

m(App) My Data! : The Power of Location as a Data Integrator

Abstract

In the information age, the integration of location-based information offers a significant opportunity for improvements in urban development, educational frameworks, and sustainability efforts. However, improper data sharing and fragmentation often hinders the practical completion of this potential, resulting in resource and time wastage for data scientists and missed opportunities. Therefore, this study aims to promote FAIR (Findable, Accessible, Interoperable, and Reusable) data sharing and integration, facilitating the development of more effective and sustainable strategies.

The methodology involved identifying common factors and challenges in mapping data to develop a standardised rating system to evaluate how easily can data be mapped, adding this rating system to an interactive web app. The rating system and app were then used to assess the environmental and educational datasets of the official UK source of open data, data.gov.uk.

The findings revealed several issues within data.gov.uk, including illogical search results, missing key datasets, duplicate information, improper formatting, and a lack of meaningful metadata and titles. This contrasts with the UK Geospatial Strategy which has been investing billions of pounds in "unlocking the power of location data and technologies" in the country.

Thus, this study analysed and exposed issues with the sharing standards of location data, as valuable information remains inaccessible, hindering research and advancements. The intent is to encourage productive data sharing, enabling researchers, urban planners and policymakers to better choose data, gain deeper insights and develop more effective and sustainable strategies for the future.