

# Unified Theory Approach to Assess Open Data Accomplishments

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## Abstract:

Open data and open government are habitually mistaken for each other. At its heart, open government is about responsibility, and open data is information available and reusable by the general population. The accomplishment of open data relies upon its openness, nature of data, security strategy, and stage works as a rule. This paper provides a full-bodied evaluation structure that not just gives a significant comprehension of the headways of open data strategies yet a compelling instrument to scrutinize open data approaches. The aftereffects of this exploration recommend that administration organizations ought not just upgrade the sum and nature of open data consistently yet in addition fortify the linkage of datasets. With this linkage of open data sets, government offices will enhance the capacity of applying open data for better formulation and implementation of the policies.

**Keywords:** Open data, Innovation, Perspectives, Theories, Freedom of Information.

## STATEMENT OF THE PROBLEM

The open data is being studied in legal, political, social, economic, institutional, operational and technical perspectives by the researchers, academicians and activists but it is essential to review the usefulness of open data platforms from citizens point of view.

Open data is the concept of providing information in open domain to comprehend, break down, envision or in different ways utilize a dataset that has been given to people in general by an administrative institution. In any case, the data are "open" just when they are constantly distributed and refreshed online as soon and as frequently as could be expected under the circumstances, in a way that permits, at the least conceivable cost, to lawfully reuse them for any reason. Be that as it may, capacity to utilize open data somewhat relies upon the accessibility of open data.

The portal 'data.gov.in' is the host of priceless freely available information. These data have the capability of empowering people by creating opportunities for employment, enhancing the lives of citizens and by assuring effective administration. One of the systems by which these advantages

transmit is through research. The big data, if analyzed properly, can influence policy making and also ensure participation of citizens in decision making.

The open government data initiative which took shape in October 2012 with the launch of data.gov.in has not been publicized well. The consent of the government to provide machine-readable data on open platform has not been fulfilled in true sense. It is often seen that datasets are not accessible. In addition, the accessible ones, that is, transferred datasets are often obsolete, copied, fragmented, ailing in meaning and insufficiently referenced. In simple words the open data is not good quality data.

This study aims at making an assessment of:

1. Awareness about open data platform 'data.gov.in'
2. The usability of data available on 'data.gov.in'.
3. The extent of open data being used by citizen

## Review of Literature

Innovations are vital for making utilization of open data. The utilization procedure can comprise of different advances and frequently requires the

revelation, investigation, preparing, representation and assessment of open data utilizing innovation.

The real utilization of open data depends from country to country and from data to data. What's more, barely there is any settled upon structure to delineate usefulness and handiness of open data advances. In this way a superior comprehension of indicators can enable strategy creators to figure out which instruments they can use to build the acknowledgment and utilization of open data advancements.

UTAUT-the Unified Theory of Acceptance and Use of Technology is utilized all around to make an evaluation of indicators impacting the acknowledgment and utilization of open data advancements. The aftereffects of experimental examinations in light of UTAUT demonstrate that encouraging conditions (simplicity of utilizing data) and willfulness essentially impact behavioral aim. These discoveries propose that approach producers should expand the acknowledgment and utilization of open data innovations.

Merton (1942) was the first to advocate that outcomes of research should be universally available to all. Following this advocacy discourses were started in UK and USA on the level of openness (Ivester ,1977; Relyea, 1977; Benett,1985). There are scholarships which bolster the suspicion that utilization of open data innovation is favorable for policy makers as well as for citizens and specialists to outline openness in government exercises (McDermott, 2010). Once the innovative issues are addressed the challenge comes at motivational level in light of the fact that without urging the data suppliers to distribute and interface their substance to create helpful data for society the objective of having an open data environment can't be accomplished.

The worldwide investigations in light of UTAUT propose that gatherings and workshops to invigorate the utilization of open data advancements have not similarly affected individuals' capacity to utilize open data advances. Thus, a far reaching knowledge of the variables affecting open data innovation

requires empirical assessment of workability and usability of the data being discharged by the governments (Dawes, 2010).

### **Method**

This Study aims at making an assessment of the awareness about the open government data platform 'data.gov.in' among residents of Delhi NCR and the usability of the data available on 'data.gov.in'. This study makes empirical assessment of the citizens of Delhi-NCR about the awareness and use of open government data platform 'data.gov.in' using a field survey method. The findings are analyzed in the light of previous scholarships in the area to suggest the strategies required for promoting open data platforms for enhancing citizen participation in governance. The respondents who had no idea about the term open data were not considered for the study. The first question was 'Have you ever heard the term open data?'

### **Hypotheses:**

H 1: Majority of respondents are aware of the website 'data.gov.in'.

H 2: The respondents, who visit the website 'data.gov.in', find it useful.

### **Data and Measures:**

Altogether 300 samples were collected from different locations of Delhi and NCR. Out of which 287 samples were taken for the study based on the protocol set by the researcher. Sampling error of 2-3 percent was also taken into account to make the data significant enough.

### **Results and Discussion**

The results indicate that the website data.gov.in is not known to most of the ordinary citizens. However, those who have visited the website found it useful for a lot of purposes. Therefore, the study suggests that there is need to popularize the open data platform 'data.gov.in' and incorporate the information available on this site to other applications.

There is insufficient evidence to conclude that respondents of Delhi-NCR are aware of the website 'data.gov.in'. However there is sufficient

evidence to conclude that those who visit the website 'data.gov.in' find it useful. Of the 287 respondents (who were aware of the term open data), 213 said that they don't know about the website data.gov.in and hence they have never visited it. Of the rest 75 respondents who had heard about the website 'data.gov.in' only 53 had visited it. Of the 53 who had visited the website data.gov.in, 48 said that they found it useful for one or other purposes and they would like to visit the website again. When asked how they came to know about the website majority of the respondents said while searching for some information on search engine. The majority of respondents who had visited the website said that it improved their decision making. The respondents who used the open data had a general belief that open data increases trust in government.

### **Conclusion and Recommendations:**

#### *Awareness and Decision making perspective*

The aim of Right to Information Act is to improve the quality of decision-making and governance. It was expected that open government data will make people aware of how government takes decision and how the citizens will have their say in the process. The results of the empirical assessment done in Delhi-NCR which is the National Capital regions clearly indicates that government authorities have failed to familiarize citizens with the concept of open data and its open data platforms. So, there is need to create awareness about the website 'data.gov.in'. This will ensure the participation of more people in decision making function of the government.

#### *Media and Strategic Communication perspective*

The strategy of communicating the basic concept of open data is poor. The purpose of bringing government data on open platform is to provide and reveal the minutiae of the decision making process of the government, but if there is lack of awareness about from where citizen can access these minutiae, then how the objectives of the open data could be achieved. The 'data.gov.in' website however provides a lot of information which is of use to citizen, but the focus is low on providing

minutiae of the functioning of the government. The media is also not playing the expected role in this regard. The case is not similar in other countries. In New Zealand there are a lot of newspapers which routinely publish cabinet papers. In the UK there always appears a demand for disseminating more. But in India, the media rarely reports or demands open data. The decadal analysis of the RTI stories in India shows that in prominent newspapers the most frequent theme was corruption (15% of articles), with the second most dominant theme related to accountability (11%). 62% of articles were related to events that were positive, compared to 21% that were negative for RTI objectives (Jha and Vats, 2017).

#### *Trust building perspective*

The third perspective in open government data is whether it has increased public trust in government or not. Not all who were asked this question agree that right to information can or will increase trust, but majority of those who use open government data or who have access to it believe that it increases trust. Some of the researchers are of the opinion that right to information law reinforces the perception of secretiveness and seizes the opportunity for media to come up with something really groundbreaking (Roberts, 2005). The trust building discourse is important in the context of open data because it exposes incompetence and inconsistency of the government if it fails to meet the promises. It is also important because trust in government has been declining across the globe because of the secrecy of the functioning of the government.

#### *Right to Information perspective*

The findings of this study reflect that essence of open government data under the premise of right to information act has not honestly been taken care of. The reason may be the lack of infrastructure or willpower but the findings of researches suggest that open government data is the only instrument in the hands of the citizen which can ensure their participation in policy making (McDermott, 2010).

#### *Collective empowerment perspective*

Exploring open government data gives better understanding to citizens of the government, polity, legislations and of course the hassle free access to information. This intrinsic and instrumental capacity of OGD addresses the problem of filling the gap of information inequalities (Dahl, 2000). But the previous scholarships on the subject suggest that there always remains a risk that whether the data being disseminated on platform is usable for developers or for common citizen. The other risk associated with this is whether open government data will lead to neglect of mechanism for direct and personalized OGD access. However there are provisions in the government policy that infrastructure of the OGD platforms should promote in principle the opportunities for the citizens to have access to direct and trusted data. Therefore the empowering principle behind the OGD remains unclear. From the instances covered in this study it is clear that the reach of OGD to common people is low and the awareness about open data platform is also comparatively low, but what are the reasons for this low level of awareness still remains unanswered.

#### *Civic Mobilization perspective*

If the aim of the open data is to create an informed and empowered citizenry then the perspective of civic mobilization needs to be taken care of. Bowker (2000) and Scott's (1998) in their study observe that civil mobilization depends on geographies of data and if the geographies of data don't match with the geographies of common people then civic mobilization will hardly be possible. The findings of this study suggest that however people are aware of their concern but they are not aware of from where they can get access to information which can be helpful in addressing their concern. Therefore as it happened in US, where the 'data.gov' was launched together with other initiatives of informing the people about the website, in India such strategies could have been planned for ensuring better awareness about 'data.gov.in'. Michener (2011) and other researchers have pointed out that accountability and transparency in the governance can only come when there is good understanding of

open data among bureaucrats. The bureaucrats who create data should maintain high level of certainty and agreement on issues which affect the masses while implementing the policies of the government (Richter and Wilson, 2013; Barata and Cain, 2003). Another investigation by Piotrowski, Zhang, Lin and Yu (2009) analyzes the open government system in other countries. Community for Technology in Government (CTG), of the University at Albany in the United States, portrays a progression of systems to advance open government which is evaluated by a board of open data officers. The findings of the study of this group direct the attention of open data government initiatives towards semantics. To simplify this let us take an instance of property registers which are not quite the same as the kind of registers required in other research areas (Dawes, 2010; Helbig et al., 2010). So, the problem with the open data is how to link the data of various areas and departments semantically so that they have a definite and workable meaning.

#### *Semantic perspective*

Wood (2010) proposed how to create and keep up the records with adaptability. Scholl and Luna-Reyes (2011) proposed a comparable model that consolidated the utilization of administrative data and the citizens' cooperation. These studies indicate that just opening up the data is not the purpose of OGD initiative. The importance of open data needs to be rethought. The end clients of open data are not only to be recognized well, the procurement of data for making it meaningful and usable is equally important. The need to look at the semantic perspective of the open data is so intense that voluminous researches are being carried out from this perspective to address the problem of data linkages.

Data linkage problem is being studied from different perspectives by Information and communication Technology experts. A group of researchers from Indian Institute of Information Technology have come with a model which tries to fit the open data platform in a new frame called 'Many Worlds on a Frame (MWF)' - a framework

where knowledge is organized within one or more thematic worlds each of which in turn relate to one another to form the global knowledge frame. This frame is based on Kripke semantics. This semantics allows aggregation of data from different arena in a single frame (Subramanian et al, 2016). Therefore the focus of the government should shift more towards the utilization of the data for specific purposes by general public. At the same time people should be trained and informed enough to use the data in a useful way. Otherwise the open data platforms will remain bureaucratic in nature and the policy will not meet its end.

### **Impediments and scope for further studies**

This examination was planned just to make an assessment of whether people actually know what open data is and from where to access it? The study also investigated that to what extent the open data is useful for the end users and what are the constraints which prevent the citizen from using open data. There is scope for further research by segmenting the open data into various categories and test their usefulness for citizens.

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