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Beyond publication: addressing the usability gap in Italian open government data portals through metadata assessment and automated Support

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Open Government Data (OGD) holds significant potential for fostering socio-economic innovation across various domains, but its effective reuse is often constrained by several factors such as the quality of the data infrastructure. This research empirically assesses the readiness of Italian OGD portals to support structural reusability and facilitate data linkage through quantitative analysis of metadata quality and usage trends. Adopting quantitative methodologies from Neumaier (2016) and Quarati (2023), we analyzed metadata quality across major Italian regional and municipal portals using DCAT-based metrics (Existence, Conformance, Openness). We juxtaposed these technical scores against actual datasets usage trends retrieved programmatically via CKAN and Socrata APIs. Findings reveal a critical misalignment: higher technical metadata quality does not necessarily correlate with higher usage. Conversely, datasets with lower meta-

data quality often show significant engagement, suggesting that technical standards alone fail to drive reusability without accounting for user practices, resulting in widespread dataset underutilization regardless of platform or location. Drawing on socio-technical theory, we frame this discrepancy as a 'usability gap', where we argue that while technical compliance is essential, the concurrent neglect of the social dimension of data access creates structural barriers that hinder effective data linkage, necessitating a shift beyond mere publication towards enhanced discoverability and usability. To address these barriers, we propose preliminary AI-driven chatbot interface integrated with municipal portals. Currently in the prototyping phase, this tool represents a potential socio-technical intervention designed to translate metadata into actionable information, offering a pathway to automate support for users (especially newbies) navigating imperfect data infrastructures.

