ABSTRACT

ChatGPT is an artificial intelligence platform that can help users write, learn, and solve assessments in a conversational manner. Botswana is concentrating on improving its education system to prosper economically and socially. The utiization of AI technologies such as ChatGPT in higher education has sparked debates. Critics worry that it may lead to plagiarism and fake references, while supporters see benefits in learning enhancement and increased access to academic materials. In Botswana, the delayed adoption of ChatGPT has been attributed to a lack of awareness. Different surveys revealed that 55% of univerisity students use ChatGPT, with 22% utilizing it expressly for academic work. While 89% of students have used ChatGPT in a classroom context. There is currently little research on this topic in less developed and emerging countries such as Botswana.

 Based on the above, this research aims to comprehensively understand and analyze the factors influencing customer adoption of ChatGPT within educational institutions in Botswana. The research utilized the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) as a theoretical framework to address this gap in understanding.

The research employed a quantitative approach using survey data and statistical analysis to examine the correlation between variables and test hypotheses. Non-probability snowball sampling was chosen as sampling. The questionnaire comprised scales developed from previous studies, with participants rating their level of agreement on a 5-Point Likert Scale.

This instrument was then utilized to collect primary data from 518 respondents using Google Form Survey. The obtained data was analyzed with Smart PLS 3.0. Confirmatory factor analysis was used to evaluate the psychometric properties, comprising reliability assessed through Cronbach's alpha and composite reliability scores, as well as testing convergent and discriminant validity using factor loadings, AVE, and HTMT ratio.

The result revealed that Personal Innovativeness (0.388) has the most positive and significant impact on Behavioral intention followed by Performance Expectancy (0.232), IT knowledge (0.221), Hedonic motivation (0.128), Habit (0.094), Effort Expectancy (0.071) while Social Influence (-0.017) Facilitating Condition (-0.024) does not have a positive and significant effect on the behavioral intention variable to use ChatGPT. The R2 of Behavioral Intention is 0.538 and Use Behavior is 0.517, therefore the modified UTAUT2 model in this study can be used to predict the Behavioral Intention and Use Behavior of consumers toward ChatGPT in Botswana.

The study recommends hosting competitions and providing research funding to enhance personal innovativeness. Performance Expectancy, hosting workshops, and integrating ChatGPT into course assignments. IT Knowledge developing a dedicated learning site and hosting webinars on ChatGPT. Hedonic Motivation hosting online competitions. Habit, educators to incorporate it into daily tasks and offer peer support. Effort Expectancy creating interactive tutorials. Social Influence creating student ambassador programs. Facilitating Conditions ensuring access to essential devices and providing technical support in computer laboratories. Behavioral Intention establishing user communities where users may exchange success stories, cooperate on projects using ChatGPT. Use Behavior recognizing successful users and providing certifications.

Keywords: Botswana, ChatGPT, UTAUT2, Technology Acceptance, Educational Institutions, Quantitative Research, Personal Innovativeness.