

Decidim Fest 2022 Report

# **Decidim.Vis: A viewer of participatory processes in instances of Decidim**



This report was drafted by Tecnopólítica and Platoniq members. The report from the technical group, drafted by David from Platoniq, is available [here](#). This document has a CC-BY-NC-SA license. This license allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator.

## Introduction

Since 2018, the Decidim community has repeatedly debated the need to create a Viewer to make Decidim more transparent and reflective, that enhances knowledge about the platform, inside and outside the platform. And that favors the improvement of the processes that take place on the platforms. The Decidim.vis project, led by [Tecnopolitica](#) (IN3/UOC) within the framework of the [D2](#) space, in collaboration with [Heuristica](#) and [Platoniq](#), aims to address this need. Our proposal is to design the viewer through an accelerated participant experience workshop. We presented this project on Friday 14 October 2022 during the [DecidimFest22](#), the international conference meeting of [Decidim](#) digital participatory platform.

## Objectives

Starting from debates and works previously developed by the community, as well as a prototype launched before Decidim Fest, this session had two objectives:

**Objective 1.** Collect proposals and needs, through an accelerated session of Participant Experience (PX).

**Objective 2.** Mobilize a team of people interested in developing the viewer. After it, the needs and proposals collected, as well as the people interested in contributing to the development, will be incorporated into a plan that will be executed between October and December of this year. This development will conclude with the release of a version of the display prototype, in January 2023.

## Groups overview

Here's only a copy/paste to show the overall preliminary results of each working group, in total 4.

**G1. Tech Group.** Addressing the technical limitations in the interaction with the Decidim API and data as well as with the visualization possibilities

During the workshop, participants were introduced to the Decidim data viewer at [viz.platoniq.net](#). The session was conducted in English due to the international presence of Decidim ecosystem workers. A methodology provided by Platoniq, consisting of generating User Stories, was used for the attendees' contributions. During the discussion, many technical questions were generated, which can be grouped into the following categories:

- Front (Usability, graphics, responsive)
- Back (Frameworks, languages)
- Servers (Number of servers, features)

## Key Questions

- How do we address the problem of interoperability between Decidim instances?
- How do we download and work with the large amount of data available in the Decidim API? Do we resort to massive data? How do we ensure the update of massive data?
- How do we display large amounts of information in web format with the current limitations of web browsers? Can we make a 'responsive' viewer?
- How do we address the current limitations of libraries or frameworks for information visualization?
- What should be the development methodology to follow?

## Results

In the debate there was participation from members of data analysis teams in other companies that commercialize Decidim, so it was possible to go into detail about solutions, as well as to share the need to generate 'joint' spaces on data analysis in Decidim.

In the work of the User Stories we managed to get these contributions in the form of postit within the canvas

## Cards

*Responsive view as a secondary issue now*

Although we understood the need to provide the application with the ability to be responsive, it was considered more appropriate to work on the relationship with Decidim and the data visualization itself.

*Provide possibility to download data sets for scientific purpose*

It was considered necessary to provide users (especially researchers) with the ability to download the data being visualized directly.

*As a Decidim advertizer /integration*

Add the ability to "export" the graphs, as well as to embed them in other websites through iframes, which would allow to close the circle with the Decidim instances themselves.

*DB Periodical task (prepare data for viz).*

In order to be able to manage the massive data of the Decidim instances, it is considered necessary to have a periodic management of the download of this data for its later processing inside the backend.

*For graphs*

Use specific lib

Precreate image on back

Maptiles

For graphs, it was decided to be able to specialize different data using specific libraries instead of generic ones. It should be possible to find different Javascript libraries that allow more concrete and powerful graphics, outside of generic ones such as D3.js.

In order to relieve the client of the need for computing power, two solutions were proposed. The first one is the generation of images, either in .png or .svg formats that could be downloaded in the visualization with very little computational need. The second proposal is the generation of maps, with their tiles, that would allow navigation within the data as we can find in openstreetmaps type maps. On the other hand, these two solutions limit the ability to interact with the graph data itself.

#### *Decidim version selector*

One of the most basic data when we want to extract information from a Decidim instance is the version. The different versions can provide us with additional information, but it forces us to generate queries for each one of them, being in some cases compatible, but they should be studied. A Decidim version viewer is required, as well as the filtering of instance data based on the version.

#### *Key developer flow of the Decidim self by using MetaDecidim*

In reference to the participation of the Decidim community in the development of the application, it is proposed to centralize it within the ecosystem itself using the meta.decidim.org instance.

#### *Possibility to integrate non-decidim data like special dates*

The decidim data show us the concrete interactions that take place within the instances, but do not provide us with external data that can have a great influence on participation. It is proposed to add the ability to visualize, for example in a temporal graph, marks with references to external elements (e.g. visualize the fall of a government, a case of corruption, etc).

#### *WebGL if there is a lot of data. But first is it necessary so much data?*

In this case we are asked if it is really necessary to visualize so much data. If so, WebGL could be used for these visualizations.

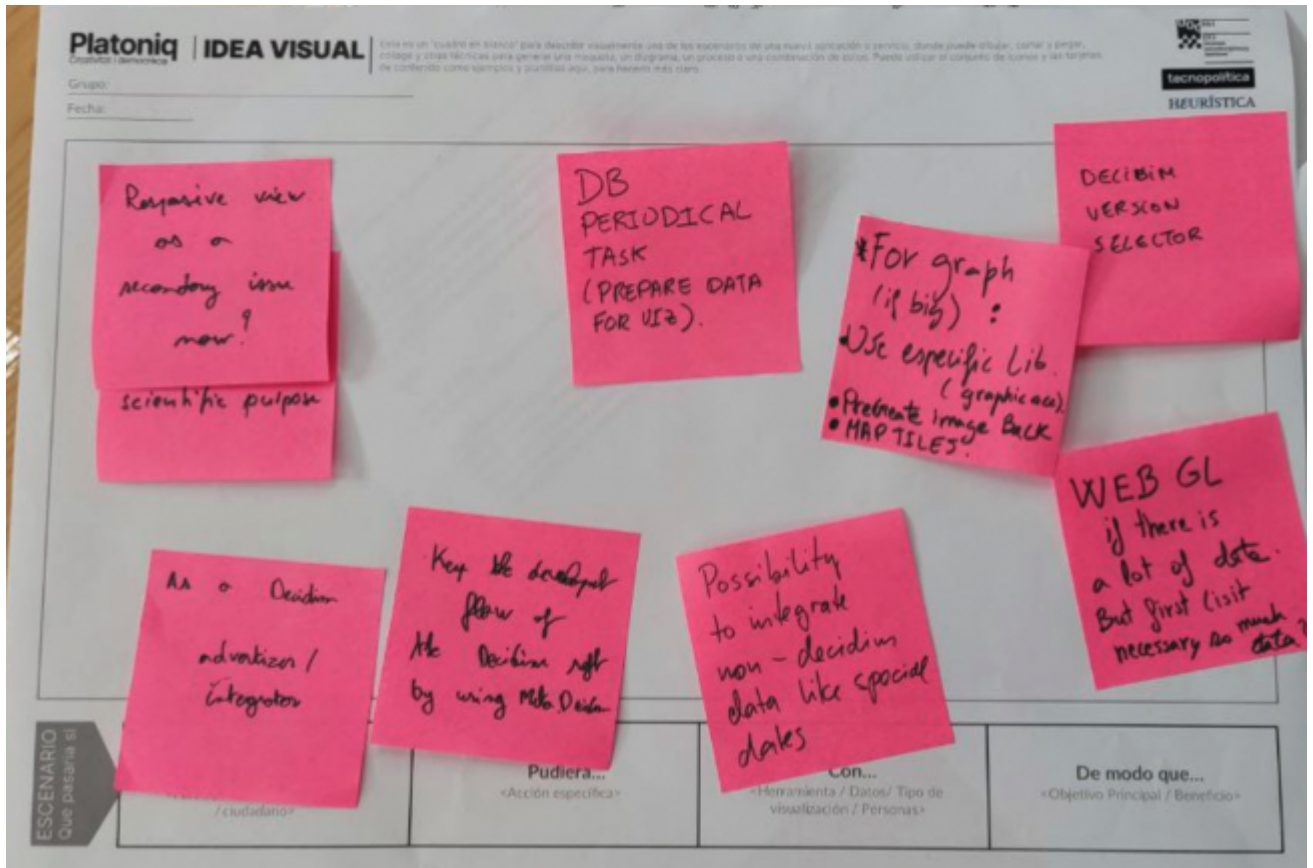
#### *OSP (Contribution of the Open Source Politics team)*

In this section, we gather the contributions of the Open Source Politics team.

As a Decidim.viz administrator I could add a Decidim platform, by giving its URL and with version detecting HTTP call the decidim instance can be correctly processed backend by having specific branch-based table definition

As a member of the decidim community I can participate to the development process on meta.decidim.org to give to features that can be implemented with which funding

As a researcher I can download the public dataset used for visualization with the available Download button on the interface in order to fulfill my paper publication purpose  
 In this case, the contributions are self-explanatory and there is no need to dig deeper into their content.



**G2. Research Group.** Collect research-related needs and proposals for improvement + Collect references from other visualizers and academic literature on the subject

### Key Questions

- As a researcher, what metrics and parameters do you think Decidim.viz should incorporate?
- What improvements can be made to the ways of presenting the data and metrics in the prototype?
- Are there any data or metrics that should be incorporated into the Decidim data ontology?
- What academic or visualization references do you think can serve as a reference for development?

**Results**

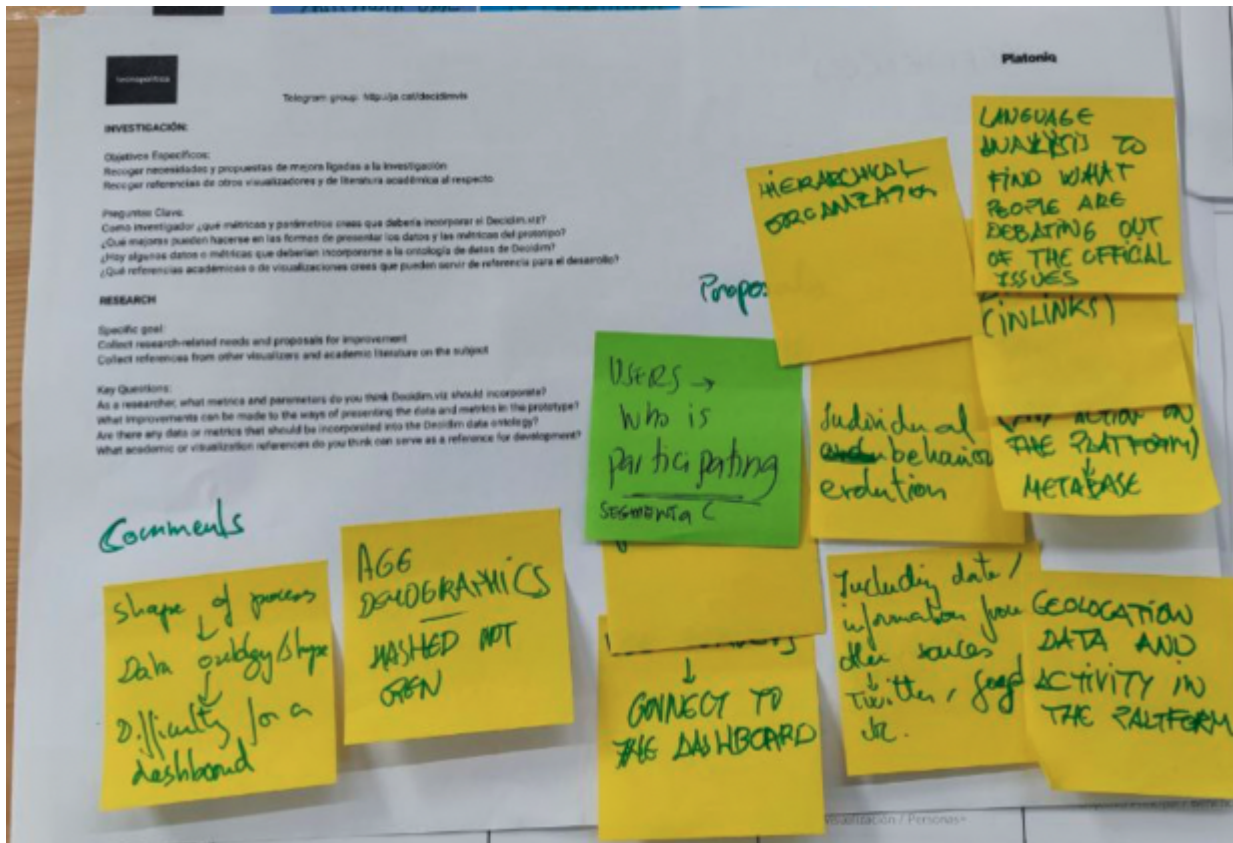
*Comments*

Shape of process->Data ontology/shape->Difficulty for a dashboard.

Aclaration: Age demographics in Decidim are hashed not open.

*Proposals:*

- Language analysis to find what people are debating beyond the official issues (types of discourse, modulation of the language, convergence of arguments, etc.).
- Language analysis of user profile (types of discourse, modulation of the language, etc.).
- Invitation data (inlinks).
- Raw activity viewer (aggregates any action registered on the platform database). This has been developed in switzerland using database.
- Individual behavioral evolution, including data/informaiton from other sources (twitter, Google, etc.).
- Use surveys connected to Dashboard for issues not easy to track.
- Interesting reference: darkmatter labs.



**G3. Storytelling Group.** Imagine how data visualization can intervene in the construction of the citizen participation framework

## Key questions

- What can data visualization contribute to narrative processes of a participatory nature?
- What stories can be built around data visualization in the context of citizen participation and radical democracy?
- What are the messages that we can/want to convey through this type of visualization?
- Who are the actors involved and how can they relate to each other?
- How can data visualization be used not only as an exercise in transparency but also in citizen empowerment?
- Is it possible to generate other itineraries or entry channels to the platforms through narratives based on data visualization?

## Results

Stories: to build a different narrative of the polarisation)

Visual fingerprint of activity for each user. Inputs include:

- Activity content
- Types of activity
- time since last activity

Visualization as informative and interactive element.

Use of game mechanics to promote debate displayed in the visualization.

Use of visualization to take decisions during any process.

The visualization as an early tool to motivate participation.

Interactive participation through the visualization

How to visualize qualitative data.

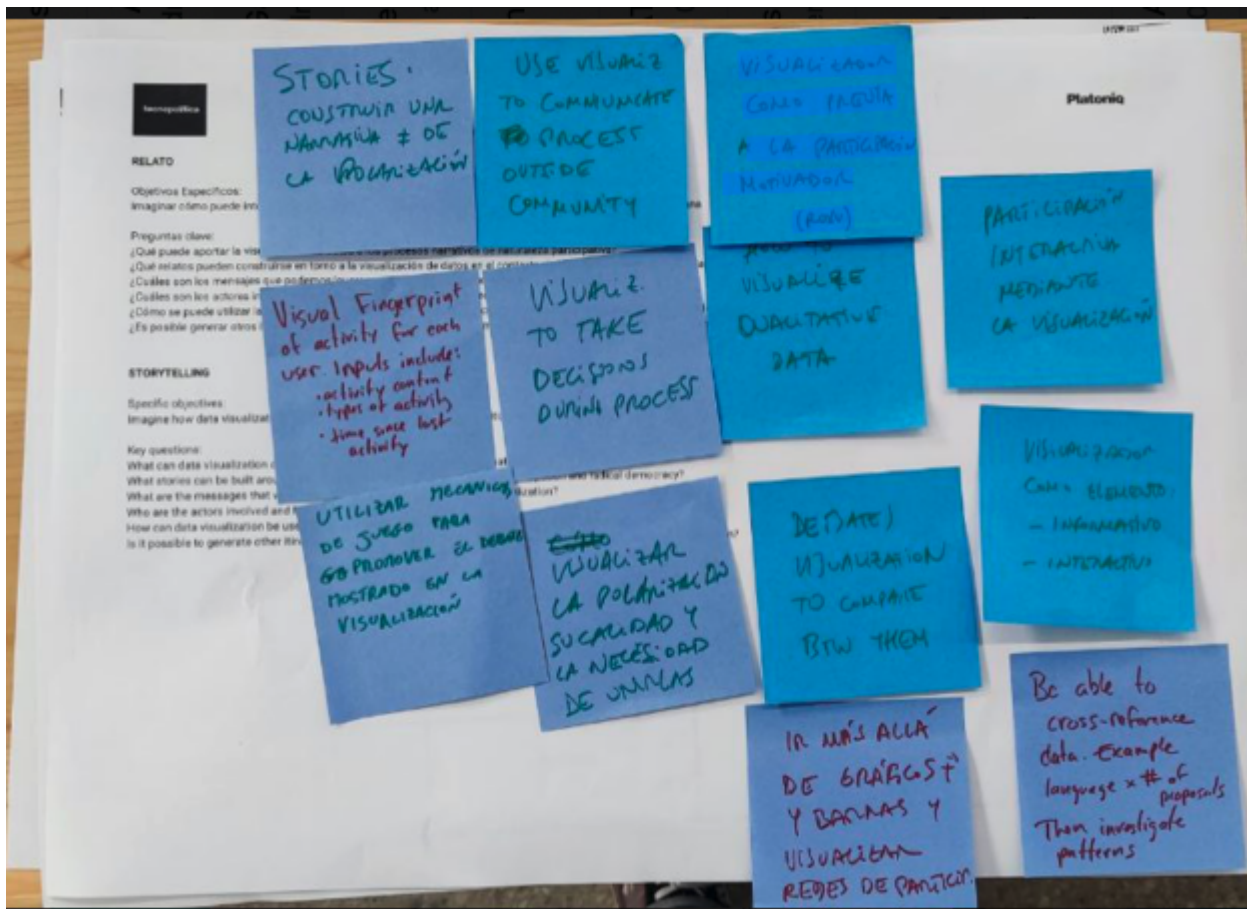
-debates in the visualization to compare between them.

Go beyond cake and bar graphics and begin to use visualization of nets of participation.

Be able to cross-reference data, for example:

Language of different proposals and interactions and then analyze the patterns.





## G4: Participant Experience Group. Collect needs and proposals for improvement (generic)

### Key Questions

- What impression does the visualizer prototype generate? Strengths and weaknesses of the visualizer prototype? What would you add or modify? How would you improve the design?
- What aspects would you like to have in a visualizer and what not so much, is there a hierarchy of preferences?
- What design and visualization systems can be implemented?
- What visualizations could be used, what kind of graphs and representations?
- Do you know references or analogies?
- What should not be displayed?

### Results

### 1st question

What impression does the visualizer prototype generate?

.Bland, too classic, not sexy and monochromatic

What are the strengths and weaknesses of the visualiser prototype?

(-)

.Histogram for visualizing the number of endorsements per proposal is confusing since histograms are supposed to represent changes over time of one particular variable/event

.To display the names of users may be problematic.

.Confusing architecture between activity and statistics (what is the difference? should they really be different?)

.Statistics figures are too empty to be the first thing displayed

.Many bar is too large while the subcategories are too compacted and small

(+)

.It's interactive.

What would you add or modify?

.More metrics and visualizations in one view (less scroll and more compact)

.More colours

.Better use of space (make use of empty spaces)

.Divide the background into sections

.Improve the architecture of the information

### 2nd question

What aspects would you like to have in a visualizer and what no so much, is there a hierarchy of preferences?

.Diverse visualizations rather than one unique prototype.

### 3rd question

What design and visualization systems can be implemented?

.Geographic map to visualize the languages used

.Design thinking (to implement a validation and feedback system through forms perhaps)

### 4th question

What visualizations could be used, what kind of graphs and representations?

.Histograms (horizontal and vertical)

.Linear graphs

.Doughnuts/ pies/ half doughnuts

.Maps

### 5th question

Do you have references or analogies? .Power BI

.Metabase

6th question

What should not be displayed?

. User's names and private information



