

A Systematic Literature Review on the Applications of Big Data Analytics – Identifying Influential Factors and Impact

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Abstract

Big Data Analytics can fundamentally change how businesses compete and operate. Therefore, many organizations are increasing their investment in Big Data and are eager to use analytics to benefit from their investment. As the result of the increasing investment in Big Data and Analytics by organizations, research publications on Big Data and Analytics have been dramatically increased in recent years. To remain in the forefront of this research area, it is imperative for Information Systems (IS) researchers to keep abreast with the rapid research development in the field. Therefore, the research reported in this work in progress paper aims to update our knowledge and understanding of the state-of-the-art research on the applications of Big Data Analytics by conducting a comprehensive and systematic review of the recent publications. The literature review is mainly focusing on the emerging concepts and definitions, theories, research models, research methodologies, influential factors, and impact on business performance. Based on the preliminary findings of content analysis results, this research in progress paper attempts to make new contributions by identifying influential factors affecting the applications of Big Data and Analytics, and their impacts on business performance. It also seeks to reveal research gaps and opportunities for future research focusing on the use and impact of Big Data Analytics. The preliminary findings from our literature review show that our understanding of the mechanisms through which Big Data can enhance business growth is still very limited. It is expected that final outcomes of this research will provide a comprehensive overview on the applications of Big Data Analytics, emerging technology-organization-environment issues, research challenges and opportunities that can help advance the field.

Keywords

Big Data, Business Analytics, Big Data Analytics, Systematic literature review, Impact of Big Data Analytics.