A different way to display the geographical information to developers and analysts in cities' open data portals – CityData 3.0

Ph.D Candidate, Fernando Benitez | Supevisor: Pr. Dr Joaquin Huerta | Universitat Jaume I - GeoC : Enabling Open Cities - http://geodata4opencities.org - http://geo-c.eu

Problem statement

- Currently, the data consumer needs to find the geospatial information in several cities' open data portals. Is needed deliver a way to integrate in a standard way the available services.
- What kind of strategy is possible to apply to assist data consumers to finding the relevant information for their projects? How we can attend to data consumers in improve the level use of available information?

Research questions

- What are the usability barriers that prevent the geographical data published in the cities' open data portals to be used by data consumers?
- What is the relationship between these identified barriers with the re-use level of available geographical information on cities' open data portals?
- What strategy is needed to improve the re-use of geographical information available in cities' open data portals?

Project overview

- One of the elements of open data and open data government initiatives is to promote transparency and collaboration between cities stakeholders. Open data portals are initiatives that allow the use or re-use of this information and transform it, in new ways that can support the real need of the citizens. However, the current goal for the data portals authors, local authorities, and local governments is engagement the final users, promote de re-use.
- This project is a focus on identifying and studying the current discoverability and usability barriers that prevent data consumer can find the geographical information and finding the strategy to assist them in the data selection process in available open data in the city. The project expects to contribute to improving the current approach of cities' open data portals from the data consumer perspective (Vullings & Wageningen; Jandirk; Frans I. Rip; Martijn Boss, 2015), organizing the geographical information according to their needs and avoid the identified barriers. CityData.3.0 present the new way to discover the Geo Open Data available in the city.

Data consumers

Developers

- who want to use the city geographical information to develop the web or native applications.
- Startups companies, media.
- Public agencies or universities developers groups.

Analysts

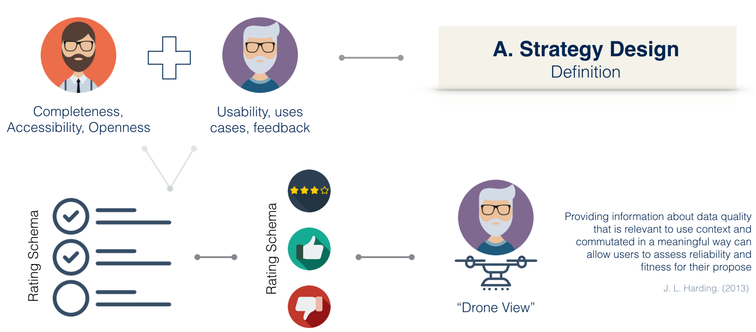
- Who use the available information in those data portals in a relevant way for the general public, they have the capability to create new services and new functionality, for re-use the information published.

Use cases

Data Users Groups	Members
GeoDevelopers	+ 800 Members
GeoGeeks	+ 800 Members
Lisbon Open Data Community	+ 300 Members
IDECA Community	Bogota City Official SDI
GeoMedellin	Medellin City GeoPortal

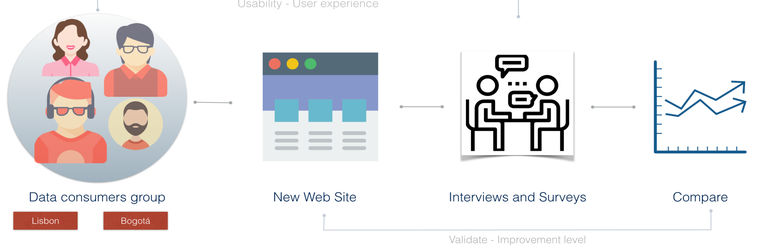
Methodology

Project proposal



Proof of Concept : "Drone View for Developers "

- Broker Concept: Integrating several APIs or Endpoints in only a One Standard Services such as GeoJson in order the developers can use just this interface.
- Rating Scheme: Using a identified barriers and spatial data criterions the porject will create a new rating scheme to rate the avaliable services based on the data consumers prespective.
- "Drone View": The project will create a web site where data consumer can see the issues and features of the avaliable information in cities' data portals integarted.
- Feedback: Data consumers can add their opinion and use case in order to rate in a better way the available service, this feedback will affect the rating scheme.



Current status

- Currently, the project is in Discovery phase, where is expect to collect all the barriers that data consumers have.
- Using the survey (http://bit.ly/COD_En) and the citygeoportals.com the project has an online campaign to collect until november 2016 all the issues that not allow using the available information.
- The project will compare the new strategy, broker implemented and feedback component with data consumers of several cities in order to establish if the data selección, discoverability and usability level of the current cities' open data portals can be improved. Using the indicators established in the strategy definition phase.

References

- Vullings, W., & Wageningen; Jandirk; Frans I. Rip; Martijn Boss. (2015). Spatial Data Quality: What do you mean? Retrieved April 4, 2016, from https://agile-online.org/Conference_Paper/cds/agile_2015/shortpapers/87/87_Paper_in_PDF.pdf
- Schmidt, B., Gemeinholzer, B., Treloar, A., Tenopir, C., Allard, S., Douglass, K., … Bendix, J. (2016). Open Data in Global Environmental Research: The Belmont Forum's Open Data Survey. *PLOS ONE*, *11*(1), e0146695. http://doi.org/10.1371/journal.pone.0146695
- J. L. Harding. (2013). DATA QUALITY IN THE INTEGRATION AND ANALYSIS OF DATA FROM MULTIPLE SOURCES: SOME RESEARCH CHALLENGES. Retrieved March 23, 2016, from http://www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-2-W1/59/2013/isprsarchives-XL-2-W1-59-2013.pdf

geo-C Joint Doctorate in Geoinformatics: Enabling Open Cities
Universitat Jaume I
NOVA IMS Information Management School
European Commission Marie Skłodowska-Curie actions
Westfälische Wilhelms-Universität Münster
Geotec Geospatial Technologies Research Group
geodata4opencities.org
@mfbenitez