Abstract

The automation and digitalisation of society has given rise to the term big data. The explosive growth in data in recent years in terms of volume, complexity and speed has resulted in new technologies used to handle and analyse these large and complex forms of data. This presents a challenge to most business and IT leaders in storing and capturing these large and complex data as they require additional skills and techniques existing data management teams especially DBAs with traditional knowledge and capabilities lack.

The main objective of this dissertation is to determine the impact big data technologies have on the skills of DBAs, who have experience in managing traditional data environments as there is a lack of comprehensive academic research on the impact of big data on the skills of DBAs.

This exploratory study adopted a positivist methodology by applying a purely quantitative approach to data gathering via an online survey in an attempt to develop a big data skills framework suitable for DBAs. The findings, which should be of interest to organisations planning or currently working on big data initiatives, DBAs and academic researchers, conclude that there is a need for the DBA to upskill in order to manage these new technologies and forms a basis for future research for other emerging technology that may arise in the data management industry.