# GEO-C

# Initiative City Data 3.0

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## Context

For a long time, one of the main authorities' concern was to set up and populate open data portals with high data quality web services (Attard, Orlandi, Scerri, et al., 2015), so that they were enriched by large data catalogs that follow most of the current standards (Blaim, 2014).

However, the current challenge is not only downloading data or publishing web services; it is about data consumer requirements, their needs, engagement and about finding the way to involve them to be a part of the data selection process.

Recently, re-usability and discoverability are most frequent topics of discussion in events on open data and geographic standards. Several talks presented about data user's engagement mechanisms, tools to improve available information, re-usability and some use cases to link data consumers with open data portals.

Nevertheless, there are still rooms to improve the usability of geographic information. For instance, what is the usefulness level of available published geographic information in cities' open data portals? Are cities effectively using these available services to promote transparency, collaboration, and entrepreneurship? What strategy can improve re-usability and discoverability level of published geographic information in open data portals?

## Actions

Figure 1 displays the methodology which has three phases on how to develop initiative. Phase No. 1 is devoted to the analysis and understanding the barriers, Phase No. 2 focuses on the strategy and defining the indicators to assess the reuse level, developing a website to display the available open data and finally phase No.3 is about testing the strategy and usefulness of the created website.

Through an online survey with 152 valid responses and a series of participatory workshops phase No.1 is about to finish..
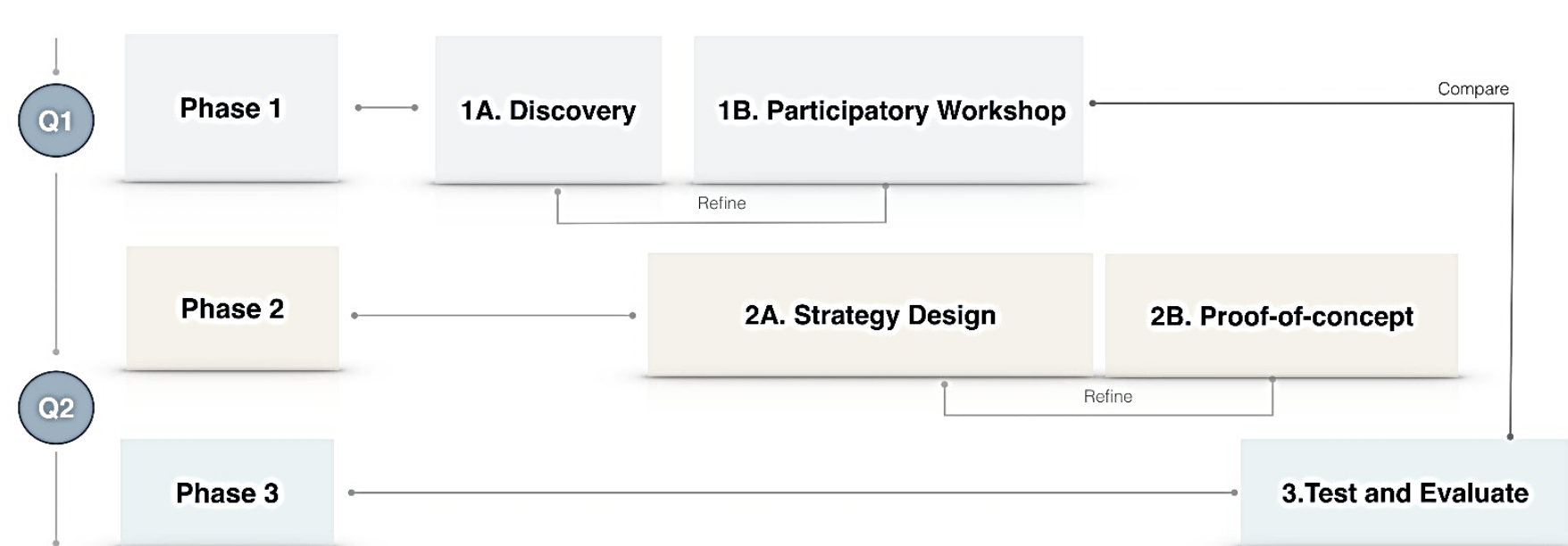


**Figure 1.** Methodology

## Challenges

The focus of this project is to study the current barriers that provide data consumers (developers and analysts) full advantage of available open geographic data in cities.

The aim is to create a generic strategy to promote and assess the reuse of geographic information in cities.

Therefore, the challenges are as follows:

- **No.1:** It is possible to determine the usability barriers that prevent the published geographic data in the cities to be used by data consumers.

- **No.2:** Study a relationship between these identified barriers and the re-use level of available geographical data on cities.

- **No.3:** Create a generic strategy to improve the re-use and discovery level of geographic information available in cities.



**Figure 2.** Use cases

## Impact

This project can be useful for local authorities that already have the open data portals. They have made a huge effort to make available open geographic data, but they also need some approaches to assess the benefit of this information for their data consumers. Find a way to use this information and transform it in social and economic benefits for the city.

The targeted cities (**Bogotá**, **Medellin**, **Valencia** and **Lisbon**) were interested in being a part of the initiative process, because they understood that evaluation of open data discoverability and reuse level is the next step to improve their open data portals and its related actions.

The project has contacted some data consumer's communities (Data activists, developers, analysts, entrepreneurship) who are interested to find and reuse the available open geographic data in an effective way.

GeoGeeks, BigDataCol, GeoDevelopers, Medellin City hall, Bogota, City Hall, Cali City Hall, and Valencia City Hall, Lisbon City Hall are the communities and authorities that reach some benefit of this project (Fig. 2).

## Results

The initiative is in the final part of Phase No.1, which mean that Discovery and Participatory workshop sub-phases are about to finish. The following summary describes the gathered results.

- **Online survey:** Using social networks, email lists, and events of open data community in Colombia and Spain, an online survey was shared to understand the current barriers, features and perceptions of open geographic data in the targeted cities. (see Fig 3.)

- **Open Data for Open Cities participatory workshops:** During the last three months the initiative was to focus on collecting barriers and perception of the impact and reuse level in the selected cities as use cases. Bogotá, Medellin in Colombia and Castellon de la plana in Spain were the cities where took place these workshops with more than 100 attendants to discuss, evaluate and collect suggestions to improve the reuse level of open geographic data in cities.
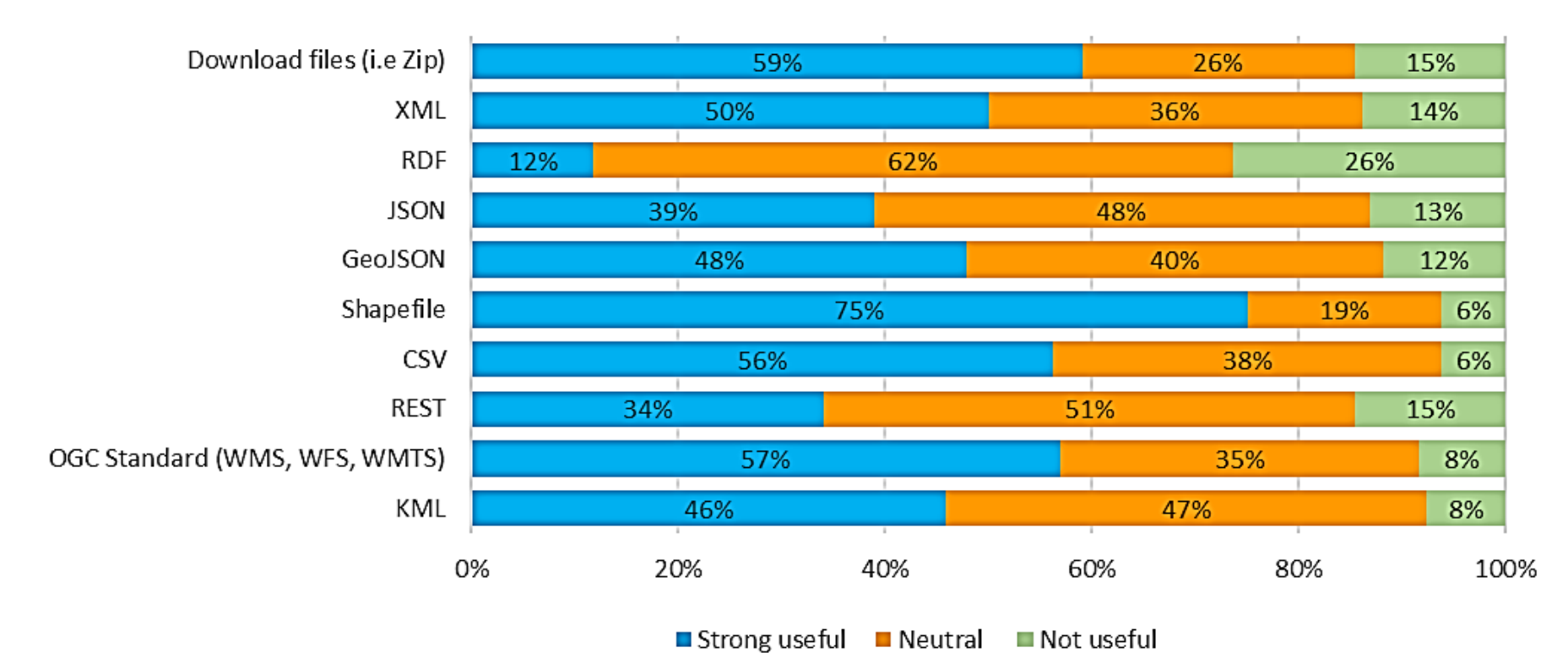


**Figure 3.** Formats considered most useful. n= 144

## Scaling Up

This initiative enriches authorities to have a strategy in order to engage and assess the reuse of the open data in cities. To better understanding the behavior of the cities, the next step is to integrate the project with other research themes such as a participatory framework to understand which information the authority should consider and focus to improve their upcoming decisions.

Lack of standardization and incorrect metadata are the most persistent barriers. This project can be used to evaluate and develop a new methodology to improve issues related to interoperable formats, data vocabularies, structures as well as high-quality standardized metadata.

# CityData 3.0

## Consortium

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## Acknowledgements

## References

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