

Navigating the Ecosystem Perspective to Maximise the Value of Open Government Data

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Today

- 1 Theoretical Background
- 2 Context of the Study
- (3) Navigating GeoFA as Ecosystem

PERSONAL PROFILE María Elena López Reyes

- MSc | Strategic Product Design (TU Delft, NL)
- Digital Transitions (6+)
- Sustainable Transitions, Participatory City-Making & Complex Service Systems.
- PhD | Aalborg University, Copenhagen
- Department of Communication and Psychology, Purposeful Technology Lab
- **Towards Sustainable Open Data Ecosystems (ODECO)**
- Maximising the Availability and Use of Local Government Open Data







THEORETICAL BACKGROUND Ecosystem Perspective



(Image: Motion Story, Swell Consulting 2020)

- Coordination and collaboration beyond government efforts are needed (Harrison et al., 2012; Pollock, 2011; Zuiderwijk et al., 2014).
- OGD value creation: complex and requires several actors (Charalabidis et al., 2018b)
- Data suppliers determine the delivered value (Kitchin et al., 2018).
- Open data providers are mostly unaware of their data's use and user (Van Loenen et al., 2021).
- Data asymmetries (Verhulst et al., 2020)







THEORETICAL BACKGROUND Ecosystem Perspective



(Image: Motion Story, Swell Consulting 2020)

- System of people, practices, values, & technologies in a particular local environment (Nardi & O'Day, 1999)
- Cycle and recycle available data (Pollock, 2011)
- Collaborative data value creation (Pollock, 2011)
- Internal and external data use (Share-PSI 2.0, 2016)
- Multi-scale interactions (Zuiderwijk, 2015)
- Cross-sector and cross-organisational
 participation (Mulder et. al 2019)







- Link the use of Open Government Data to the Ecosystem.
- Use Value: how individuals perceive the qualities and utility of products, services or activities (Bowman & Ambrosini, 2000).
- Society-wide: how people perceive this impact instead of taking a public or private perspective (Halmos et al., 2019).
- Society > organisation > community (Den Ouden, 2012).









- What is the current social use value of local open government data?
- 2. What are the dynamics for using local open government data?
- 3. What are the outputs of using local open government data?







(1) What is the current social use value of local open government data?









(2) What are the dynamics for using local open government data to gain value?









(3) What are the outputs of using local open government data?









Social Use Value of local OGD		Dynamics of local OGD Use		Local OGD Use Output
Solution-driven	Is OGD use solving problems?	Operational	What are dynamics for using OGD in terms of operation or process?	Output
Relation-driven	Is OGD use improving relations?	Technical	What are the dynamics for using OGD in terms of technology or functions?	What form does the OGD use take?
Knowledge- driven	Is OGD use promoting knowledge?	× 5 ●× Strategical	What are the dynamics for using OGD in terms of strategies?	







CONTEXT OF THE STUDY Multiple Exploratory Case Study



Geo-FA

- 1. What is the current social use value of GeoFA?
- 2. What are the dynamics for using GeoFA data?
- 3. What are the outputs of using GeoFA data?







CONTEXT OF THE STUDY Multiple Exploratory Case Study



- 6 Use Cases
- System of people, practices, values, and technologies (Nardi & O'Day, 1999)
- Cycle and recycle available data (Pollock, 2011)
- Collaborative data value creation (Pollock, 2011)
- Internal and external data use (Share-PSI 2.0, 2016)
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Use Case







(1) Social use value of GeoFA data

Is OGD use solving problems?

- Planning of Connections.
- Save Time and Prioritise.
- Planning Efficiency.
- Integral Approach to Essential Activities such as Mobility.
- Address Participation Inequality.
- Coordination between Municipalities.
- Value and User-friendliness of Data
- Environmental and Health Transformations.
- Inclusive Policy-making.





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(1) Social use value of GeoFA data

Is OGD use improving relations?

- Planning and Coordination.
- Breaking Down Silos.
- Cross-Border Collaboration.
- Awareness and Engagement.
- Addressing Common Goals.











(1) Social use value of GeoFA data

Is OGD use promoting knowledge?

- Access to Essential Functions.
- Inclusive Data Accessibility.
- Identifying Infrastructure Improvements.
- Understanding User Needs.
- Enhancing User Experiences.
- Critical Consciousness for Decision-Making.
- Knowledge-Networks for Collaboration.









(2) Dynamics of GeoFA data use

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In terms of the process?

- **1. Discover:** identify, understand, discuss, align, re-value, evaluate.
- 2. Collect: prioritise, collect, register, validate.
- 3. Publish: centralise, release, disseminate.
- 4. Uptake: connect, incentivise awareness, support.
- 5. Impact: ensure reliability, and compatibility, integrate, and engage.
- 6. Follow-up: update, maintain, feedback, document, showcase.











(2) Dynamics of GeoFA data use

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In terms of the technology?

- Integration with existing systems: avoid duplication and ensure consistency.
- Accessible Formats: across different platforms. Open APIs to connect different systems and allow various uses.
- **Data Infrastructure:** centralised databases, standardised data formats, easy access to up-to-date information.
- User-centric approach: user-friendly tools and interfaces.
- Long-term sustainability: maintenance, update, and coordinated databases.





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(2) Dynamics of GeoFA data use



In terms of the strategy?

- Cross-scale and cross-sectorial partnerships.
- Alignment and Common Ground.
- User-driven Accessibility.
- Ensure Maintenance.
- Overcoming Silos.
- Strategic Development.
- Communication and Awareness.
- Ensure Political Value.









(3) GeoFA data use output

use output?

- Information for different groups.
- Research Output.
- Apps and Web Platforms.
- Datasets and data catalogues.
- Data Integrated Systems.
- Diagnosis Reports.
- Policy-making Evidence.









FOLLOW-UP Next Steps

"you need to be humble because if you just say all the time – Oh! but we've got this change, and you've just got to do and just do that –then people get like – you don't hear what I'm saying? – That's dangerous because the Kommune might say they want to use GeoFA, but the person who needs to do the practice is like – f*ck you! – Sorry for my language, but you need people on board because someone needs to do the groundwork. So, you need to be respectful and humble about how to get the people that actually need to do the job."







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