Examining Factors Influencing the Acceptance of Big Data Analytics in Healthcare

Abdul Sajid Mohammed amohammed5836@ucumberlands.edu University of the Cumberlands School of Computer and Information Sciences Williamsburg, KY

> Mary Lind mary.lind@lsus.edu University of Louisiana Shreveport College of Business Shreveport, LA USA

Abstract

This study investigated the factors influencing the acceptance of big data analytics in healthcare. Big data analytics can improve many aspects of healthcare, including diagnostics, service provision, and patient outcomes. A cross-sectional online survey administered to N=132 professionals working in the U.S. healthcare industry used regression analysis to determine the extent of the predictive relationships between the variables. The findings support previous research linking big data analytics to performance improvements in healthcare by highlighting performance expectancy's significance as a predictor of behavioral intentions. The mixed results suggest that the Unified Theory of Acceptance and Use of Technology (UTAUT) has limited explanatory power when studying big data analytics adoption in healthcare settings. Future research should focus on developing a theory that explains big data analytics acceptance and use based on information security risks, implementation costs, and user aversion to technology.

Keywords: Big Data Analytics, health care, UTAUT, performance expectancy

An updated and full version of this abstract may be found at https://jisar.org

ISSN: 2473-4901

v9 n5998