

**COVID-19 Pandemic in the New Era of Big Data Analytics in e-government: Applications and Challenges\ Future Research Directions****Rasha Sadeq Abdin***Researcher in AI and Big Data topics***Abstract for paper 1**

Big data applications and data analytics play a vital role in proposing ultimate strategic decisions. Previous research work emphasized that big data applications and analytics can empower those who apply it. However, the sudden emergence of COVID19 has drastically changed the global economy, social life and both individuals and communities' health standards. It has raised challenges, set burdens on nations to progress and continue their sustainability and development. In this paper, a thorough research on literature review papers specializing in big data applications is conducted. A comparison between the before and after pandemic, use of big data applications in e-government is presented. The comparison is extended to three highly-recognized industry fields: Healthcare, Education, and Transportation. A discussion on the effectiveness, of the 4 major types of data analytics across the mentioned industries, is highlighted. Hence, this paper provides an illustrative description on the importance of big data applications in the era of COVID19, as well as aligning the applications to their relevant big data analytics models. We conclude that applying the ultimate big data applications and their associated data analytics models can harness major hurdles faced by organizations during one of the most fetal pandemics worldwide. Such applications supported organizations and nations to navigate through COVID19 pandemic confidently. The future work will start by investigating the Big data implementation challenges faced by e-governments on different levels, it will also investigate the critical success factors of Big Data and their categories toward developing a conceptual model for Big Data implementation.

AI and Data Science

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Big Data Challenges during COVID-19 Pandemic for e-government: Reviews and Future Directions

Abstract for paper 2

The sudden emergence of COVID19 has drastically changed the global economy, social life and both individuals and communities' health standards. It has raised challenges, set burdens on nations to progress and continue their sustainability and development. Hence, COVID19 pandemic, paralyzed most vital industries globally. Moreover, there is no evident of how ICT and e-government can support cross nations unifications. Recently, this is the presented fact, however there is a real opportunity hidden in the new oil, in the digital economy, which is Big Data. Despite the new opportunities from Big Data insights, the challenges and issues that arise should be handled efficiently before and during the Big Data projects. This paper will present in details challenges faced by governments. The challenges will be illustrated by regional challenges and challenges by 3 fields: Healthcare, Education, and Transportation. The paper describes a proposed model. The presented proposed model goal, is to build a strategy that will not only optimize the utilization of big data application use, but also to build a long term strategy, that will enable governments to boost knowledge sharing beyond COVID19 burdens, and to ensure achieving governments sustainable development goals. It has to be a strategy that would overcome the current challenges and seize opportunities. The findings of this paper could be used as a grounded reference with critical insights for the decision-makers to perform their Big Data strategies and decision.

Biography

Data Scientist Specialist | Researcher in Big Data & AI | BSc. MIS | MBA | CAPM

Rasha Sadeq Abdin, has a varied academic and work experience ranging from data science, project management and research. She is an MBA holder from American University of Sharjah, she has received her bachelor degree in MIS from AUS. She has a solid project management experience, as she was part of the IT advisory division in KPMG. A passionate researcher in the field of AI and Big Data, who is looking for the AI research field in a distinctive way to solve regional and global challenges in AI and seize opportunities, keeping in mind the importance of triple helix model as an accelerator to the research work.