

# Intelligent ATM Security

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**Abstract**— Automated Teller Machine (ATM)’s now days are extensively used all over the world for the withdrawal of cash. A unique card is issued for each user along with the unique code provided to him so as to the person may do all his transactions personally without anyone getting known. Since transactions are extensively secure there is no much more security required but in countries like India its very necessary to have a physical security to the machine. Our proposed system will provide advanced ATM theft security system. The afflatus for our project is gained from the news and issues which are happening in our daily life. Now a day’s larceny or robbery of ATM is super abundantly increased so due to that we trying to disclose remedy for it. Keeping the technique of ‘keeps it simple’ in our mind, we recommended advanced ATM theft security system for ATM machine, starting from sensors at the entrance to GSM technology in the ATM machine. Followed by the smart unauthorized access detection and informed to the nearest police station and the Bank Authority.

**Key words:** ATM Security

## I. INTRODUCTION

We belong to the edge of digitized and smart world. People are getting smarter day by day with the help of new technology, new innovations. Main reason behind the up-gradation of new technologies is nothing but to overcome the existing problems. Economic growth of world makes the life smarter and better as compared to previous lifestyle. A smart step towards economy is the introduction of Automated teller machine (ATM), for faster and easier money transfer. But a group of people do malpractices over this ATM system to put people, organization or bank into a millions pounds of loses. If any types of unexpected events occurred, nearest police station and the authority will be informed automatically.

## II. LITERATURE REVIEW

In 2013 International Journal of Engineering Inventions e-ISSN: 2278-7461, p-ISSN: 2319-6491 Volume 3, Issue 1 (August 2013) PP: 01-07 paper proposed by Sivakumar T. Gajjala Askok, k. Sai Venuprathap paper name “Design and Implementation of Security Based ATM theft Monitoring system”

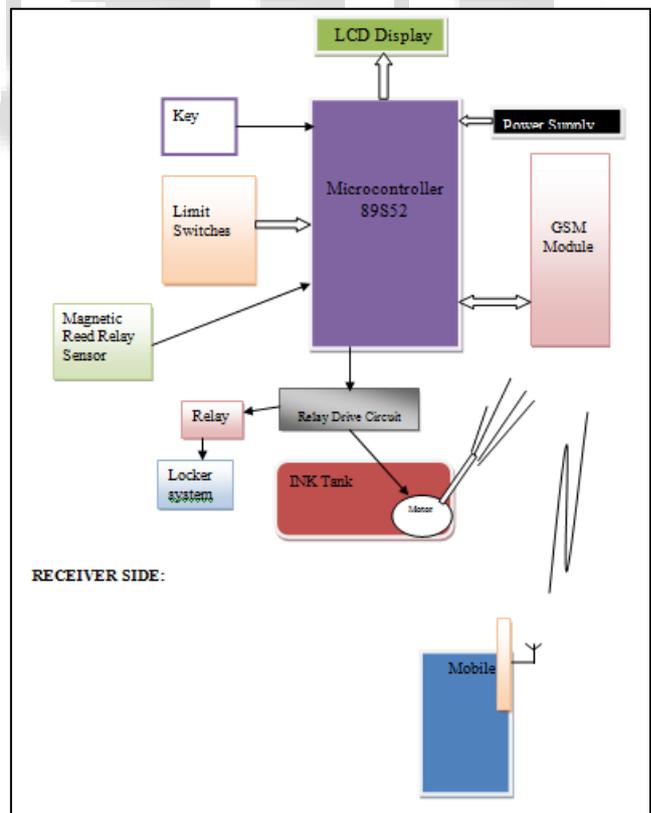
The Idea of Designing and Implementation of Security Based ATM theft project is born with the observation in our real life incidents happening around us. This project deals with prevention of ATM theft from robbery.so overcome the drawback found in existing technology in our society. Whenever robbery occurs, Vibration sensor is used here which senses vibration produced from ATM machine. This system uses ARM controller based embedded system to process real time data collected using the vibration sensor. Once the vibration is

sensed the beep sound will occur from the buzzer. DC Motor is used for closing the door of ATM. Stepper motor is used to leak the gas inside the ATM to bring the thief into unconscious stage. Camera is always in processing and sending video continuous to the PC and it will be saved in computer. RTC used to capture the robber occur time and send the robbery occur time with the message to the nearby police station and corresponding bank through the GSM. Hear LCD display board using showing the output of the message continuously. This will prevent the robbery and the person involving in robbery can be easily caught. Here, Keil tools are used to implement the idea and results are obtained. keil tools is used for run the DC motor and stepper motor for automatic door lock and also leak the gas inside the ATM.

## III. PROBLEM STATEMENT

The ATM Machines are not secure unless and until some physical protection methods are provided. The various types of attacks are as listed in the figure.

## IV. BLOCK DIAGRAM



## V. WORKING

In this project we will use the microcontroller 8051. It will be central part of our project. We will be interfacing LCD with

micro-controller. LCD will used to display all condition on display. We will also used the limit switch & reed relay for money tray of ATM machine when any sensor position change hey will indicating the ATM machine is open that time this signal will giving to microcontroller & microcontroller send signal to GSM & GSM send message on police or bank person mobile. also same time ink will spray on money. This ink will be indication those money or thief money.

#### VI. COMPONENTS USED

- 1) Microcontroller 89s52
- 2) LCD
- 3) GSM
- 4) Power supply
- 5) Magnetic reed relay
- 6) Limit switch
- 7) Relay driver
- 8) Relay

#### VII. ADVANTAGES

- 1) Provide complete ATM theft security.
- 2) Inform the police station.
- 3) Our proposal supports smart city concept.

#### VIII. LIMITATIONS

- 1) This advanced secured system may be costly as compared to existing.
- 2) Making of ATM machine will be little bit complex in structure.

#### IX. FACILITIES & REQUIREMENTS

- 1) Computer with software like Keil 3, Proteus, Flash magic software.
- 2) Microcontroller IC burning kits.
- 3) Internet & online journals.

#### X. CONCLUSION

Our suggested system will be very much effective to reduce the ATM robbery. This secured system will also help the higher authority to take necessary steps before happening of a theft or unauthorized access by any trespasser. Limitation of this proposed system may be a little bit costly as compared to current ATMs, but when it's all about someone's money, potentiality is more of this system. This advanced ATM theft security system will provide secured, smarter and better tomorrow for the human being.

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