

Cybercrime Prevention in Online Transaction Using Biometric Access Control

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Abstract

Cybercrime is a recognized international problem that is a major security issue for anyone who manages, owns, uses or accesses computer systems linked to the internet. The yearly cybercrime cost in the United States is over 300 million and rising. The crucial security mission is access control to systems to keep out identity thieves. However, with the rise of identity theft it has become more difficult to prevent unauthorized access to information resources. Methods of positively verifying and authenticating people may mitigate the current identity theft crisis.

The development of information technology in online transaction model provides efficiency for account holder to do online transaction. In this situation, technology plays important role in providing consumer identity protection. However, the cases of online transaction scams have been on the increase. Perpetrators access consumer's account and do online transaction illegally. Identity theft is one of the fastest growing types of cybercrime. Using biometric such as fingerprint technology is very important to protect consumer identity during online transaction. This paper focuses on customer identity theft protection in online transaction through biometric technology application. The result shows that the biometrics technology can be applied in the cyberspace to authenticate genuine customers only.

Index terms: authentication, biometric access control, cybercrime, fingerprint, identity theft, online-transaction

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