



A Framework for Nominated User-Based Secured Automated Teller Machine (ATM) Transactions for Increased Availability (Nigeria)

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Abstract:

There is need for improve security in ATM transactions. Due to tremendous increase in the number of criminals and their activities, the ATM has become insecure. There could be situations where an account holder is incapacitated or a case of emergency that would make the account holder not to be physically present at the ATM point; ATM systems today use no more than an access card and PIN for identity verification. The Personal Identification Number (PIN) not only gives good security. The fingerprint is unique and cannot be duplicated by others. This paper combines the GSM technology and fingerprint recognition technology for identification. With fingerprint recognition technology, we embedded the GSM modem to generate the 4 digit one time password and it send to the main user mobile number only when the nominee user enrol the fingerprint. The fingerprint of the nominee and the card holder are collected and stored in the database. Every fingerprint which enrols is check by the database. The 4-digit one time password should be replied by pressing the keys on the mobile phone. After which, the customer can begin the further transaction. We also proposed room for many more nominees fingerprint identification process while actual card holder unable to do the transactions. The biometric features cannot be replicated; this proposal will go a long way to solve the problem of account safety. The Nigerian Banking sector over the years has been experiencing significant changes and development in its Information and Communication Technology. Among the development is the introduction of Automated Teller Machine (ATM) that intends to decongest the banking halls as customers now can go to any nearest ATM outfit to consummate their banking transactions such as: cash withdrawal, cash deposit, bill payments, and transfer of fund between accounts. The purpose of this paper was to measure the satisfaction of customers as regards to ATM services.

Biography:

Reuben Chukwuemeka Njoku is a Cyber security professional with experience in the field and holds a Bachelor Degree in Cyber security from the prestigious Federal University of Technology Minna (where he was the students' Association President) and working towards getting a Master of Science in the same field. Reuben has years of work experience as a Funds



Transfer Officer at Access Bank PLC. In his role of Cyber Security Analyst for CyberDome Nigeria he analyzed data and documents for inconsistencies that may indicate various types of fraud, Protection of company's digital assets from unauthorized access, among others; Security policy implementation reports for IT administrators and business managers as the team lead. He is conversant with all the latest information security programs and applications, and have much experience installing and using them, as well as teaching them to all departments regardless of their IT Knowledge. Reuben is detail-driven with an eye for spotting errors. His analytical skills are sharp and is able to solve complex problems. He has presented numerous papers in conferences including ISACA Abuja Annual International Conferences and workshops. He is currently a volunteer Cyber security Analyst of ISACA Abuja Chapter.

Publication of speakers:

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