

A Quantitative Study of Factors Affecting the Use of Cloud Computing through Big Data Technology

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Abstract: This quantitative study explores the factors influencing the adoption and utilization of cloud computing through big data technology. The integration of cloud computing and big data technology has gained significant attention due to its potential to enhance decision-making, operational efficiency, and innovation. However, organizations face various considerations and challenges when adopting and leveraging these technologies effectively. This study aims to provide insights into these factors using a quantitative research approach.

The study employs a structured questionnaire to collect data from a diverse sample of organizations. The questionnaire captures information related to the adoption and usage of cloud computing through big data technology, perceived benefits and drawbacks, organizational characteristics, security and privacy concerns, organizational culture, technical expertise, and industry-specific factors. The data collected will be analyzed using descriptive and inferential statistical techniques.

The findings of this study are expected to contribute valuable insights into the factors influencing the adoption and utilization of cloud computing through big data technology. The research aims to identify the key factors driving organizations to adopt these technologies and the challenges they face in the process. The impact of organizational characteristics, such as size and industry, on adoption will be explored. The study also investigates the role of security and privacy concerns in decision-making and the influence of organizational culture and leadership support on adoption. Furthermore, the relationship between technical expertise and successful implementation will be analyzed, along with the impact of industry-specific factors.

Keywords: cloud computing