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Assessment of How Users Perceive the Usage of Biometric Technology Applications

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Abstract

Biometrics applications are progressively widespread as a means of authenticating end-users owing to the extensive range of benefits over traditional authentication (token-based-authentication). However, the transaction involves taking into account the perceptions and responses of end-users. If end-users are fearful, hesitant about these biometric technology-applications, misuse and implementation-complications can surely overshadow. The goal of this study is to sightsee the user's-motivation, understanding, consciousness and acceptance towards utilization of biometric technology-applications. A 300-person survey was conducted to evaluate public-opinion on the use and adoption of biometrics. Stratified sample technique was used to administer the surveys. The results presented that perceived ease-of-use, user-motivation and attitude are more important-factors when deciding whether to accept new technology-applications. Although many end-users have become more familiar with biometric technology-applications (e.g., Fingerprints or facial-recognition), many individuals still have a negative-perception of the technology. Concerns regarding confidentiality and security i.e., storing and protecting personal-identification data, the fear of intruding into a person's daily-life and disclosing personal-information remain a major problem. Some end-users claim that despite the potential resilience to biometrics, designers must mentally and psychologically prepare the general public for the new use of biometric technology. This will make it possible to transform negative user-perceptions into a positive-experience. Thus, this study can help end-users and companies understand and make the right decisions to promote the use of biometric-applications and services. The study is expected to be an important research-discovery that will greatly contribute to Uganda's digital-economy.

Keywords

Biometric application; User perception; Privacy; Security; Utilization