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ADVANCED SECURITY SYSTEM FOR ATM'S

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Abstract:

In present time ATM (Automatic Teller Machine) robbery is the common thing, because we have not strong security and rule or regulation to withdrawl the cash from ATM with help of ATM card. We generate many problem during robbery of ATM like police not reach in correct time , no information or no alert, weak wall of ATM room and so own . In this paper I have provide the solution of robbery of ATM to used various technology, rules and regulation. This is common weakness in ATM security facility, remove this problem we used following technology to improve security system .This technology work in main three steps or phases, in first phase user need to swap the ATM and used palm for scanning after successfully swap machine will generate voice you can enter for 2nd phase and palm will save in that transaction database. When you go for 2nd phase then need to scan the retina and then go for phase 3rd. there will final ATM. In performing the transaction gate will closed. The wall of phases will of strong fiber that can not cut by any Gas. When he wants to come out then need to press a button that button connected through gate then gate will open. The final phase has Gas that can power for unconscious.And all CCTV cameras monitored by near police station.

Keywords: Biometric System, Security System Architecture, Retina & Palm Scanner, Automatic Alarm Generation, Software Architecture.

1. INTRODUCTION

In performing the transaction gate will closed. The wall of phases will of strong fiber that can not cut by any Gas. When he wants to come out then need to press a button that button connected through gate then gate will open. The final phase has Gas that can power for unconscious.And all CCTV cameras monitored by near police station.

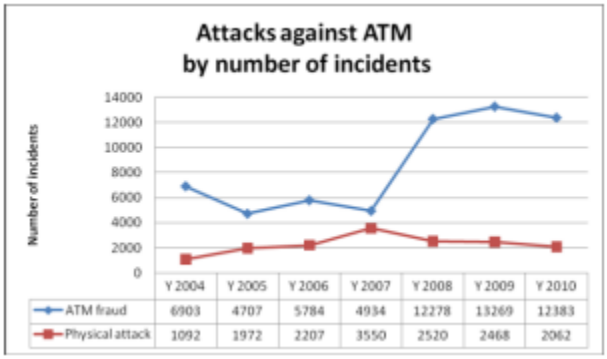

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Fig.1. ATM Robbery per year

When any thief does robbery in ATM then alarm generate in police station and Gas will leak in near ATM. Then in this situation all information like, robbery time, date, CCTV data, voice data will stored in server. The server monitored by state level. This paper shows only how three phases will work and generate alarm. The ATM robbery is the common problem. This technology has solution to remove it in sequential manner. In present time we have thousands number of robbery attacks. It is detail which is registered, if we calculate then it will much then imagination. This technology is responsible to call for police in robbery situation and try to catch the thief using some unconscious by using Gas. It works with many technologies, but basically it has three phases for operating procedure. This system contains in a single room but we divide three phase or boundaries between ATM working procedures. The first phase contains verification of user and valid ATM pin, account number. When user do swap of ATM card then he give response for valid ATM card else he generate message this card in invalid. If you used card more than three times then system do not response, or system layer will close it will open when you will press button new card.

2. RELATED WORK

After successfully of first phase you go in second phase, it used the palm and retina scanner after scan the door will open. If he is new user then save in data base if he is old user then match profile in data base if user is successfully match then open gate for third phase, You have to take a photo with help of face recognizer than go in finally ATM machine, please insert your ATM pin perform transaction and come out with press a button that located near 3rd phase.

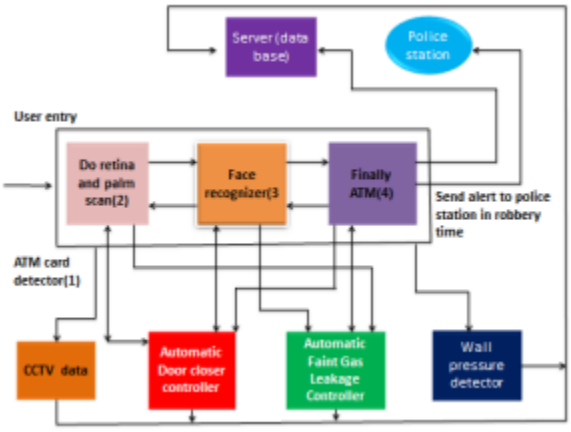

Fig.2. Block Diagram

The boundary walls of ATM will strong metal that can not cut by help of any gas. And when thief broke any part of ATM then alarm generate. And send all information near police station. The police station will connect through GPS. The biometric system has responsibility to measure the psychological and behavioral characteristics of human. The biometric system data collected on main server it also give facility to match input in valid state. When user will give input as eyes then sensor scan eye and match from existing database if old user then match confirm else store new identity of that user. In case of palm scanning user need to

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put your palm in system after putting the pal it will scan the palm with help of sensor that send the data in main user.

3. SYSTEM ARCHITECTURE

The total structure of security system will dependent on various technology and many approach. All steps will connect with phase by phase, the overall structure of security system will make in a complete room. The room will divide into three phases and each phase has the some operating part.Three phases will pack by strong metal that can not cut by any type of Gas.

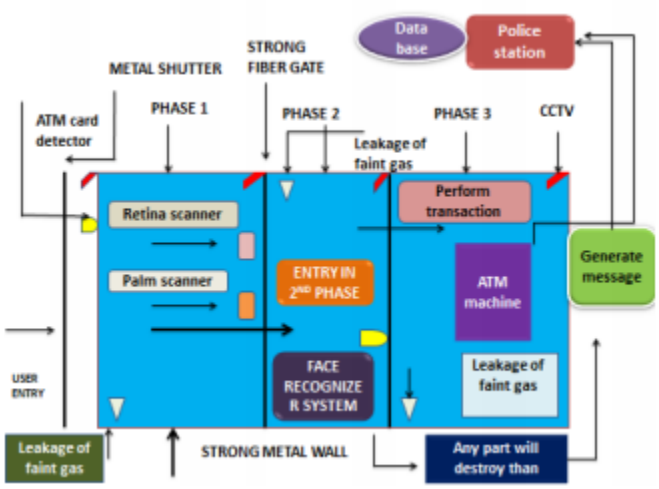

Fig.3. Architecture

In both phase the faint (unconscious) Gas will present. It connection will attached from breaking any module of ATM then faint gas will open. Suppose that thief want to lose Gas without faint of any person then he break any part of ATM security then remove this type of situations then Gas will leak when number of any object will present in ATM inside portion. If two peoples want to go inside the ATM than only two can go, the second people follow same instruction or procedure. The connection of CCTV pack in strong metal can that have sensor that can measure any brokenness in CCTV then alarm will generate. You can see overall structure of security system in following diagram. If card is valid then first gate will automatic open, else card is not valid then give response that your card is invalid please contact your related branch. If any thief wants to go inside without ATM and break anything related to security system then alarm will generate. The network of blood vessels in the retina is not entirely genetically determined and thus even identical twins do not share a similar pattern.A retinal scan is performed by casting an unperceived beam of low-energy infrared light into a person's eye as they look through the scanner's eyepiece. This beam of light traces a standardized path on the retina. Because retinal blood vessels absorb light more readily than the surrounding tissue, the amount of reflection varies during the scan. The pattern of variations is digitized and stored in a database.

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4. RESULT ANALYSIS

This system will work when the any authorization process will detect or pressure detector detects more pressure in wall. The gas leakage system will set up in each phases, when any person will try to access the authentication to without permission than faint gas will leakage. The wall have pressure detector. All sensors will connect through a circuit, and circuit has responsibility to send message through wireless communication protocol. The pressure detector is the type of sensor that will have responsibility to detect the object or feel object to any pressure of objects. This will activate when any unauthorized person want to access the ATM. This sensor will operate with some power supply and when any person will break or destroy all parts to relate the ATM then alarm will generate. The process of alarm generation will occur when pressure detector sensor will activate, and send signal in near police station.

Fig.4. Scanning Process

The police station has software that will install in each police station. This software will connect through GPS and GPS send signal to search near police station. It has many modules like user can search or see the alarm generation detail, time, date, location and other things.

CONCLUSION

The security system of ATM safety has very techniques to maintain the robbery problem. In future thesecurity system will advance. We can enhance the security system to safety of ATM by robbery problem. We have strong internet communication in future and solution all problem regarding the folds, airthquicks and others. In future we will enhance the weakness of retina scan, palm scanner and others. The main things are that police must become more faithful for people security. And follow the rule and regulations related to this system to improve security of this approach.

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