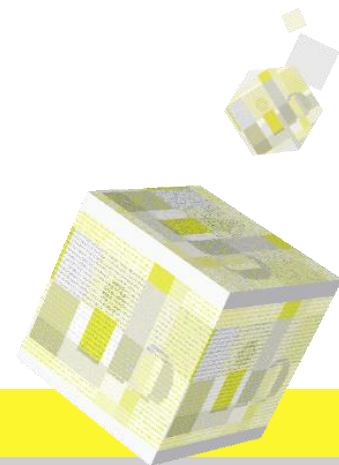


The Maturity Assessment of the Recent Open Data Development in the Context of Taiwan E-Government

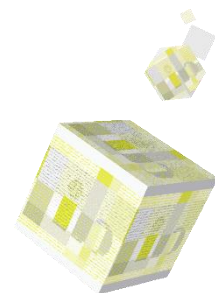
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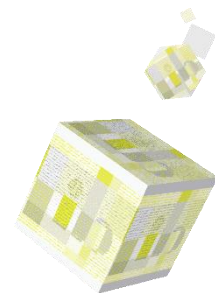
Introduction



- Open government data (OGD) has become an important policy among the government administrations around the world.
- Both central and local governments of Taiwan have dedicated efforts and resources to establish open data infrastructure.
- Because of their respective information environments, agencies possess different capabilities of open data implementations, and different outcomes are achieved.

In Sight

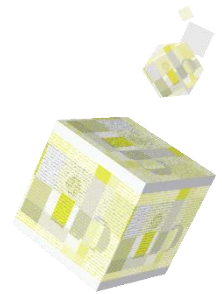
The Proposed Research



- An open data maturity model from the literature is adopted and refined for the assessment purpose.
- This research first assesses the current development and implementation of open data among Taiwan government agencies.
- The research also explores whether central government agencies, six-municipality agencies, and other local government agencies possess similar or different capabilities and commitments in implementing open data.



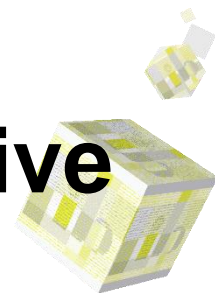
Research Methods



- A quantitative approach by using survey is employed. The questionnaire items are developed in the following three perspectives and their eight subcategories based on the adopted model.
- Establishment and Legal Perspective: “Strategy, Leadership & Establishment”, “Laws & Regulations”, “Management”
- Technology and Data Perspective: “Data Availability”, “Data Access”, “Data Format & Content”
- Data Reuse and Citizen Perspective: “Reuse Encouragement”, “Participation & Collaboration”

InSight

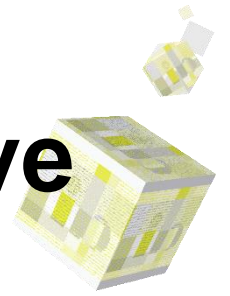
Establishment and Legal Perspective



- Most of the central and six-municipality government agencies have engaged in OGD while some of the local government agencies haven't and their experiences tend to be much limited.
- Most of the participating agencies can comply with the existing external and internal regulations, and open data licensing is provided.
- Most agencies have their OGD policies be consistent with those of the central government.
- However, many agencies haven't established standard operating procedure for OGD and haven't integrated OGD with their respective business processes.
- More trainings are needed for helping government agencies obtain the required skills and concepts for running OGD.



In Sight Technology and Data Perspective



- Most government agencies have adopted data portals or API approaches for opening their datasets.
- Datasets are released by using non-proprietary data formats with appropriate metadata information, and datasets are periodically updated.
- Nevertheless, most agencies do not want to completely open their possessing datasets. Datasets are usually aggregated and processed rather than released in the form of raw data.
- The adoption of linked open data is still relatively limited.



InSight

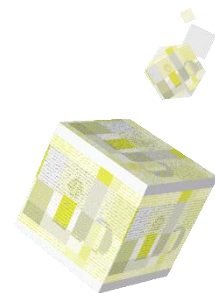
Data Reuse and Citizen Perspective



- For many participating agencies, there is still a lack of mechanisms for resolving the questions and problems raised from using open data.
- There is limited reuse encouragement from the participating agencies for promoting the use of open data. Specifically, aid resources such as funding support is relatively scarce.
- The communication channels between citizens and the participating agencies can be further strengthened to respond to the suggestions and reactions of open data policies from citizens.

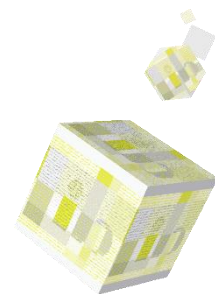


Discussions



- In this study, in terms of the maturity of OGD implementation, central government agencies have higher engagements. The agencies of the six municipalities follow, and the other local agencies have lower performances and engagements.
- It is interesting that there is no statistically significant differences among the agencies of the three levels in terms of whether to completely open datasets, whether to open raw datasets rather than processed datasets, whether to apply linked open data technologies, and whether to hold events or provide funding supports for promoting data reuse.

Conclusions



- It is suggested that the experiences of central government agencies, including the establishment of OGD advisory group, open data licensing, and the concept of public-private partnership, should be introduced to both the six-municipality agencies and other local government agencies.
- The research results are expected to provide insights to practitioners for related policy suggestions and resource allocations. This investigation in Taiwan e-Government can also enrich and contribute to the current open data literature from an international perspective.