The multiple meanings of open government data: Understanding different stakeholders and their perspectives

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ABSTRACT

As a field of practice and research that is fast-growing and a locus for much attention and activity, open government data (OGD) has attracted stakeholders from a variety of origins. They bring with them a variety of meanings for OGD. The purpose of this paper is to show how the different stakeholders and their different perspectives on OGD can be analyzed in a given context. Taking Chile as an OGD exemplar, stakeholder analysis is used to identify and categorize stakeholder groups in terms of their relative power and interest as either primary (in this case, politicians, public officials, public sector practitioners, international organizations) or secondary (civil society activists, funding donors, ICT providers, academics). Stakeholder groups sometimes associated with OGD but absent from significant involvement in Chile – such as private sector- and citizen-users – are also identified.

Four different perspectives on open government data – bureaucratic, political, technological, and economic – are identified from a literature review. Template analysis is used to analyze text – OGD-related reports, conference presentations, and interviews in Chile – in terms of those perspectives. This shows bureaucratic and political perspectives to be more dominant than the other two, and also some presence for a politico-economic perspective not identified from the original literature review. The information value chain is used to identify a "missing middle" in current Chilean OGD perspectives: a lack of connection between a reality of data provision and an aspiration of developmental results. This pattern of perspectives can be explained by the capacities and interests of key stakeholders, with those in turn being shaped by Chile's history, politics, and institutions.

Overall, stakeholder analysis and perspectives analysis are shown from this case to be workable techniques for OGD that add value by exposing the identity, power, motivations, and worldview of key actors. They provide a necessary foundation of knowledge for both researchers and practitioners who need to understand the different meanings of OGD in any particular context.

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1. Introduction

From origins in Freedom of Information up to the present day, there is growing practice of open government data (OGD) initiatives around the world, with a particular expansion during the 2010s. This has occurred within individual governments such as the US (Obama, 2010) and UK (Cabinet Office, 2012) and has been driven forward by global organizations such as the World Bank (2012) and United Nations (2013) and through the advent of the Open Government Partnership (OGP, 2015a).

This has therefore become a topic of increasing importance, with a growing level of interest and involvement from policymakers and practitioners both inside and outside government. Mirroring this growth in practice has been a growth in research and literature on open government data (e.g. Kalampokis, Tambouris, & Tarabanis,

2011; Luna-Reyes, Bertot, & Mellouli, 2014; Robinson, Yu, Zeller, & Felten, 2009; Ubaldi, 2013), even though as yet the overall extent of research and literature on OGD is still quite limited.

Like many fields experiencing rapid growth from small beginnings, open government data has attracted commentators, strategists, and practitioners from a variety of origins: "There are a *lot* of different voices in this space" (Howard, 2012a). They bring with them different understandings and different visions of OGD. At present, these different stakeholders and their different perspectives are not well understood in OGD. This will be a problem for analysts and researchers if they assume those working within the OGD field share common understandings and meanings, when in fact they may not. But it will be even more problematic for practice. We know from existing experience in the related field of e-government that a failure to identify different stakeholders and their views causes problems for projects and, conversely, that analysis of stakeholder perspectives can make initiatives more effective (Axelsson, Melin, & Lindgren, 2013; Saebo, Flak, & Sein, 2011).

The focal question for this paper is, therefore, "What are the multiple meanings ascribed to open government data?" We instantiate this with

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a specific case study in the context of Chile, which asks three sub-questions:

- Who are the different stakeholders shaping the meaning of OGD in this context?
- What are the different meanings these stakeholders give to OGD in this context?
- Why are the different stakeholders ascribing these particular meanings?

The main contribution of the paper is to help all those working with-in the field of OGD to understand the different perspectives and motiva-tions of the various other stakeholders who work alongside them on open government data, or whom they research. Conceptually, we pro-vide a first application of stakeholder analysis to OGD, and also analysis of perspectives. Alongside assisting OGD researchers, we argue that ap-plication of these two analysis techniques will have a practical value in helping improve the likely effectiveness of OGD initiatives. In turn, that greater effectiveness should have a broader social value in delivering the intended political and economic benefits of open government data.

The structure of the paper is as follows. In the next section, there is a literature-based review of the different perspectives that exist on OGD, then followed by an explanation of the research methodology utilized. Findings about key stakeholders in the Chilean context and their per-spectives are given next. Finally, the paper offers some explanation of these perspectives and draws conclusions.

2. Perspectives on open government data

If, as noted above, an understanding of differing open government data perspectives can make for more effective OGD analysis and prac-tice, how can we identify those perspectives? A starting point will be a reduction of OGD into its three foundations – open, government, and data – as shown in Fig. 1 (developed from Howard, 2012a; Yu & Robinson, 2012). This creates three entry points to OGD:

- *Government data* approaches originate in government being the single largest collector, user, holder, and producer of information about citi-zens, organizations, or public service delivery (Heeks, 2006). A partic-ular concern is with the way in which that data, as a resource, can best be managed within the public sector (Otjacques, Hitzelberger, & Feltz, 2007).
- *Open data* approaches are not sectorally bound but originate in the in-formation and communication technology- (ICT-)related innovation and diffusion which potentially enables much greater accessibility of data than previously (Braunschweig, Eberius, Thiele, & Lehner, 2012). A particular concern is overcoming barriers to this accessibility through innovations in the way data are captured, stored, processed, and output (ibid., Janssen & Zuiderwijk, 2014).
- *Open government* approaches originate in beliefs that government decision-making and actions should be more transparent and partici-pative (Meijer, Curtin, & Hillebrandt, 2012). A particular concern has been finding ways to empower citizens individually and organizations of civil society collectively through the process of opening govern-ment (Lathrop & Ruma, 2010).

Taking these three different approaches as our foundation, we then began an iterative process of comparing the approaches with the views expressed in literature on open government data. That literature was identified via search term "open government data" starting with more highly cited items but filtered to focus on sources in which differ-ing perspectives were discussed; derived either in relation to OGD prac-tice or to OGD conceptualization (for example, Davies, 2010; Huijboom & van den Broek, 2011; Janssen, Charalabidis, & Zuiderwijk, 2012; Ubaldi, 2013 plus sources cited below). We continued the iterative process of analyzing literature content, discussing and refining the
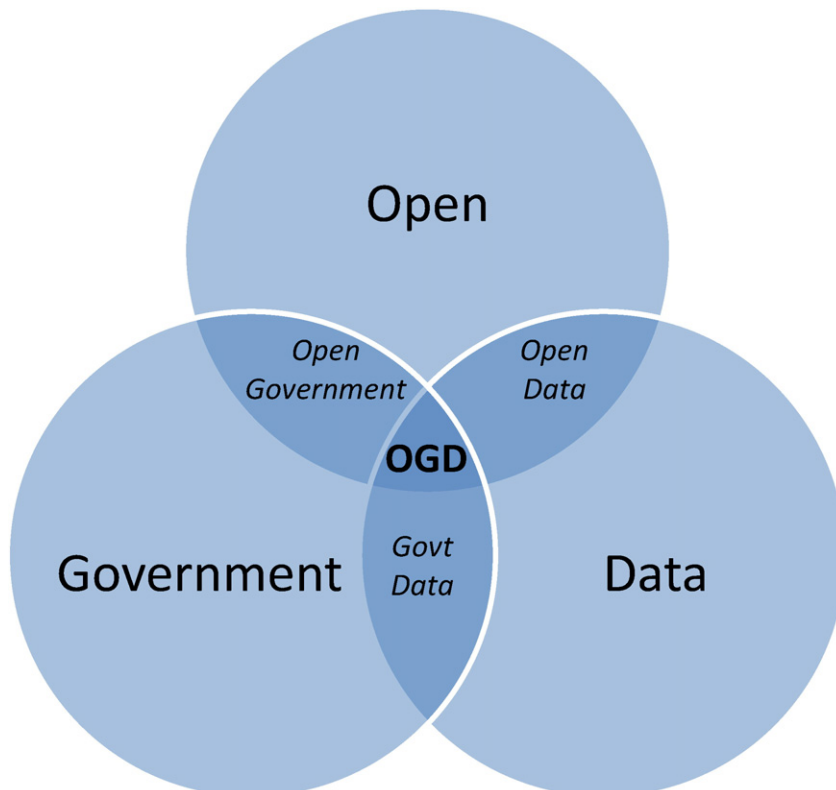

Fig. 1. Foundations of open government data.