

Chapter 43

Exploring the Factors Influencing the Adoption of Open Government Data by Private Organisations

Maaïke Kaasenbrood

Delft University of Technology, The Netherlands

Marijn Janssen

Delft University of Technology, The Netherlands

Anneke Zuiderwijk

Delft University of Technology, The Netherlands

Martin de Jong

*Delft University of Technology, The Netherlands
& Fudan University, China*

Nitesh Bharosa

Delft University of Technology, The Netherlands

ABSTRACT

Governments are increasingly opening their datasets, allowing use. Drawing on a multi-method approach, this paper develops a framework for identifying factors influencing the adoption of Open Government Data (OGD) by private organisations. Subsequently the framework was used to analyse five cases. The findings reveal that for private organizations to use OGD, the content and source of the data needs to be clear, a usable open data license must be present and continuity of data updates needs to be ensured. For none of the investigated private organisations OGD was key to their existence. Organisations use OGD in addition to, or as an enhancement of their core activities. As the official OGD-channels are bypassed trustworthy relationships between the data user and data provider were found to play an important role in finding and using OGD. The findings of this study can help government agencies in developing OGD-policies and stimulating OGD-use.

INTRODUCTION

Government agencies produce large amounts of data. With these data being digitally available and the fact that use of Information and Communica-

tion Technologies (ICT) is more widespread than ever, governmental data becomes more and more valuable (Vickery, 2011). Many governmental agencies now look for ways to open their data (Bertot, Jaeger, & Grimes, 2010). One of the

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main potential benefits of Open Government Data (OGD) is that private parties can build added value products and services based on these data: giving the public interactive access (Robinson, Yu, Zeller, & Felten, 2009) and increasing public engagement (Kassen, 2013). Other important benefits of the use of open data are the creation of new services which ultimately contribute to economic growth (Jetzek, Avital, & Bjørn-Andersen, 2012 ; Kalampokis, Tambouris, & Tarabanis, 2011), provide social value (among others knowledge) to citizens (Jeztek, Avital, & Bjørn-Andersen, 2013; Kalampokis et al., 2011), encourage data use (Kassen, 2013; Rothenberg, 2012), enable use and combine open data with other digital content to create innovative added value products and services (Huijboom & Van den Broek, 2011; Jetzek et al., 2012 ; Kalampokis et al., 2011).

To realise these benefits of opening data, OGD must be adopted and used by various stakeholders, including private organisations. We view *adoption* as the intention to use OGD, where higher levels of OGD-adoption can lead to OGD-use (Venkatesh, 2003). Considering the potential benefits discussed in literature, one would expect that many private organizations use OGD. However, in practice there are very few private organisations using OGD, and even fewer that are successfully building profitable products or services solely on OGD. In addition, there is a lack of understanding about the factors influencing the adoption of OGD by private organisations. Understanding these factors is necessary to increase adoption. Moreover, the use of OGD, including the barriers accompanied with this use, is an ill studied topic. To obtain a better understanding of the factors which influence the OGD-adoption by private organisations, it is important to know in which cases OGD are used. With more insight in which factors influence OGD-adoption, open data policies might be adjusted to stimulate the successful adoption of OGD, thus encouraging the use of open data by organisations and increasing the value of OGD.

Which factors influence the adoption of Open Government Data by private organisations? To answer this research question a framework for identifying the factors influencing the adoption of OGD by private organisations is developed. By using this framework to analyse five cases, we develop recommendations for improving the development of open data policies.

By researching how OGD are used by private organisations, and which barriers private organisations face, insight is gained in how the adoption of OGD and OGD-policies can be developed to stimulate the realisation of the potential benefits of open data. Furthermore, this study provides insight and recommendations to private organisations that desire to use OGD.

This paper is organized as follows. Section two provides an overview of literature on OGD-use, which is used to identify factors for adoption of OGD by private organisations. Section three describes the case study approach and explains how the framework has been used to study five cases. The results of this use and the analysis of these cases is described in section four. This paper concludes with recommendations for policy makers who look for ways to stimulate OGD-use by private organisations.

FRAMEWORK FOR INVESTIGATING OPEN GOVERNMENT DATA USE

A framework for investigating open government data adoption and use was developed using two methods. First, a literature review was performed to gather information from journals and conference proceedings about already existing frameworks for the adoption or use of OGD. The literature search started at online databases including scopus.com, sciencedirect.com and the Delft University of Technology repository using the keywords open data, implementation, openness, initiatives, business, transparency and combinations thereof. As open data is a relatively new and emerging field, one of the

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