

ABSTRACT

This study explores the relationship between factors that influence user acceptance of biometric authentication technology using the Technology Acceptance Model (TAM). This research examines how perceived usefulness, ease of use, trust and security, privacy and attitude towards using the technology influence users' behavioural intention to use and, ultimately, actual system use. TAM was used to predict the potential influence of different factors and the role of new factors in biometric authentication adoption. The results showed that user intentions strongly influence the use of biometric authentication technology. This study included the development of a new hypothesis that examines the relationship between perceived privacy and intention to use the technology, which was supported by data obtained from respondents. In addition, this study found that users' intention to use the technology is influenced more by attitude, privacy, trust and security factors than by the perceived usefulness and convenience. Overall, the results indicate that in biometric authentication, new factors such as privacy, trust, and security play a more dominant role in shaping intention to use, even though these factors only have good descriptive ratings.

Keywords: *User Acceptance, Authentication Technology, Biometrics, Technology Acceptance Model*