Abstract

This study aims to explore the impact of Big Data Analytics (BDA) on business decision-making by utilizing a mixed-methods approach. The rapid development of technology has led to an exponential increase in data availability, creating opportunities for organizations to leverage data-driven insights to enhance their decision-making processes. This research investigates how companies across various industries are adopting BDA tools and techniques to improve operational efficiency, strategic planning, and competitive advantage.

A combination of quantitative surveys and qualitative interviews is used to examine the perceptions and experiences of business leaders and data analysts. The survey provides statistical evidence on the extent to which BDA influences decisions such as market forecasting, risk management, and customer behavior analysis. The interviews offer deeper insights into the challenges and benefits associated with BDA implementation, as well as the factors that contribute to successful integration within business processes.

This mixed-methods approach allows for a comprehensive understanding of the relationship between BDA and decision-making, highlighting both the tangible and intangible impacts. The findings contribute to the growing body of knowledge on how businesses can effectively use Big Data to drive innovation, improve performance, and navigate the complexities of a data-driven world. The research also offers practical recommendations for organizations seeking to optimize their data analytics strategies.