**ENHANCING ATM SECURITY USING FINGERPRINT BASED AUTHENTICATION**

**ABSTRACT**

In this modern world, all the people were used ATM machines to withdrawal and transfer cash. This research based on implementing Fingerprint mechanism in the ATM System. We were selected this area to increase save and secure for all customers to make easy to do the transaction. The fingerprint minutiae features are different for each human being. There is no worry of losing ATM card and no need to carry ATM card with you always. By comparing different technologies that are used for ATM security, it observes that fingerprint technology performs better and safer than other technologies. Which is making easy and secure transaction also maintaining user-friendly environment with user and ATM machine. This is most promising technology at electronic money transaction.

**EXISTING SYSTEM**

In our modern world, all the people used to do truncation in banking like deposit money and withdrawing money. For that, the customers will be standing in queue to withdraw money from bank. All the customers felt like waiting for withdraw cash. Therefore, that bank introduces ATM (Automated teller machine) to help the customer to withdraw money quick. In that ATM system, they introduce CARDS (Credit, Debit, master, Visa) to the customer to withdraw cash by using them. Main advantage is quick cash providing by the ATM system. The customer feels happy and they will not waste time to withdraw cash by standing. but it has the disadvantage like, smart cards and physical keys, can be stolen, lost, replicated, or left behind; passwords can be shared, forgotten, hacked or accidentally observed by a third party. The banks required a better system to maintain security for the customer to do the transaction in their banks. To overcome these problems, the developed this fingerprint based ATM system.

**PROPOSED SYSTEM**

The proposed system to increasing the safe and security by introducing fingerprint system. The advantage of finger-scan technology is accuracy. By using fingerprint system many disadvantages are rapidly, reduce. They are we need not to carry ATM card in your wallet and no chance of loss card, CARD can be stolen, password can be shared or, hacking many customers are satisfied by our system because of quick and better service. Moreover, initially we store the fingerprint of bank manager and that verified with the fingerprint that we are giving when the time of authentication. If the fingerprints are matched then ATM cashbox will open, otherwise buzzer will give alarm.

**OBJECTIVES**

The objective of this research are listed below

* Fingerprint based ATM System is more secure than ATM card.
* User can make transaction using his fingerprint any place and at any time, he need not have to carry ATM card.
* User can transfer money to various accounts by mentioning account number in case of emergency.
* The system can be used in various Banks.
* Low educated people can access easily.
* When our ATM card misplaces then no one use or access. It automatically blocks.
* No one can hack the pin code. The hackers can easily guess the 4-digit pin code.