Analysis of the Open Data Landscape in Mexico

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EJE TEMÁTICO

Datos abiertos

ABSTRACT

The concept of open data originated from the idea of making government data available to anyone. In 2013, the Mexican government launched the National Digital Strategy to encourage the adoption and development of information by implementing five key enablers, including an open data portal to make government data more accessible to citizens. In 2014, the beta version of the datos.gob.mx portal was launched. Due to the significant potential of data to generate benefits, it has been referred to as the new gold. However, open data also presents some challenges, such as lack of interoperability and reproducibility and the resources needed to provide and maintain open data available to all. Therefore, based on the transversal agenda REMERI-ANUIES-EduTraDi focused on Open Science Ecosystems, the objectives of this research are to identify and analyze institutional repositories promoting Open Data in Mexico in order to document their characteristics and determine possible areas for improvement in such initiatives. This investigation allowed the identification of ten repositories promoting open data in Mexico and the integration of 16 characteristics that helped to describe and analyze the open data landscape, showing that the different open data management efforts carried out by Mexican institutions are mostly consolidated.

KEYWORDS

Open data; repository; Open Data Landscape; Mexico.

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Introduction

The concept of open data originated from the idea of making government data available to anyone. In 2013, the Mexican government launched the National Digital Strategy to encourage the adoption and development of information by implementing five key enablers, including an open data portal to make government data more accessible to citizens. However, open data presents some challenges. Therefore, based on the transversal agenda REMERLANUIES-EduTraDi focused on Open Science Ecosystems, the objectives of this research are to identify and analyze institutional repositories promoting Open Data in Mexico in order to document their characteristics and determine possible areas for improvement in such initiatives.

Main Theme: Open Data

Methodology



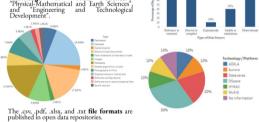
Results

1. Definition of the Collected Characteristics

The 16 characteristics defined for the analysis of the repositories, promoting open data in Mexico, are related to their identification (such as name and Uniform Resource Locator (URL)), the area of knowledge of their content, their typology, numerals, metadata standards, use licenses, among other aspects oriented to data and software.

3. Open Data Landscape in Mexico





On the one hand, the Dublin Core **Metadata** Initiative (DCMI) is the most followed by repositories by incorporating its Dublin Core (DC) vocabulary. On the other hand, the Creative Commons (CC) **licenses** were the most widely used in repositories.

Conclusions

- CONCIUSIONS

 This investigation allowed the identification of ten repositories promoting open data in Mexico and the integration of 16 characteristics that helped to describe and analyze the open data landscape (until May 12, 2023). The results of this research show that the different open data management reflorts carried out by Mexican institutions are mostly consolidated since they incorporate metadata standards, platforms, and use licenses that enable free data access, use, and sharing.

 Some areas for improvement were identified:

 Some areas for improvement on the information to be provided and its structuring for a better description, analysis, and evaluation of the data and the repositories research of the data in a unique repository or in different expositories where it is sought to unify metadata standards and the hosting technology or platform.

 Strengthen the adoption of laws and agreements on the protection of personal data and the treatment of sensitive data.

 Encourage the integration of more private institutions in Mexico's Open Data initiative.

References

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2. Repositories Promoting Open Data in Mexico

The identification of Mexican repositories promoting open data was carried out from September 9, 2022, to November 2, 2022.

No.	Repository Name	Repository URL	Institution	Sector	Open Data Exclusive
1	Portal de Datos Abiertos UNAM	https://datosabiertos.u nam.mx/	Universidad Nacional Autónoma de México (UNAM) / Dirección General de Repositorios Universitarios	Public	Yes
2	Data Hub del Tecnológico de Monterrey	https://datahub.tec.mx Z	Tecnológico de Monterrey	Private	Yes
3	Datos Abiertos de México	https://datos.gob.mx/	Gobierno de México	Public	Yes
4	Laboratorio Nacional de Políticas Públicas	http://datos.cide.edu/c ommunity-list	Laboratorio Nacional de Políticas Públicas	Public	Yes
5	CIMMYT Research Data & Software Repository Network	https://data.cimmyt.or g/dataverse/root?q=&t ypes=dataverses&sort= dateSortℴ=asc&p age=1	International Maize and Wheat Improvement Center	Public and private	Yes
6	Repositorio Digital del Servicio Sismológico Nacional	http://rigeofisica.ssn.u nam.mx/jspui/	UNAM / Servicio Sismológico Nacional / Instituto de Geología	Public	Yes
7	Datos abiertos - INEGI	https://www.inegi.org. mx/datosabiertos/	Instituto Nacional de Estadística y Geografía (INEGI)	Public	Yes
8	Repositorio de Documentación sobre Desapariciones en México (RDDM)	https://rddm.mx/	Center for Research Libraries; El Colegio de México; Universidad Iberoamericana; UNAM / Instituto de Investigaciones Jurídicas	Public	Partially
9	Datos Abiertos - SSA/DGIS	http://www.dgis.salud. gob.mx/contenidos/ba sesdedatos/Datos Abie rtos gobmx.html	Secretaría de Salud (SSA) / Dirección General de Información en Salud (DGIS)	Public	Yes
10	Repositorio IBERO	https://ri.ibero.mx/	Universidad Iberoamericana	Private	Partially



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