

A review of security aspects of ATM transaction in banking sector

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Abstract. An Automated Teller Machine (ATM) is an electronic banking transaction point that allows customers to complete basic financial transactions in a public space without the assistance of a branch representative or teller. The current banking system is very popular with the feature of offering high quality 24 hours service to the customers, but there is a low-level security for the ATM transaction. At present ATMs are so advanced which can communicate with each other even if different banks, so it can be introduced as shared ATMs. There are different transaction methods used in shared ATMs with regards to the encipherment of PIN, biometrics methods, OTP methods, SMS methods and mobile banking methods with QR code. The existing method of Personal Identification Number (PIN) at the ATM has stood the test of time, mainly due to its speed and storage, but there is a greater risk to customers and the bank. Identifying the best transaction method and propose an enhanced feature for further enhancement or the development is the main aim of this review paper, and this study investigates more about ATM system in advance. This review is intended to carry out a detailed analysis on how to enhance security of transactions in ATM system and introducing mobile banking transaction method with QR code feature to improve the service of ATM transaction in less time with more level of security. The review is conducted with the objective of proposing an enhanced feature to improve the service of ATM transaction in more level of security, compare security level of existing and proposed ATM system and identifying main security issues of existing ATM system.

Keywords: *ATM, ATM transaction, PIN, security, banking sector, ATM fraud, Biometrics, QR code*