A Citizen-Centric Open Data Portal for Rural Digital Users

Contact emails: njere@wsu.ac.za or nobert43@gmail.com

Abstract

There is a lot of data that is collected and available on many systems. This data could be collected by certain systems and users could knowingly or unknowingly be sharing the data. Nowadays with high cases of cybercrime as many users are accessing services online, the issues of data management become critical. On the other hand, users do not want to provide same data on related systems over and over again. As a result, data managers propose open data environment. Open data is data that can be freely used, re-used and redistributed by anyone. In order for any data to be considered open, it must always be available and downloadable via the internet in a modifiable format. The availability of open data has provided benefits to citizens, organisations and even governments as it gives easier access to information and allows for the improvement of services while promoting a culture of innovation. Even though open data has a number of benefits, the biggest challenge facing open data is privacy. Privacy can be defined as the appropriate use of personal data. Opening access to such data involves trading off privacy for utility or vice versa. Releasing the raw data allows for better engagement with the data however this creates privacy risks. Protecting the data limits the usefulness of the data. Therefore, a balance between privacy and utility must be maintained. It therefore becomes challenging to release data while ensuring that it is useful. This study aims to understand the limits of open data in terms of excluding critical users. This study investigates the currently existing South African open data repositories to identify users participation and privacy risks that exist in terms of the data fields that are released in the datasets. The study is rural digital users centred and puts them at the centre of open data.

The key research question are:

- How can the rural citizens participate and contribute to open data portal development?
- What is the role of digital rural users in creating open data portal towards system usage and trust?
- Who are the key stakeholders in open data within South Africa and how they engage citizens?

The proposed approach is a qualitative co-design approach through citizens engagements. We categorise and group the participants according to their skills and understanding of digital systems and data management. We then experiment and educate the citizens on open data, data management and data security mechanisms and alert them on the best practices. The study is expected to produce guidelines on how to engage the citizens within the open data environment. A citizen centric open data portal is formulated and evaluated by key stakeholders.