 'Internet Health Movement', how they are related to Mozilla, where they are based, how they act and which IH topics they cover. The visualization produced should be used by the Mozilla Foundation team to both understand the impact of the 3 years long program and identify <u>gaps</u> and and <u>opportunities</u> for future actions.

## The Internet Health Allies

### RESEARCH QUESTIONS

Which organizations can be considered part of the IH Movement?

Are they formally linked to Mozilla? How?

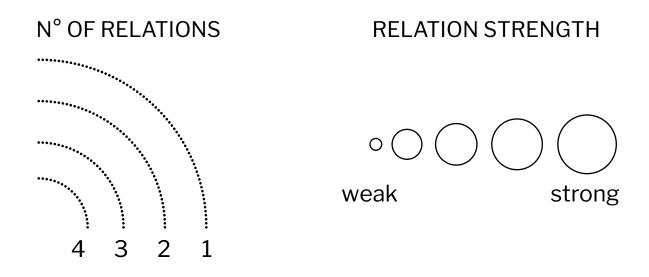
Which organizations could be considered allies but they are not formally related to Mozilla?

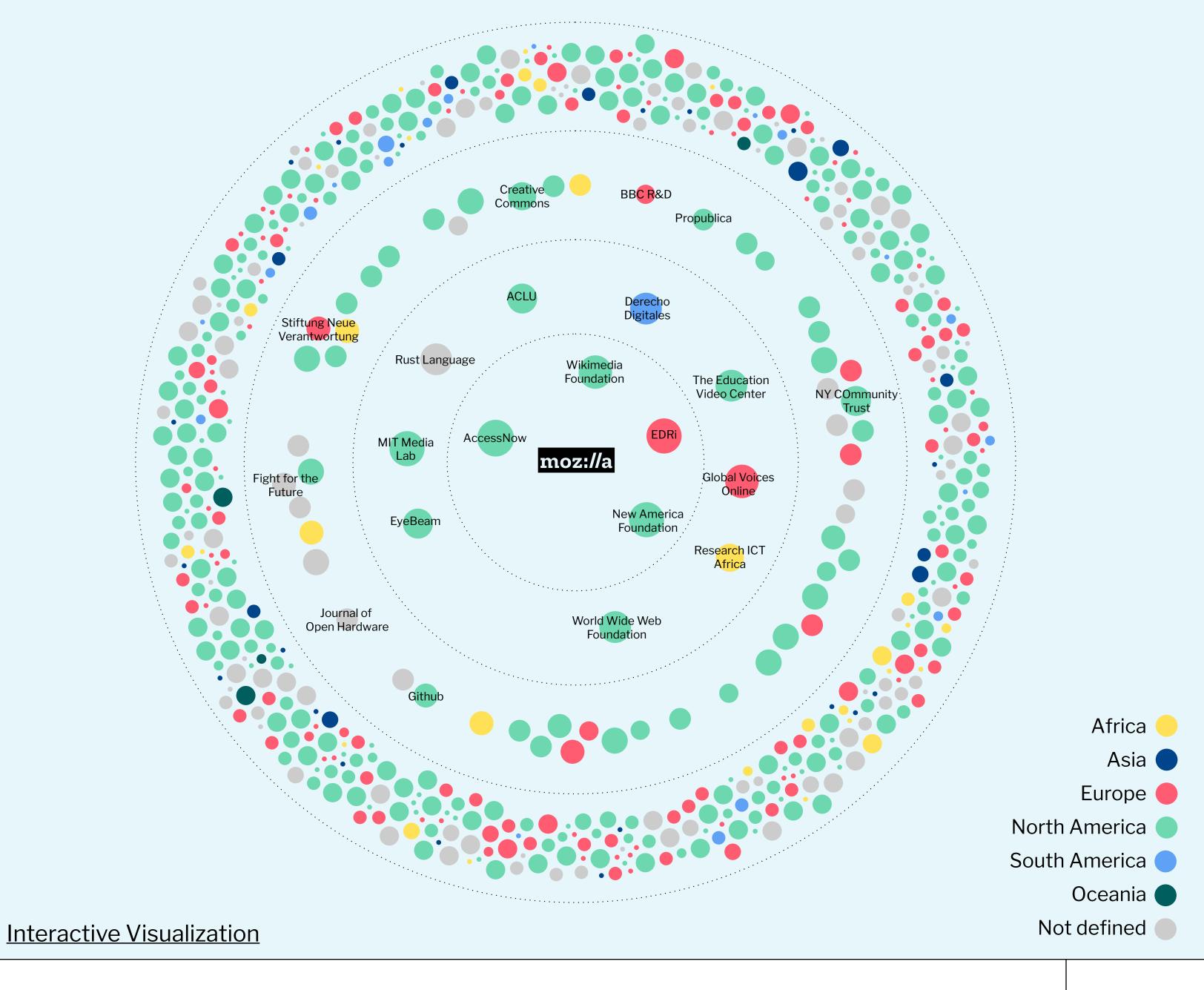
- ¬We started from 14 different lists of organizations provided by the Mozilla team. (eg: Lists of funders and grantees, organizations cited in the Mozilla Survey, etc,)
- ¬We cleaned and reconciled the names of the organizations using Wikidata obtaining 628 organizations
- ¬We classified the organizations in 8 different lists named by the relation they have with Mozilla: (Funders, Grantees, IHR Contributors, Mozfest Facilitator, MozFest Speakers, Open Leaders, OWF Host org Applicants, Not formally related to Mozilla)
- ¬The Mozilla team gave a weight to each relation (form 1 to 5, where 1 is weak and 5 is strong)
- ¬We enriched the dataset with geographical information retrieved both manually and by using Wikidata obtaining the geolocation of the headquarters (city, country, continent).

## The Mozilla Galaxy

In this visualization we positioned all the 628 organizations around Mozilla. The position of each dot represents the number of formal relations with Mozilla. The more central organizations are the ones that can be considered closer to Mozilla. The size of each organization represent the strenght of the relationship (e.g. a funder is more important than a MozFest facilitator).

As we can see the organizations closer to Mozilla are big organizations and institutions involved in digital and civil rights advocacy campaigns but also in research and technological development.





Mapping the Internet Health Movement

## The Internet Health Geographies

#### RESEARCH QUESTIONS

What is the geographical distribution of the organizations involved in the IH Movement?

Which are the main hubs?

Are there areas that are underrepresented?

- ¬We enriched the dataset with geographical information retrieved both manually and by using Wikidata obtaining the geolocation of the headquarters (city, country, continent) for 513 organizations out of 628.
- ¬We exctracted the coordinates and plotted them in different maps.

# The Geographical Distribution of the IH Movement

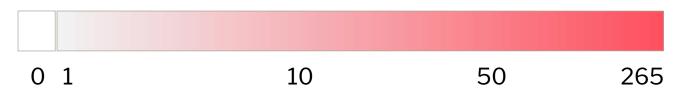
We mapped 513 organizations in 59 different countries all over the World.

The biggest cluster is in North America (USA and Canada). Europe, South America and South East Asia and Oceania are covered but the number of organizations is quite low (especially in the lasts 2).

In Africa most of the organizations are based in Kenya and South Africa while in most of the other Countries there are none.

A big gap emerges in the Middle East and North African area and in Russia.

N° OF ORGANIZATIONS (log scale)

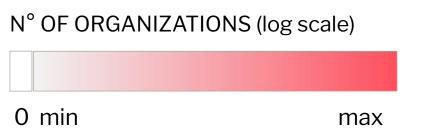


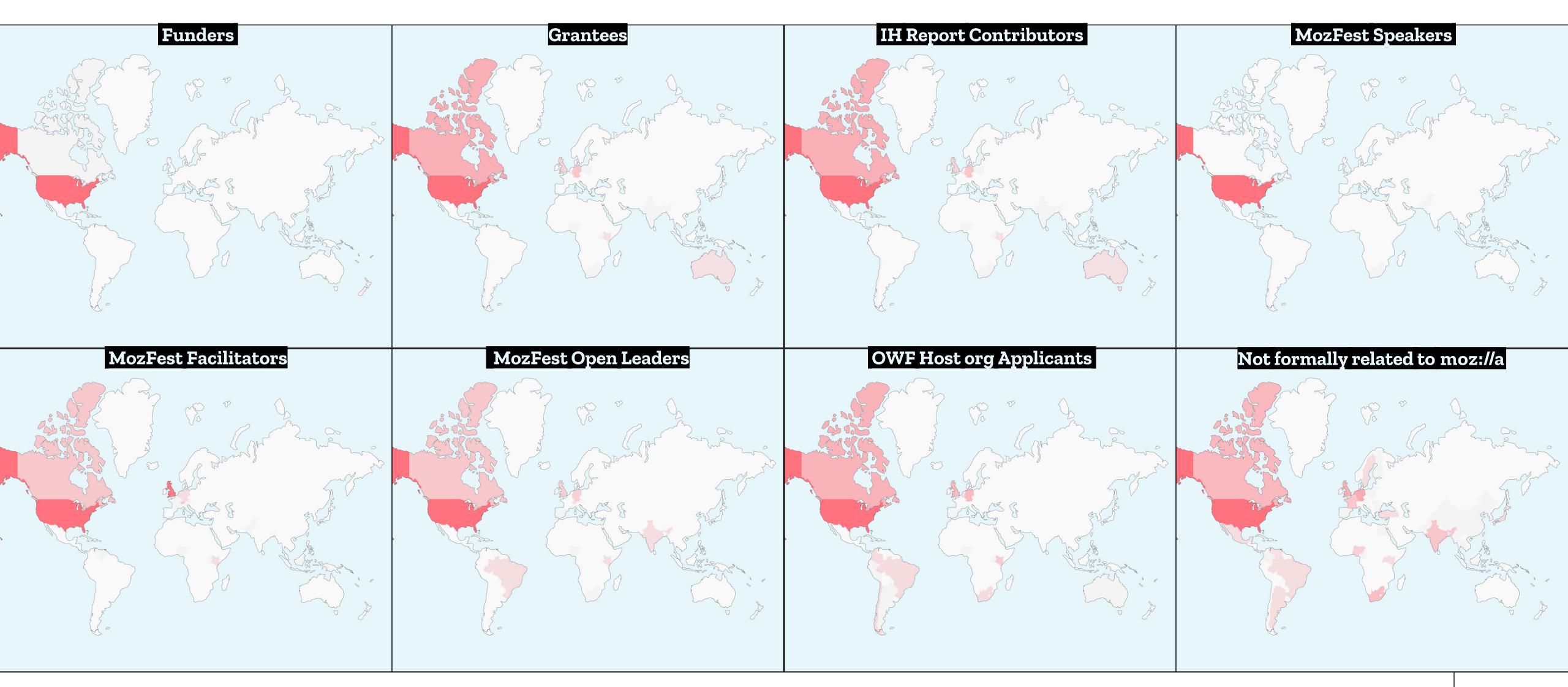
moz://a

Mapping the Internet Health Movement

## The Geographical Distribution of the IH Movement

If we look at the geographical distribution according to the type of formal relationship with Mozilla we can see even more how the key organizations are mostly based in North America.





## Toronto Chicago Kansas City London • Washington D.C. Paris Austria (5) Seattle (7) San Francisco Los Angeles Beirut Lhasa New Delhi Hong Kong The Gambia Bangalore Najrobi Lagos Quito Semarang Lima São Paulo Brisbane Cape Town Buenos Aires Melbourne Wellingto

## The Internet Health Hubs

Mapping the cities where the organizations are based we can explore in details the main hubs of the IH Movement. The most important capitals in terms of organizations are New York City (73 orgs), London (35 orgs) and Washington DC (33 orgs).

The top 10 cities out of 172, host more than than half of the organizations in our dataset.

N° OF ORGANIZATIONS

## The Internet Health Chronology

#### RESEARCH QUESTIONS

Using Twitter as a proxy to understand when an organization started participating in the public debate, which are the organizations that have been present for longer?

Which are the more popular and the more engaged in the Twittersphere?

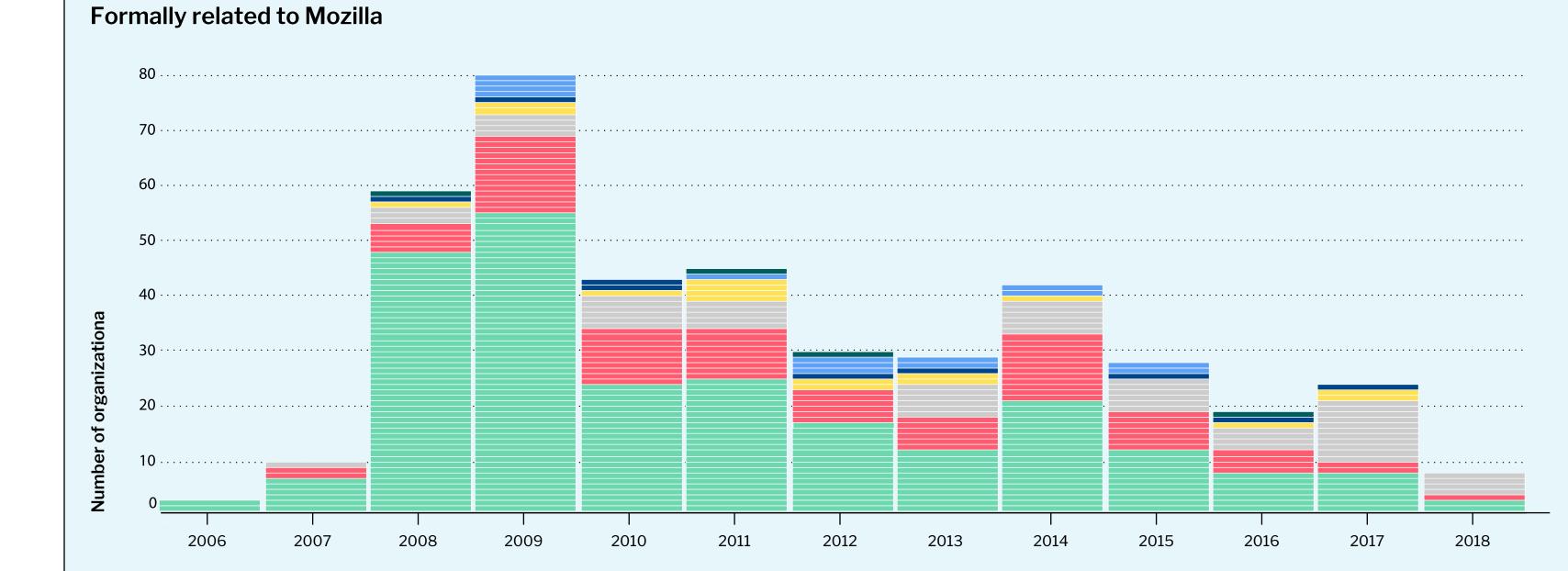
- ¬For each organization we retrieved both manually and by using Wikidata their Twitter account.
- ¬For each account we extracted through the Twitter API the join date, the number of followers and the number of tweets published.
- ¬In order to compare the different organizations we divided the number of followers and tweets by the number of days since the account creation.

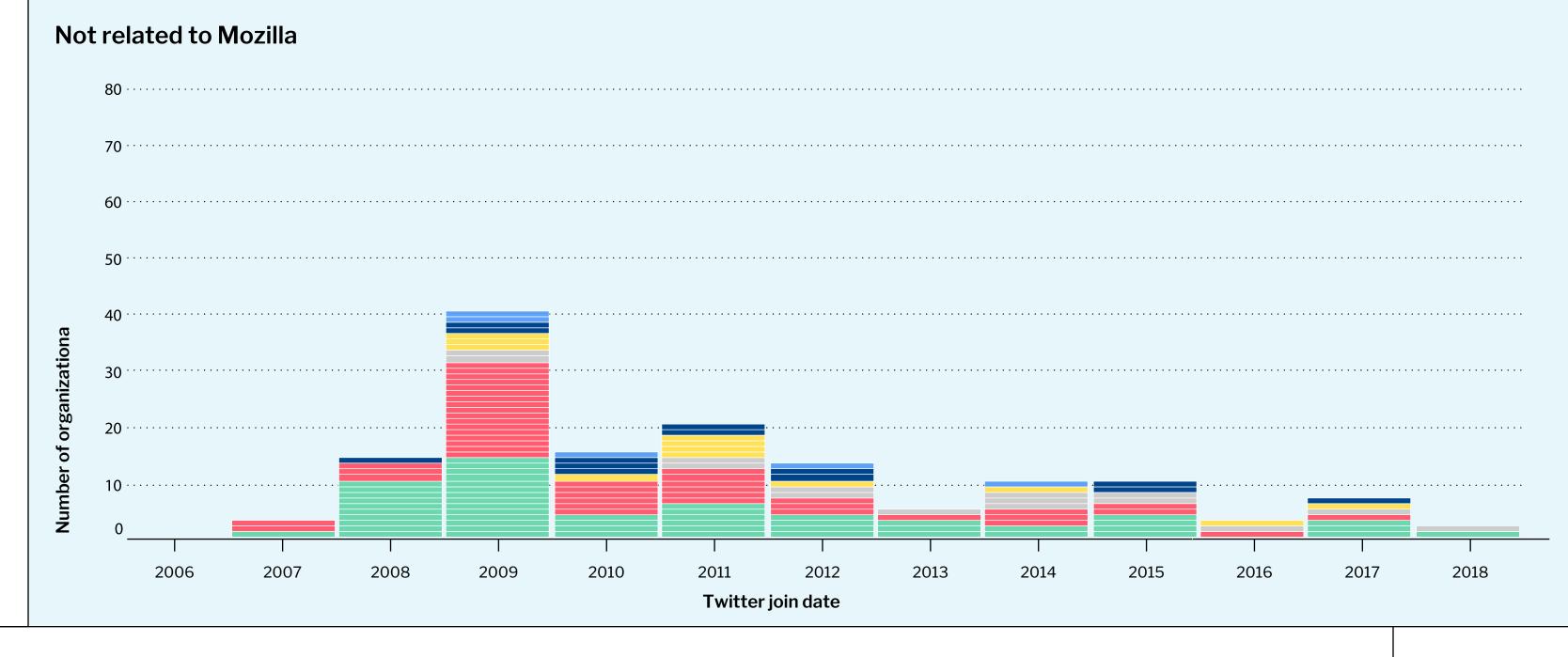
## The Growth of the Movement

The two barcharts represent the number of organizations that joined Twitter per year. The color is mapped on the continent. The main peak is in 2008/2009 and it's probabily linked with the rise of popularity of the social network.

We can spot another wave in 2014 when organization such as Battle for the Net started their campaigns in the IH space. The fact that each year new organizations join the public debate on Twitter can be seen as a positive sign of a Movement that is still growing.

## CONTINENT South America Oceania Not defined North America





moz://a Mapping the Internet Health Movement 10

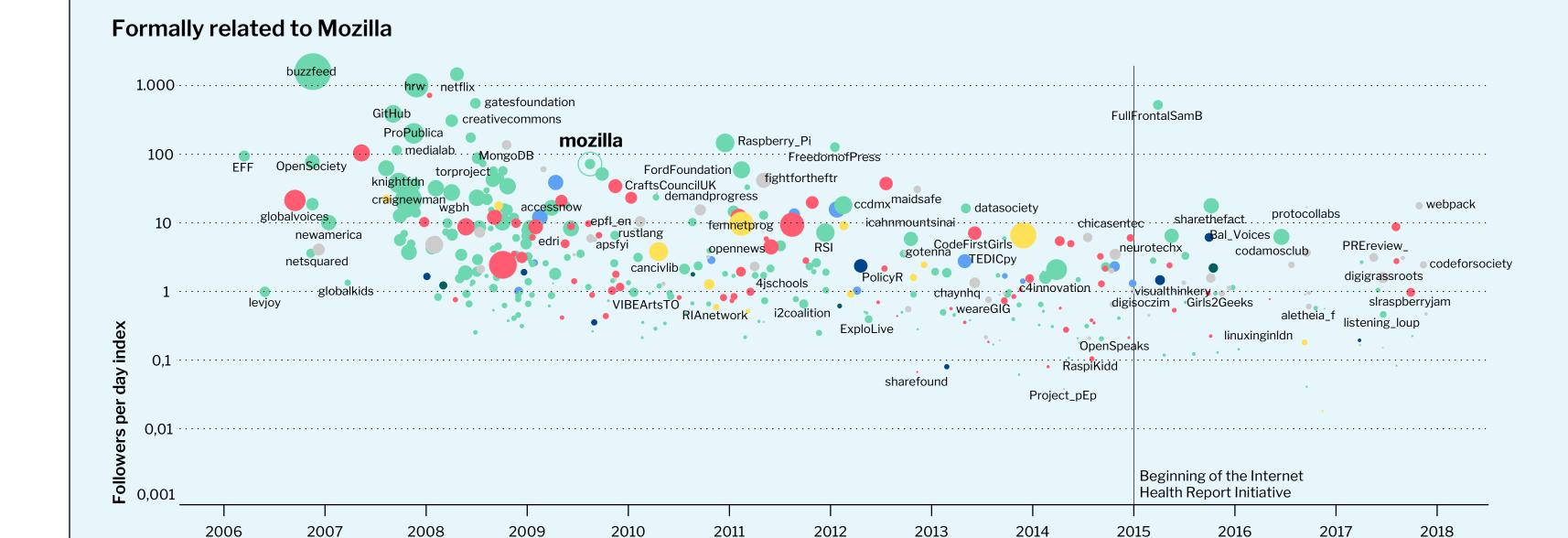
## The Growth of the Movement

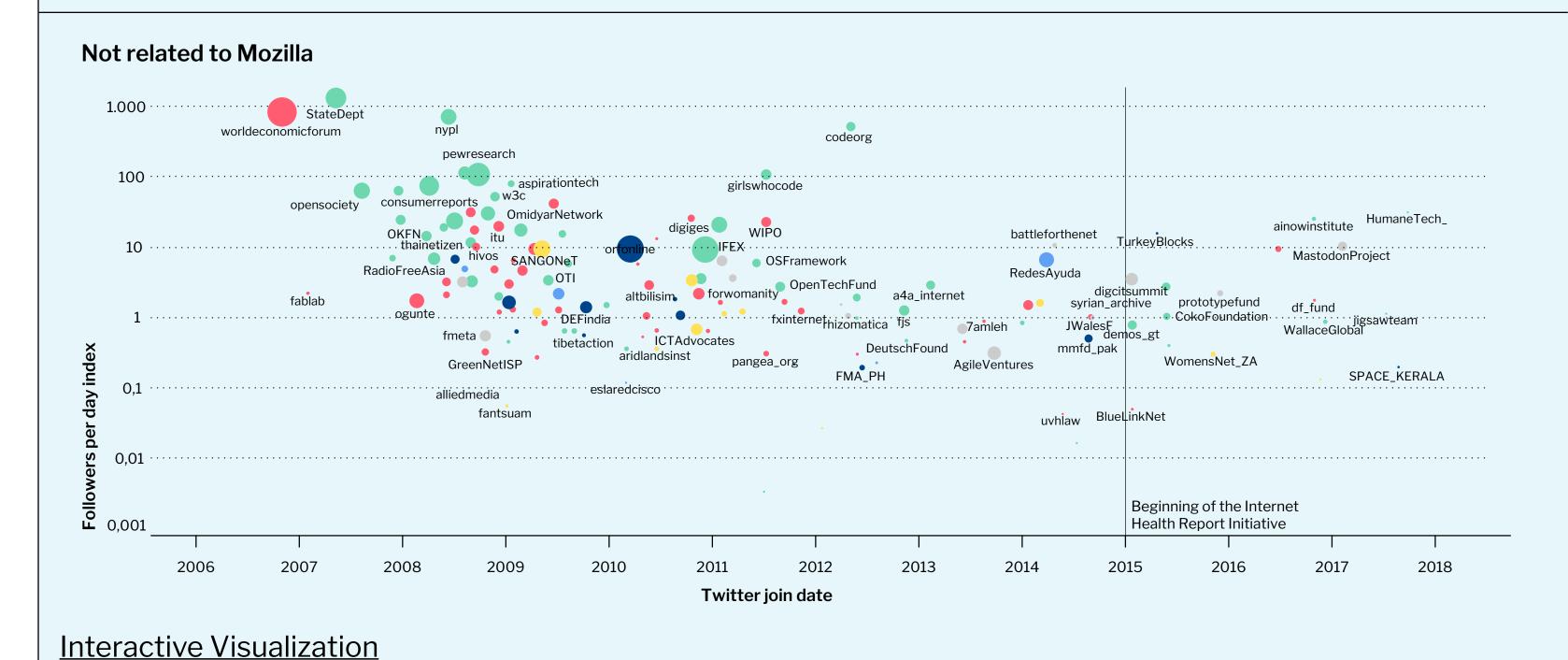
With this visualization each dot represent the Twitter account of an organization. On the X axis we see the date in which the organization joined Twitter and on the Y axis the number of followers per day on a logarithmic scale. The size of each dot is the number of tweets per day.

The organizations that are formally related to Mozilla are slightly more *popular* and more *active* on Twitter than the others that are not related.









moz://a

## The Internet Health Tactics

#### RESEARCH QUESTIONS

Which kind of organizations are part of the IH Movement?

How do they operate?

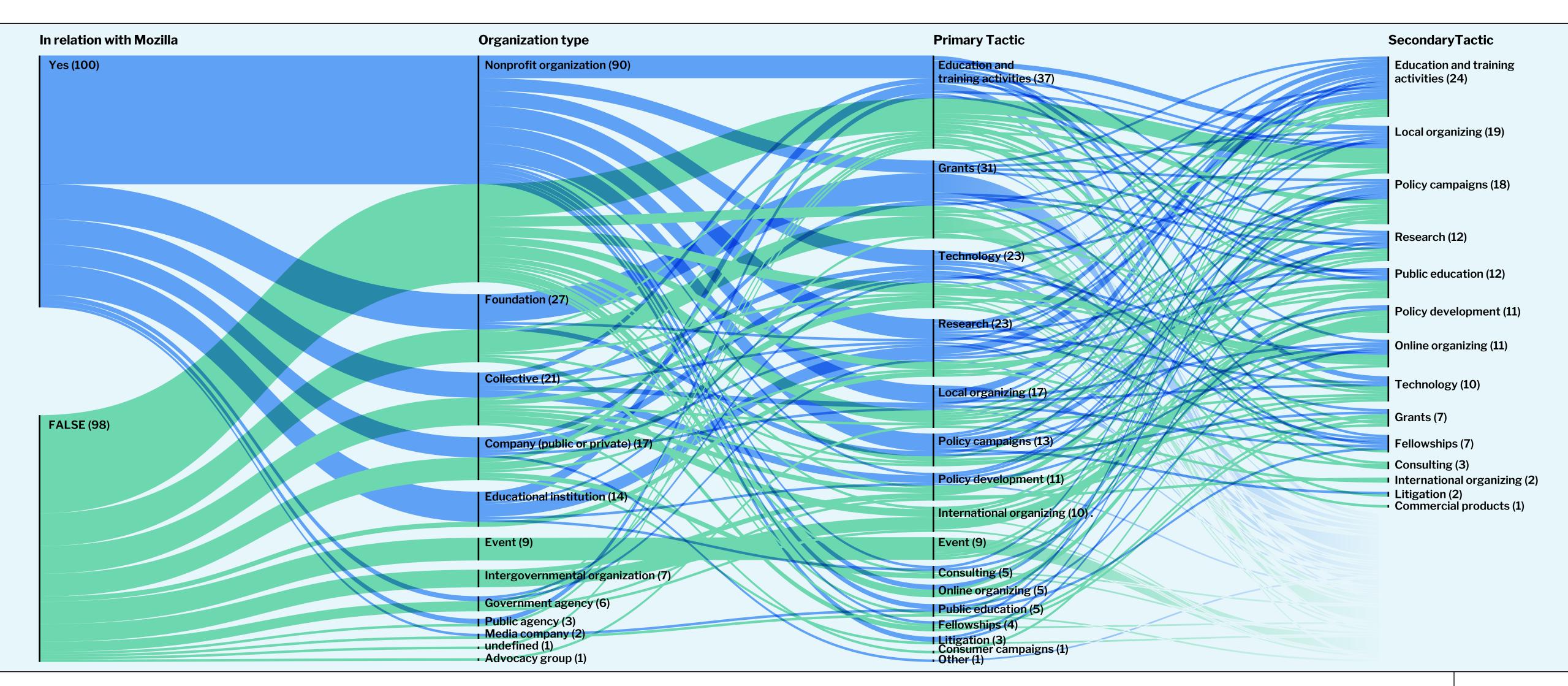
Are there correlations between the type of organizations and the tactics they use?

- ¬Starting from the full dataset of 628 organization we manually created a subset of 198 organizations (100 related to Mozilla, 98 not formally related) based on criteria defined by the Mozilla Foundation team.
- ¬For the 198 organizations we manually classified them by typology (e.g. Non profit organizations, foundations, etc.) and by primary and secondary tactics.

## The modes of organization

**Interactive Visualization** 

In this visualization we can see the correlations between the type of organizations and the tactics they use. Most of Foundations, as expected, flow in Grants. "Nonprofit organizations" spread in almost all tactics. None of the organizations related to Mozilla are intergovernamental or focused on events.



## The Internet Health Topics

#### RESEARCH QUESTIONS

Which are the main IH topics covered by the organizations taken in consideration?

Which organizations share the same topics?

Are there topical clusters in the IH movement?

Which topics are more popular and which ones are underrepresent?

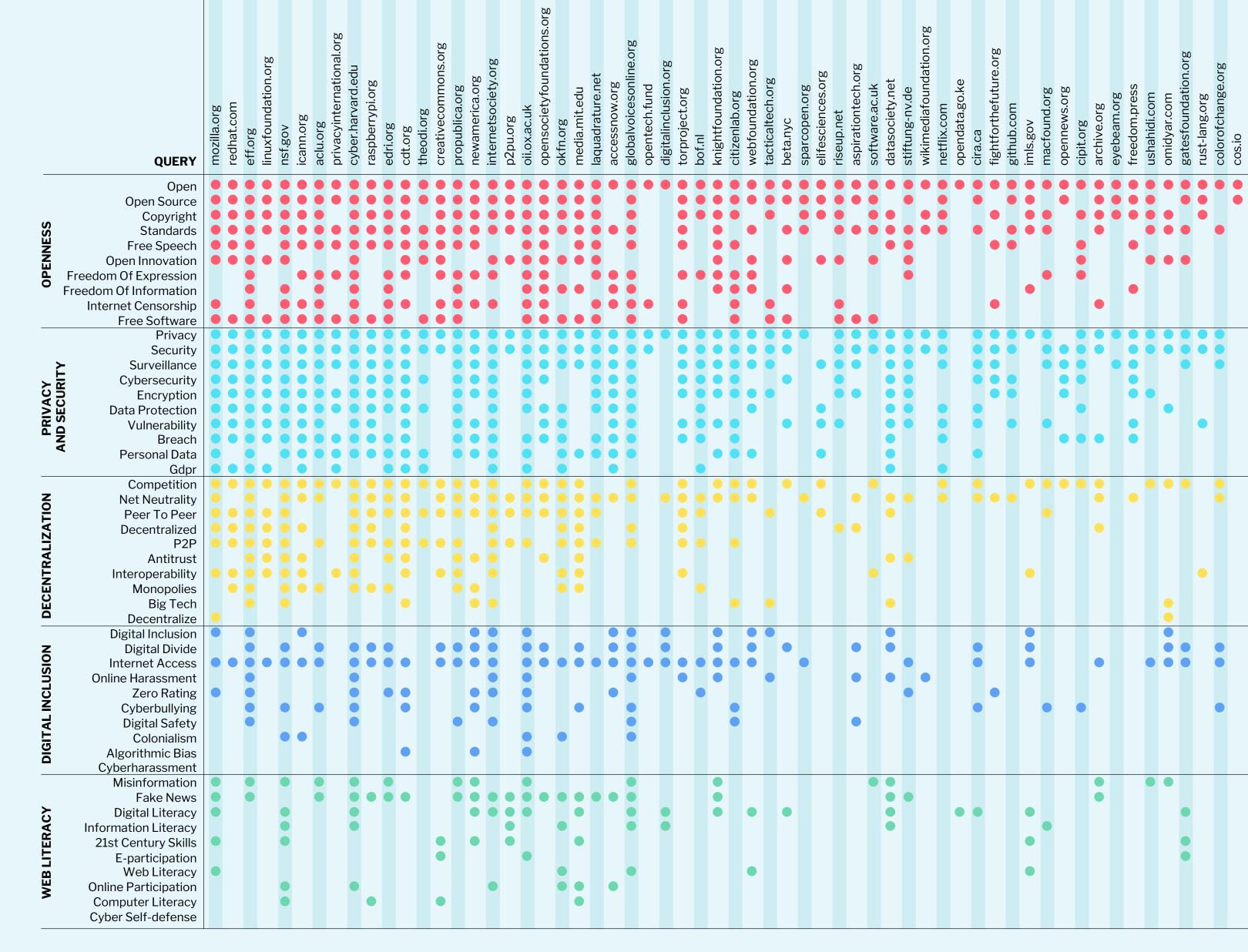
- ¬Starting from the 100 organizations that are related to Mozilla and were part of the subset defined by the MoFo team we retrieved their website.
- ¬We defined a list of 10 terms for each of the 5 IH topics in order to capture all the main subtopics (e.g. for Digital Inclusion we defined Algorithmic bias, Colonialism, Cyberbullying, etc.).
- ¬We searched all the terms in the page titles of each organization website through Google Search (e.g. "intitle:Cyberbullying site:mozilla.org)
- ¬We collected 135,257 results and mapped in different ways.

# Distribution of Topics among Organizations

The visualization shows how the results are distributed per each website. Both axis are ordered by the absolute number of results. When the dot is not present it means that we haven't found any result.

We can see how *Openness* and the *Privacy* and *Security* topic are the most discussed while *Web Literacy* is specific to few organisations. Since some websites don't publish a lot of content on their website, we have found very few results (or none at all).

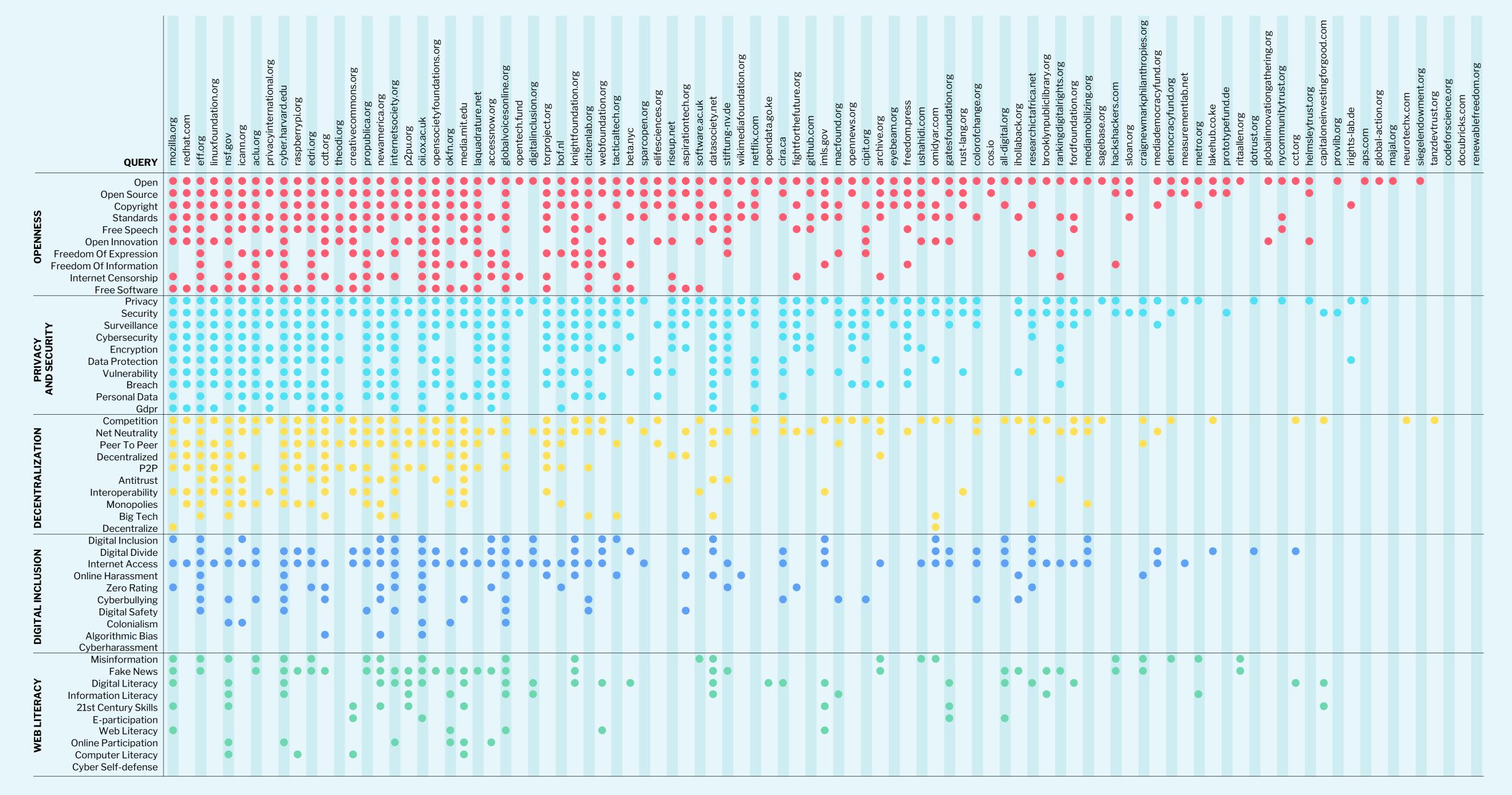
For less central topics, such as *Digital Inclusion* and *Web Literacy*, we have found anyway popular subtopics such as *Internet Access* and *Fake News*.



15

#### **Interactive Visualization**

Mapping the Internet Health Movement



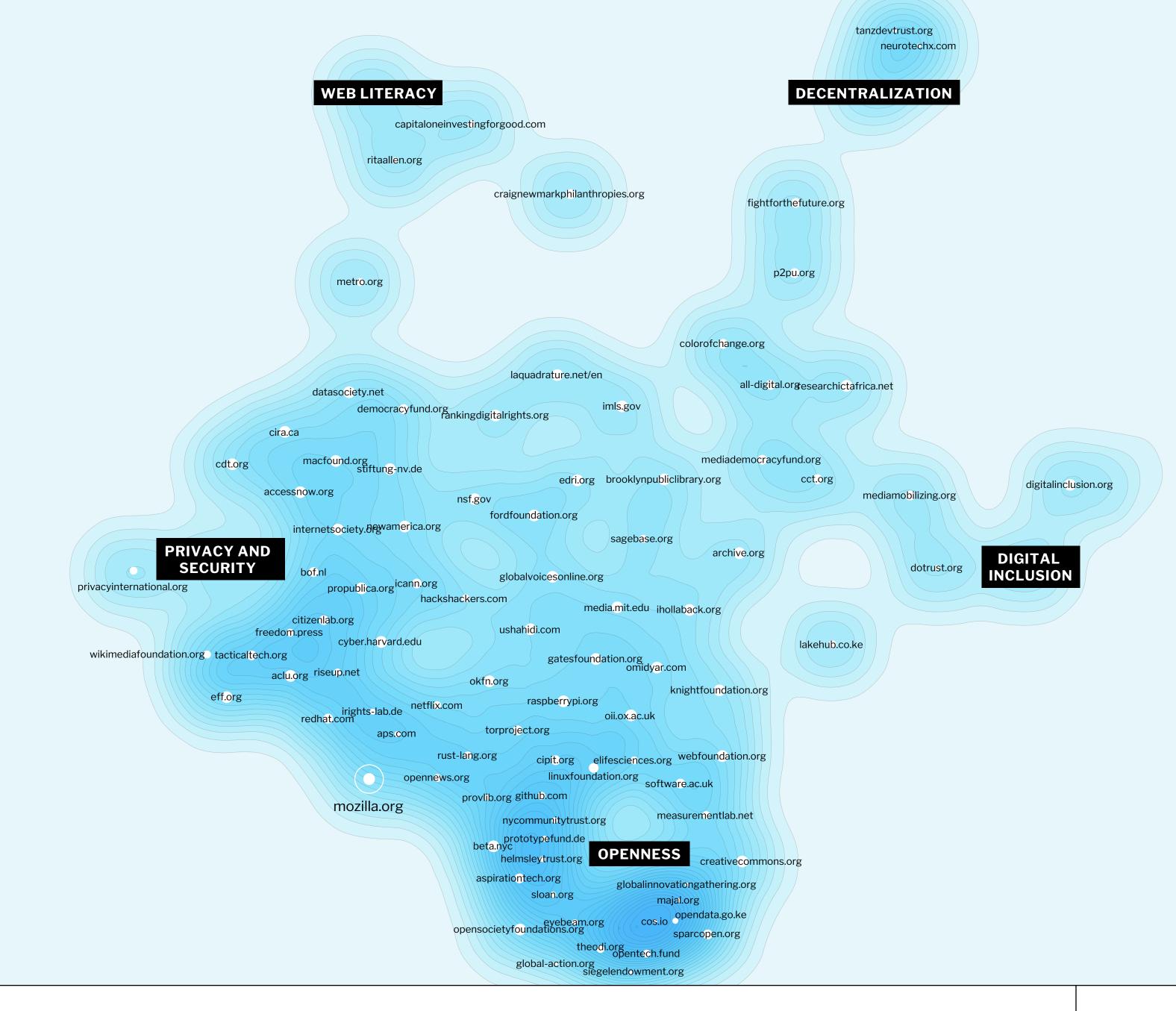
### Interactive Visualization

## The Network of IH topics

The network shows how the Organisations are clustered according to the number of results per topic. The 5 topics act as poles, attracting the organizations.

We can see a high density of organizations in the area around Openness and Privacy and Security. The fact that certain queries related to the other topics returned few results is visible in the many gaps around the other three poles.

Mozilla can be found in a very dense area of the network, in between the two most important topics of the IH space. The same space is occupied by big actors (such as EFF and Wikimedia), while the other topics are covered by smaller organizations that are less linked to Mozilla (see the first visualization).



17

moz://a Mapping the Internet Health Movement

## Main insights

The organizations that we can consider part of the IH space are mostly based in few cities and countries (mostly USA, Canada and EU). Some crucial areas such as Asia, Russia and Middle East seems far from the allies space.

Every year new organizations are funded and enter the IH space.

Many organizations that can be recognised as IH allies don't have formal relationships with Mozilla, that is mostly linked to non profit orgs and foundations. Mozilla seems far from governative and intergovernative actors.

If we look at the IH topics we can see that there is a particular interest around topics that are already largely discussed in the public debate (such as *Privacy and Security* and *Openess*). Important topics, such as *Web literacy*, emerge less than others, probably because are less central in the news. The lack of a defined and well established vocabulary to describe them is probably influencing the results.