

Behavioural Intention to Use AI Chatbots in Online Shopping among State University Undergraduates in Sri Lanka

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Abstract

This study investigates the behavioural intention to use artificial intelligence (AI) chatbots in online shopping among Sri Lankan state university undergraduates, a key demographic in the nation's expanding e-commerce landscape. With rapid advancements in AI, chatbots have become essential tools for enhancing customer interaction and improving operational efficiency in digital retail. The research employs the Unified Theory of Acceptance and Use of Technology (UTAUT) framework, extended with trust, to examine the effects of performance expectancy, effort expectancy, social influence, facilitating conditions, and trust. A quantitative approach was adopted, utilising a structured questionnaire distributed to 384 students from 17 universities. Data were analysed using SPSS through descriptive statistics, Pearson correlation, and multiple regression. The findings reveal that performance expectancy, effort expectancy, and trust have a significant positive influence on behavioural intention, with trust and performance expectancy identified as the strongest predictors. Social influence and facilitating conditions exhibited no significant effect, indicating that students prioritise utility, usability, and reliability over peer opinions or infrastructural support. While the quantitative methodology ensures generalisability, it may limit psychological insights; therefore, future research could adopt mixed-method approaches. As one of the pioneering UTAUT based investigations in this context, this study offers valuable insights for developers, e-commerce retailers, and policymakers to design reliable, user centric chatbot systems that foster trust and adoption in emerging markets such as Sri Lanka.

Keywords: AI chatbots, behavioural intention, online shopping, trust, UTAUT