Abstract

This paper evaluated users’ perspective of adopting a biometric authentication technique by utilizing a proposed model derived from the technology acceptance model to determine how effective user accepts a proposed keystroke biometric authentication in an E-Health System. This paper combined the TAM of Davis et al with the success adoption model of DeLone and McLean where external variables for the TAM of Davis et al were derived from the four dimensions considered in the model of DM. The research design is a self-administered survey and the empirical part of the research is quantitative. The aim of the empirical part is to test the fit of the conceptual model with received data based on a questionnaire. This paper uses a cross-sectional approach that provides a “snapshot” of the secured system’s usefulness and ease-of-use from the perspective of the end-users. Based on empirical findings, users with a higher degree of perceived usefulness, privacy concerns, and security concerns will demonstrate a more positive attitude towards adopting keystroke biometric authentication in an e-Health System. The proposed model and its elements prove that it can be a useful tool for decision makers in evaluating authentication techniques in e-health systems.
References

17. A study of personal information in human-chosen passwords and its security


34. User acceptance of computer technology: a comparison of two theoretical models. Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. 1989, Management science, pp. 35(8),


**Index Terms**

Computer Science  
Security
Keywords

DHIMS 2, Technology Acceptance, Delone and McLean, Keystroke Biometrics Authentication, Ghana e-Health Service