

Situation Awareness, Digital Competence and Motivation to Use Artificial Intelligence Technologies among Librarians in Edo and Delta States, Nigeria

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Certification

This is to certify that this thesis was carried out by **Nosakhare Okuonghae** with Matriculation Number **LCU/PG/002840** a student in the Department of Information Management under my supervisor in the Faculty of Communication and Information Science, Lead City University, Ibadan, Nigeria.

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Dedication

This project is dedicated to the God almighty

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Abstract

Motivation to use artificial intelligence (AI) technologies are those factors that influenced users' drive to actually use AI technologies. There are various AI technologies that librarians can adopt to improve their service functions. However, studies have shown that the use of AI among librarians is low. It is in the light of this that this study therefore investigated the motivation to use AI technologies among librarians in Edo and Delta States. Descriptive survey research design was adopted. The population consist of 125 librarians selected from 18 Universities in Edo and Delta States, Nigeria. Total enumeration technique was adopted because of the manageable size of the population. A validated questionnaire was used to collect data from the respondents. Data collected was analyzed using both inferential and descriptive statistics. The reliability coefficient for each of the variable ranged 0.72, 0.78 and 0.81. Finding revealed that situation awareness (Adj. $R^2 = 0.413$, $p = 0.000$) has positive and significant influence on motivation to use AI technologies among librarians in Edo and Delta States. It was also found that digital competence (Adj. $R^2 = 0.195$, $p = 0.000^b$) has significant but weak influence on motivation to use AI technologies among librarians. In addition, multiple regression analysis showed that situation awareness construct has positive and significant influence (Adj. $R^2 = 0.651^a$, $p < 0.05$), while digital competence does not. The study concluded that situation awareness and digital competence influenced motivation to use AI technologies. The study recommended that there should be more awareness of AI among librarians. At the same time, librarians should improve their digital skill through regular training programs so that they can effectively use AI tools.

Keywords: Situation Awareness, Digital Competence, Artificial Intelligence Technologies, Perceived usefulness, Perceived ease of use.

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