

ATM BANK MANAGEMENT SYSTEM

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ABSTRACT

With the help of an automated teller machine (ATM), customers can conduct banking transactions without having to speak with bank employees directly. Every account holder must have a distinctive ID card for each individual account with a distinctive pin in order to do this. Whatever the unfortunate circumstance, using this ATM service is not allowed in the absence of this card. Aim is to suggest a better feature to speed up the cash withdrawal process from ATMs. In India, there are some **rural areas** where people don't know how ATM works. Also, some aged people and young boys and girls also don't know how ATM works. Anxiety to use a machine and unnecessary fear of leakage of personal information like ATM Pin may be some reasons .There is no change required to the current system. The customer satisfaction could increase as a result of this research, which will speed up cash withdrawals.

KEYWORDS

ATM, Digitalization, Icon, OTP ,PIN.

1. INTRODUCTION

A few years ago, in order to withdraw cash, we had to visit banks, wait in a long line for our turn, and fill out paperwork with our personal information. Withdrawing money from a bank account took a lot of time and felt like a big project. After some time, technology advanced, and some brilliant

comes to cashless travel is ATM service. Every account holder who uses an ATM has their own individual, provided by the corresponding bank, ATM card. A finite number of transactions using those ATM cards are allowed over a finite period of time from any ATM. However, having an ATM card makes digitalization much simpler overall, especially when using online marketing or money transfer services. When using an ATM, the card must be inserted into the machine along with a special password or identification code. If the credentials of the card match those on the server, the transaction is approved.

Fewer people are withdrawing cash from ATMs as a result of consumers mostly using debit and credit cards instead of cash to pay for purchases. However, there are still some locations where cash is required, so the customer must visit an ATM to withdraw it from his account. There are currently more than 1.5 million ATMs operating worldwide. We occasionally have to stand in line in front of the ATM. Even though we have to wait in line at the ATM machine when we need cash, there are times when we are in a rush. Additionally, choosing numerous unnecessary options, such as language, account type, print transaction, etc., is required when using an ATM to withdraw cash, which takes time. some people also don't know how to use this ATM and it is also not possible to go to bank for every transaction so to give knowledge of ATM to every citizen of India

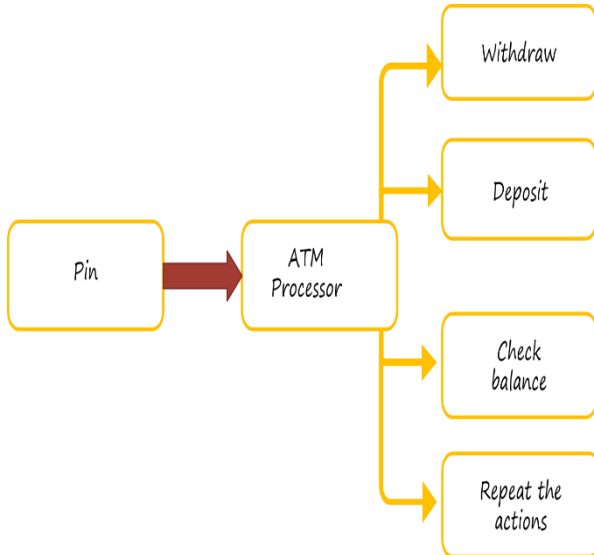
is important. So, to create simple ATM machine which can be easily understood by teenagers and also aged people.

II.LITERATURE REVIEW

ATM Service is the one of the projects related to this project. In No matter how unfortunate the circumstance, using this ATM service without an ATM card is prohibited. Therefore, a microcontroller-based embedded system-based Internet of Things and Computer Vision-based Smart ATM service is proposed here, where each individual will be their own identity and where fingerprint, face, and OTP verifications are vital characteristics for security. Since no ATM card is required for transactions in this suggested model, face recognition coupled with aliveness checks of the face, fingerprint verification, and OTP (one time password) security checks have been considered for purposes of security. Here's a basic explanation of the face recognition concept. To cut down on transaction time, transactions from ATMs utilising mobile banking in addition to ATM use are suggested. However, if the system is compared to any biometric security, there may be security issues. In contrast, this mobile device is required every time for ATM service, however the suggested model just deals with the user and is more advantageous when it comes to account holder transactions. The research study described SEPIA, or Secured Pin Authentication, as a mobile ATM solution. Additionally, a new "MCARD" is made available there so that users can access mobile banking services using the same card rather than an ATM card. On the other hand, other services allow users to generate a secure banking pin, verify co-location with cloud-based servers, and check authenticity from any mobile or wearable

device. We also look at the paper by FELIX C AGUBOSHIM. This study's goal was to pinpoint software strategies. developers of In Nigeria, ATM systems are used to provide user-friendly banking ATM system interfaces for a variety of users with varied reading levels and skills. This project specifically addresses the IT issue that some Nigerian software developers of banking ATM systems lack methods for designing user-friendly ATM system user interfaces for a range of persons with diverse skills. The results of this study may significantly increase knowledge about the use of ATMs and electronic banking in Nigeria. They may also offer banks and organisations that use bank products banking insights on how to increase customer satisfaction as many developers learn effective methods for making user-friendly interfaces that benefit a variety of people with different abilities and literacy levels. The next study we looked at addressed the accessibility of ATMS for functionally illiterate users with an icon-based interface. This study examines the preliminary design and assessment of an icon-based ATM interface for use by bank account holders who lack functional literacy. Icon-based visual interface is an alternative that may negate the need for written and reading literacy, but raises the question of visual literacy and the interpretability of visual icons. The three different versions of the ATM interfaces were a text-only interface, an icon-only interface and a text-and-icon interface. The icons developed in the study were then incorporated into the generic task flow of the ATM withdrawal transaction. Each subject was required to perform the same withdrawal transaction with each of these interfaces.

III. METHODOLOGY



A. Characterisation

We have used c language to create this ATM machine.

After entering the correct pin our ATM machine will show you four options, 1} Check your balance, 2} deposit money and 3} withdraw cash. Once you select option (1) then then you can check your balance. By entering (2) you can deposit money. when you press (3) you can withdraw money. After every transaction it will ask you that do you want to repeat the action or finish process. If you enter (1) then you can do another transaction and if you press (2) then your process will be get finished. After depositing money, you can again go back to check balance.

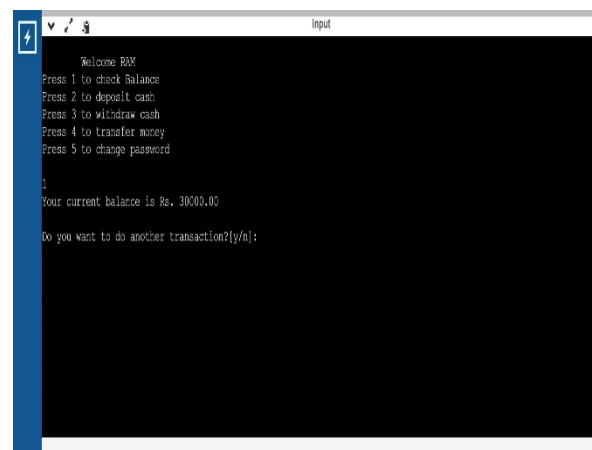
B. Simulations/ Experiments/ Testing (As Applicable):

Program Outputs.



```

Enter amount to be added: 30000
You have deposited Rs.30000
Do you want to do another transaction?[y/n]: y
  
```



```

Welcome ATM
Press 1 to check Balance
Press 2 to deposit cash
Press 3 to withdraw cash
Press 4 to transfer money
Press 5 to change password

1
Your current balance is Rs. 30000.00
Do you want to do another transaction?[y/n]:
  
```

IV.RESULTS AND DISCUSSION

The program snippet is designed with multiple inputs the user has been provided with the options of checking his or her balance then followed by depositing cash and withdrawing cash.

The user can enter the number provided with the respective options in order to perform his or her desired task i.e., weather to check balance or withdraw or deposit cash and procced to the completion of the snippet by following all the necessary

information's appearing before the individual's screen.

At the end of this project, we will be completing all our four objectives as well:

1. To design a cardless ATM
2. To prevent direct interactions and to reduce the paperwork
3. To make everyone familiar working of ATM especially the people between age 18 to 22 and elder ones.
4. Ultimately to save the time of the people by making them not to stand in queue.

A lot of advantages are also associated with this project which includes:

1. It makes sure there is better record keeping and guaranteed security
2. It will reduce fraudulent activities and ensures speedy processing.
3. It reduces all possible human errors.

V. CONCLUSIONS

a. The main aim of the project was to make everyone familiar with the working of the atm. Especially the newcomer's i.e., the people between the age 18 to 22 who want to learn the working of this device and the elder ones who are also not familiar with the working of this machine.

b. By making use of the time spent in the ATM line, it also serves the purpose of saving time when withdrawing cash from the machine. When using this feature, a successful cash withdrawal transaction will be completed in just 10 seconds as opposed to the typical 30-second minimum and longer in the event of unsuccessful attempts. This means that a cash withdrawal transaction using this feature will take less

than half as long, saving more than 50% of the time.

c. ATM PIN security Because the customer won't use the ATM PIN on the ATM machine after using this feature, there is no need to conceal it on the ATM. To complete the transaction, the customer will use an OTP, which is a random number for each transaction.

d. OTP length can be up to 6 digits, whereas an ATM PIN is only 4 digits long. hence this task is also reduced.

e. Increasing security This feature increases the PIN security for cash withdrawals. In addition to the ATM PIN, the transaction must also be completed with the OTP (sent to the registered mobile number only) and Mobile Banking PIN.

f. Access to the current system There is no waiting time if the ATM is available, so we can immediately use the current cash withdrawal procedure. Whoever chooses not to use this feature will not see a change in the system.

g. This project can have wide application in the near future because India and the entire world is shifting towards online transfer of cash and this can system can help it to go further.

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VII. REFERENCES

1} User Interface Challenges Of Banking ATM Systems In Nigeria.

https://www.academia.edu/39945212/User_Interface_Challenges_of_Banking_ATM_Systems_in_Nigeria

Author - Felix C Aguboshim

2} Accessibility of ATMS for the functionally illiterate through icon-based interfaces.

https://www.researchgate.net/publication/20208531_Accessibility_of_ATMS_for_the_functionally_illiterate_through_icon-based_interfaces

Author – Andrew Thatcher, Smangaliso Mahlangu

3} SMART ATM SERVICES.

<https://ieeexplore.ieee.org/document/8783820>

Author- Alebiosu M. Iyabode, Yekini N. Nureni, Adebari F. Adebayo, Oloyede A. Olamide