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An overview of open government data in developed countries: A comparison study between the state of Qatar & UK

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Abstract

Even though the diverse studies that have addressed OGD in many developed countries, there is still a lack in scientific literature about OGD initiatives in developing countries. The problem addressed in this paper is the lack of literature about related OGD information in two countries namely UK and Qatar. Therefore, we aim to provide information about the state of OGD in these two countries and discuss the differences in comparative analysis. This paper provides an analytical and comparative approach to discuss the state of open government data in two countries namely UK and Qatar. The results of this study showed that the state of OGD in UK is more advanced and developed than its state in Qatar according to the references reviewed and reports published by both countries.

Introduction

E-government refers to the use of ICT to improve the offered services by different entities to support other agencies such as businesses, governmental agencies, citizens, partners, and employees. The technologies used to achieve the purposes of e-government are closely related to those used for web applications. The aid of interactions among different governmental units and citizens plays a core role in creating better relation and information delivery as well as services delivery in more efficient way (Attard et al., 2015).

Governments release their data to public users to help them in better understanding of the work of government and the creation of policies. A part from this data, there is a small amount of data available in public data portals that bring and integrate data from different sources into one searchable web portal. To make this data easily reached and accessible, the availability of data will be easier and helpful in decision making and providing more suggestions of government policies and information in detail (Nayek, 2018).

Open data concept encompasses various requirements to conform open data to these requirements. One of these requirements is how to allow free use of data. Another requirement is the redistribution and reuse of data. In general, open data should provide data use and accessibility regardless the discriminated persons and with no restriction on the usability in any venture or field. Therefore, the distribution of open data would be formatted in cross-platform, available to public, and machine readable with no limit on reusability (Attard et al., 2015).

Open means the freely available things to be used, reused, and redistributed by public, while government data means the data and information generated by government and their entities.

Overall, OGD is considered to make public data open to use and access to comply the principles of completeness, timeliness, accessibility, principality, machine processability, license-free, non-discrimination, and non-proprietary (Nayek, 2018).

The origin of OGD initiatives and OGD portals refers to the mid of 2000. Moreover, the number of these portals is growing quickly because of the requirement form making government data open, accessible, and usable for many purposes. Form different perspective, OGD is anticipated to enhance the decision making in public government and to help in understanding of the processes and performance of governments in achieving intended outcomes. OGD also aid to create multiple views on the improvement of government performance, the importance of get feedback from public, and accessibility to data to achieve improvements continuously (Nayek, 2018).

Open Government Partnership (OGP) term refers to a multidimensional initiative that purpose to make concrete commitments between governments and citizens more secure to strengthen citizens, promote transparency, harness new technologies and fight corruption with strong governance and control (Gondol & Allen, 2015)**.**

Various countries have focused on Open Government Data (OGD) and how to make commitments in this area. This opens up the public data and government datasets to reusability and availability to the public to support citizen engagement, transparency, and social innovation (Gondol & Allen, 2015)**.**

In this case, Open Data (OD) is a good instance of the changing in the relation between citizens and governments with the phenomenon of public data and e-government. OD attempts to achieve accessibility of data provided by governments by releasing their datasets in an open standard and format. OD can be defined based on Open Knowledge Foundation as freely used, redistributed, and reused data that is cited and acknowledged to its author or creator.

It is also focused on data accessibility and availability via online sources and media with editable and intelligible format. In addition, the limit on data usability with restrictions is no longer exist but rather the integration with other data called Linked Open Data (LOD) can achieve redistribution and reusability. It implies to revise the conventional user licenses with keeping the concepts of privacy policy, patents, and copyright (Reale, 2014).

OD has got its popularity with may advancements and progresses in the World Wide Web (WWW). More specifically, the drive of Open Government Data (OGD) like those initiated by United Kingdom (UK) and State of Qatar has emerged a certain data to be freely and online available to everyone for use and redistribute with no limit on copyright. This refers to open data and OGD initiatives to facilitate the public data of government to practice open data based on open development protocols (Nayek, 2018).

OGD in Qatar requires to create a framework of the implementation to guarantee the success and enhance the use of web 2.0 (Al-Kubaisi, 2018). Based on statistics, the citizens in the state of Qatar still not completely reliant to e-government. It is similar to other developing countries the suffer from low use of e-government (Al-Kubaisi, 2018).

Background and literature review

The literature presented and discussed the issues challenging the effective ways to empower citizens. The most important challenges that affect the empowerment of citizens and OGD is the unequal distribution of time, skills and resources. OGD can facilitate the co-creation, co-design and collaboration between governments and their citizens (Doyle, 2015).

Even though the diverse studies that have addressed OGD in many developed countries, there is still a lack in scientific literature about OGD initiatives in developing countries.

The problem addressed in this paper is the lack of literature about related OGD information in two countries namely UK and Qatar. Therefore, we aim to provide information about the state of OGD in these two countries and discuss the differences in comparative analysis (Craveiro et al., 2016).

Van Schalkwyk et al., 2015 provided a recognized approach for social perception of open data intermediaries using Bourdieu's social model as a theoretical framework. It was based on analysing a sample of instances taken from the evolving effects of open data in the project of Open Data of Developing Countries (ODDC). They extracted data from ODDC reports based on the determinants of OD focusing on their values to provide links for agents as an open data supply chain. It found that multiple intermediaries are comprised in open data supply chain with multiple forms and types for open data use. Their effectiveness is qualified based on their proximity for data supply that is expressed considering type of capital within the intermediary possesses. On the other hand, the available links for capital intermediary effectively necessary to configure and connect power nexuses and link all sources of power. The study concluded that the needs for presenting multiple intermediaries in open data are critical to possess many types of capital that enable open data usability.

The study of (Doyle, 2015) aimed to analyse and examine the performance and implications of OGD based on policy analysis and open data law in Washington state. The author has analysed the procurement data presented in many proposals including verbal and written testimony to summarize the opponents and supporters of open data law in Washington state. The implementation of open data in other states of US were also collected as a secondary source of information. It has outlined the possible effects of open data law on economic, civic engagement, political and legal, and research and technology.

The paper of (Safarov et al., 2017) included a presentation of comprehensive synthesis of the literature to determine the conditions, types and effects of OGD. It involved an analysis and review of 101 academic studies by discussing the main factors of OGD exploitation.

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These include which kind of utilization, utilization effects, key conditions, and variety of users. The analysis showed that the most of studies have focused on the provision of OGD through only assuming different types of utilization rather than empirical testing.

The research of (AlAnazi & Chatfield, 2012) aimed to minimize the gap in research of open data implementation and current maturity level of open data initiates in the countries of Middle East. A model of eight principles proposed by Open Data Working Group was used to measure the maturity level and implementation practice of open government data. The findings of the study included a discussion and analysis of the website survey and open data practices.

The article of (Bates, 2013) has adopted an analytical framework to analyse the UK open government data initiative. More specifically, it employed neo-Gramscian framework to identify the relation between UK government policy makers and online collectors of civil society actors. It aimed to exploit a useful conceptual tool to analyse the relation between UK policy makers and OGD advocates. The article presented an empirical evidence that proposes the ability to highlight the political processes of adaptation, absorption, and alteration evolved in the launch of OGD initiatives in UK.

The study of Al-Kubaisi, 2018 purposed to discuss the state of e-government in Qatar by analysing the state of OGD. The author also aimed to address the primary motivates to promote Qatari government to initiate OGD. A qualitative approach was used to revise previous resources and studies. Furthermore, the analytical approach was also included to analyse the state of e-government and OGD in developing countries. More specifically, the state of OGD in Qatar has been analysed to identify the motivates for OGD.

Methodology

Open data portal expands and promotes open data with open access to public sector information that increases the transparency and efficiency of public sector. This implies for public sector efficiency based on economic knowledge with a specific number of governments focused on increasing the benefits of public sector information and citizen participation (Talaat, 2016). We can consider OGD a part of public sector information of the open data provided by government and its agencies (Davies, 2010).

We use an analytical approach to achieve the objective of this article which is to compare between the OGD initiatives between Qatar and UK. In addition, we utilized qualitative method by reviewing different books, references, reports, articles, papers and thesis to collect required information.

Discussion and results

Public data differs that open data in terms of making data freely available for public such as archive of legal documents to be freely accessible. However, they need effort to identify and find required documents. Open data oppositely enables to digitize and made data online available in indexed and standardized format. Open data is public data but vice versa is not (Attard et al., 2015).

The origin of information freedom and the current state of information sharing showed that the practice of OGD is growing around the world. However, it has extremely expanded in 2010 (Gonzalez-Zapata & Heeks, 2015).

OD is an increasing precepted concept that motivates governments in many countries to opening up their datasets available for public to make free access to machine readable data. It also facilitates accountability,

transparency and civic engagement to the governments. As a result, all of these features could produce economic growth (Doyle, 2015).

OGD is a subdivision of OD that simply provides government-related data such as datasets open to public. These datasets contain budget, expenditures, population, and parliament minutes, geographical, census, etc. Additionally, it includes indirect ownership of public administrations such as agencies and subsidiaries. For example, data relate to public transportation, climate or pollution, child care, education, traffic and congestion are included in OGD. There are many countries have confirmed on their commitment to open government data through integration of OGD in Open Government Partnership (OGP) (Attard et al., 2015).

Open governmental policies, social media, and open data have been recognized as useful tools to actively promote governmental information about transparency, collaboration, and civic engagement since 2009. Up to date, there is a limited resources and empirical researches about open government practice. For this reason, governments in the Middle East have showed explosive growth in terms of public policy implications, number of users of internet and e-government as well as social media (AlAnazi & Chatfield, 2012).

In developing countries, OGD initiatives are still in early stages. In Qatar, only a declared strategy for OGD initiative was published. In practice, OGD portal in Qatar started to achieve the objectives of open data based on political, economic, and social strategies. It can synthesis the significance of OGD and increases the opportunities for the success of OGD on short, medium, to long term (Al-Kubaisi, 2014).

On the other hand, the developed countries use web applications with great influence on the life of citizens in different aspects. These include added value to public available data, easy data access, and increased number of users of web applications. Particularly,

there many OGD initiatives have been released in developed countries such as Open Data Partnership (OGP) (Al-Kubaisi, 2018).

United Kingdom improved the access to its public sector information through the acceptance of reusability of open data since 2003. Further, there are many initiatives have encouraged the UK approach in Open Government License to launch www.data.gov.uk, as well as to regulate government information. The government of UK attempted to enhance easy and simple license models to establish regulations and complaints for more availability of public sector data through e-government web portals. Many governmental agencies sponsored to contribute and paly key role in practice of public sector information and openness (Davies, 2010).

Qatar has higher internet penetration ratio and higher maturity level in open data implementation than other developing countries. On the other hand, the basis of internet penetration cannot explain the current state of the countries with observable evidence of actively implementation and practice of open data (AlAnazi & Chatfield, 2012). In Qatar, OGD initiative has been recently launched to advance e-government through providing free access to data and unrestricted access and use. Qalm web data portal was launched to facilitate data access. It aims to achieve domestic strategy for information management (Al-Kubaisi, 2018).

In June 2010, the public sector transparency board has been created to compose experts to achieve agenda of transparency and advise and drive for success. They publish many public data principles. Further, open data institute was launched as an independent entity to demonstrate commercial value of open data funded by UK government. Moreover, public data group was created composing four organizations having rich data to improve public data access with best derived practices. They also develop new activities and establish wide public sector and efficient member organizations (Bates, 2013).

Qatar digital 2020 strategy involves the objective of increasing government openness to create political and economic value and advantage through enabling collaboration with citizens and co-design of open data. The open data portal, http://portal.www.gov.qa/wps/portal/opendata, available for Qatari citizens can assure of appropriate data for sharing and reusability by different governmental entities to improve data quality, data availability, internal efficiency, and novelty.

Data strategy broad is also a ministerial advisor generated in UK to achieve maximum value of public data group, but it was closed in 2013. Open data user group was also established to help governments in better understanding of the needs of gathering datasets to promote tools and resources required to reuse public sector information (Davies, 2010).

In practice of OGD in Qatar, there still many needed steps to promote e-government and open data that can encourage citizens in decision making participation and engagement. The implementation e-government in Qatar is activated by OGD that helps to achieve the main objectives of e-government. OGD initiatives face many challenges in developing countries because of poor coordination, poor data quality, and lack of regulations and laws to control and govern these initiatives (Al-Kubaisi, 2018).

More OGD initiatives in UK have been launched such as government license framework that provides legal overview of assignments for reuse and distribution of public sector information. The public access tool to legislation was also provided since 2011 (Talaat, 2016).

The success implementation of e-government could increase the Qatar's profile with greater transparency to let different parties easy interact. More transparent government data and performance can be obtained with further enhancements and promotions for open data access.

 Transparency is also increased through the provision of open data delivery platform that expand the individual entities with vast amount of data. Citizens can get benefits of open data with economic advantage and timely as well as usable format (Talaat, 2016).

The disclosure of principles needs to specify accountability and responsibility with minimum sequence of procedures. They include disclosure of governmental information, disclosure of public information, disclosure of processes for public members, and the disclosure of public responses via official institutional media. The limit of transparency is outlined toward accountability in a simplified model for process fourth (Peixoto, 2012).

The main principles of OGD were provided in UK are stated as follows (Ubaldi, 2013):

- Public businesses clearly drive what and when need to use data public data policy and practice.
- Public data is distributed in machine readable and reusable format.
- The open license allows releasing data to distinguish commercial reuse from free reuse.
- A single, online, easy to use web access portal is available to publish public data.
- Open standards and recommendations of WWW consortium allow publishing public data.
- The same definitions and standard formats will be used to publish the same subject of public data even it published by different departments.
- The governmental own website will publish public data in reusable format.
- Public data should be fine-grained and timely.
- Quick release of data enables making sure of the availability of linked data forms and open standard formats.
- No required registration or application to use public data.
- Public data reusability should be encouraged by public bodies and inventories of data should be maintained.

- Metadata about datasets should be published by public bodies.

However, poor cooperation between governmental entities cured by the adoption of OGD with clear action plans of the project of OGD in Qatar. Civil society community need to be empowered toward OGD to continuously progress the initiatives of development and sustainability. OGD guarantee increased civic engagement for more efficient experiences of OGD due to the major role of citizens in supporting open data release (Al-Kubaisi, 2014).

Table 1 shows a comparison between UK and State of Qatar in terms of economic complexity, readiness, and implementation according to Open Data Barometer of 2014 year data (Savenkov, 2015).

Country or territory	Economic complexity index 2014	Open Data Barometer (Year 2014 data)			Open Data Barometer (Year 2014 data)
		Sub-indices "Readiness" + "Implementation"	Sub-index "Readiness"	Sub-index "Implementation"	
Qatar	-0.4919712	55	46	9	-
UK	1.7059250	198	98	100	97

Based on the above table, the numbers show that the state of OGD in UK is better than its state in Qatar, and there is a big gap between these numbers.

Conclusion

We have reviewed a set of references and papers related to the OGD in developing and developed countries. We have addressed the problem of the lack of literature about related OGD information in two countries namely UK and Qatar. Therefore, we aim to provide information about the state of OGD in these two countries and discuss the differences in comparative analysis. This paper provides an analytical and comparative approach to discuss the state of open government data in two countries namely UK and Qatar. The results of this study showed that the state of OGD in UK is more advanced and developed than its state in Qatar according to the references reviewed and reports published by both countries.

References

Gondol, J., & Allen, N. (2015). Open government partnership as a platform for advancing open education policy. *Open Praxis*, *7*(3), 273-280.

Reale, G. (2014). Opportunities and differences of open government data policies in Europe. *Athens Journal of Social Sciences*, *1*(3), 195-205.

Nayek, J. K. (2018). Evaluation of Open Data Government Sites: A Comparative Study.

Van Schalkwyk, F., Chattapadhyay, S., Caňares, M., & Andrason, A. (2015). Open data intermediaries in developing countries.

Gonzalez-Zapata, F., & Heeks, R. (2015). The multiple meanings of open government data: Understanding different stakeholders and their perspectives. *Government Information Quarterly*, *32*(4), 441-452.

Savenkov, A. (2015). Open data appetite: How nations' hunger for open government data varies with their economic complexity.

Attard, J., Orlandi, F., Scerri, S., & Auer, S. (2015). A systematic review of open government data initiatives. *Government Information Quarterly*, *32*(4), 399-418.

Peixoto, T. (2012). The Uncertain Relationship between Open Data and Accountability: A Response to Yu and Robinson's the New Ambiguity of Open Government. *UCLA L. Rev. Discourse*, *60*, 200.

Craveiro, G. S., Machado, J. A., & Machado, J. S. (2016, March). The use of open government data to citizen empowerment. In *Proceedings of the 9th International Conference on Theory and Practice of Electronic Governance*(pp. 398-399). ACM.

Doyle, D. (2015). Open Government Data. An analysis of the potential impacts of an Open Data law for Washington State.

Safarov, I., Meijer, A., & Grimmelikhuijsen, S. (2017). Utilization of open government data: A systematic literature review of types, conditions, effects and users. *Information Polity*, *22*(1), 1-24.

AlAnazi, J. M., & Chatfield, A. (2012). Sharing government-owned data with the public: a cross-country analysis of open data practice in the Middle East.

Al-Kubaisi, A. (2018). Enhancing the Adoption of E-Government Systems through Open Government and Open Government Data (OGD) Initiatives in Qatar. Journal of Information Engineering and Applications, Vol.8, No.1, 2018.

Al-Kubaisi, A. S. (2014). *Improving the transparency, openness and efficiency of e-government in Qatar in the era of Open Government Data, and beyond* (Doctoral dissertation, Queensland University of Technology).

Talaat, M. A. (2016). Public Sector Information and Open Government Data. *Journal of Systems Integration*, *7*(2), 25-32.

Ubaldi, B. (2013), "Open Government Data: Towards Empirical Analysis of Open Government Data Initiatives", *OECD Working Papers on Public Governance*, No. 22, OECD Publishing.

Davies, T. (2010). Open data, democracy and public sector reform. *A look at open government data use from data. gov. uk*.

Bates, J. (2013). The Domestication of Open Government Data Advocacy in the UK: A Neo-Gramsican Analysis. Policy and Internet, 5 (1). 118 - 137. ISSN 1944-2866.