

## Big Data: Concepts, Technologies and Applications in the Public Sector

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**Abstract :** Big Data (BD) is associated with a new generation of technologies and architectures which can harness the value of extremely large volumes of very varied data through real time processing and analysis. It involves changes in (1) data types, (2) accumulation speed, and (3) data volume. This paper presents the main concepts related to the BD paradigm, and introduces architectures and technologies for BD and BD sets. The integration of BD with the Hadoop Framework is also underlined. BD has attracted a lot of attention in the public sector due to the newly emerging technologies that allow the availability of network access. The volume of different types of data has exponentially increased. Some applications of BD in the public sector in Romania are briefly presented.

**Keywords :** big data, big data analytics, Hadoop, cloud

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