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Government Big Data Ecosystem: A Systematic Literature Review

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Abstract : Data that is high in volume, velocity, veracity and comes from a variety of sources is usually generated in all sectors including the government sector. Globally public administrations are pursuing (big) data as new technology and trying to adopt a data-centric architecture for hosting and sharing data. Properly executed, big data and data analytics in the government (big) data ecosystem can be led to data-driven government and have a direct impact on the way policymakers work and citizens interact with governments. In this research paper, we conduct a systematic literature review. The main aims of this paper are to highlight essential aspects of the government (big) data ecosystem and to explore the most critical socio-technical factors that contribute to the successful implementation of government (big) data ecosystem. The essential aspects of government (big) data ecosystem include definition, data types, data lifecycle models, and actors and their roles. We also discuss the potential impact of (big) data in public administration and gaps in the government data ecosystems literature. As this is a new topic, we did not find specific articles on government (big) data ecosystem and therefore focused our research on various relevant areas like humanitarian data, open government data, scientific research data, industry data, etc.

Keywords : applications of big data, big data, big data types. big data ecosystem, critical success factors, data-driven government, egovernment, gaps in data ecosystems, government (big) data, literature review, public administration, systematic review

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