CARDLESS TRANSACTION

Siddhant tripathi[1]
(Department of Computer Science & Engineering)
SRMGPC, Lucknow
Siddhant.tripathi97@gmail.com[1]

Shweta Nigam[2]
(Department of Computer Science & Engineering)
SRMGPC, Lucknow
er.shwetanigam@gmail.com[1]

Abstract

The purpose of this research is to demonstrate the idea of simplifying the transaction procedure in ATMs by using mobile number registered with the bank and replacing the pin authentication method by aadhaar biometric verification.

Keywords— ATM , Aadhar, Cardless

Introduction

This project aims to demonstrate the idea of using mobile number and Aadhaar biometrics to withdraw money from the ATM without using debit cards. The idea behind this project is that every person holding a bank account has mobile number, also aadhaar card is now a mandatory and unique identity for every citizen of India as well, and the bank accounts are now being linked to aadhaar number of the corresponding person. So, a person who requires to withdraw money can visit the nearest ATM and if he doesn't has his ATM card at the moment, he/she can still withdraw money and can even access other banking services at the ATM with his mobile number at any ATM. For this, the person must select the name of his bank account provider from the list of banks on the screen and then, enter his/her mobile number corresponding to that bank to proceed. After that to authenticate his identity he must place his finger(any) on the fingerprint scanner and since his account is linked with Aadhaar, his identity will be verified on the basis of Aadhaar identification and he will be successfully authenticated.

Literature Review

The following works have been done in the past, which are somehow related to this project:

1. In June 2016, DCB launched the service in Bengaluru to withdraw cash from ATM using aadhaar Card number and aadhaar fingerprint (biometric) instead of ATM Card or PIN. **Unfortunately, the service is only limited to DCB Bank customers [1].**

2. Mumbai, Aug 09, 2018: Axis Bank has become the first bank in the country to introduce Iris Scan Authentication feature for Aadhaar-based transactions through its micro ATM tablets. This service, which requires a customer to scan their iris on a tablet, will boost the Bank's Financial Inclusion efforts by making Aadhaar authentication process hassle-free and offering easier access to digital banking for consumers especially in the rural parts of the country **[2]**.

Method

Now, this process will proceed in following steps:

1. User requiring ATM services visits the ATM, nearest to him and opts for card-less transaction from the screen.
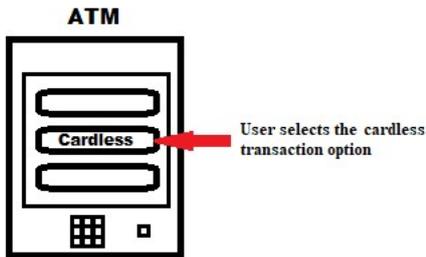

Fig. 4.1

2. Then he selects whether his account belongs to the bank corresponding to the same ATM in which he is currently in or to some other bank.
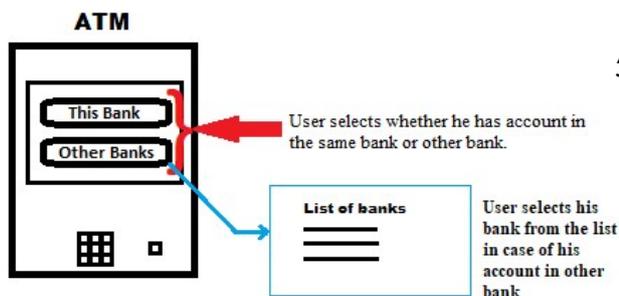

Fig. 4.2

3. If the account belongs to that ATM's bank only, he clicks on 'Self' but if the account belongs to other bank, he clicks on 'Others' and selects his bank and then the database of corresponding bank gets linked to the ATM server.
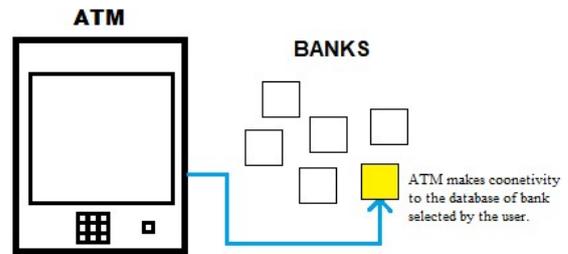

Fig. 4.3

4. Now, on the next window he enters his 10-digit mobile number corresponding to selected bank account and clicks on 'Next' button.
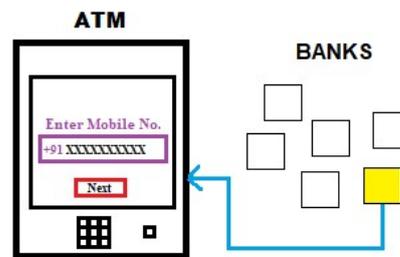

Fig. 4.4

5. Now, that number gets searched in the corresponding bank's database and then on fetching the details, if user has just one account in that bank corresponding to the given mobile number, he gets redirected directly to biometric authentication page else, if he owns multiple accounts he gets the last 4 digits (no. of digits might increase on by one if the number matches) of each of his account's number, selecting which he proceeds to biometric authentication page.
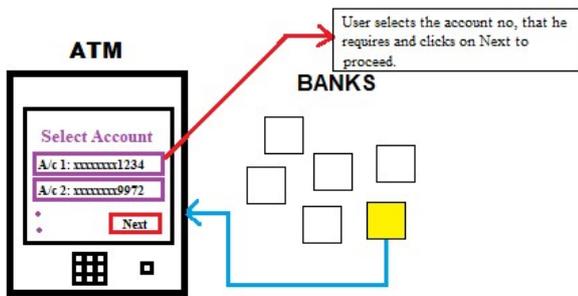
Fig 4.5

6. Then, he places his finger on the fingerprint scanner to authenticate using Aadhaar database.
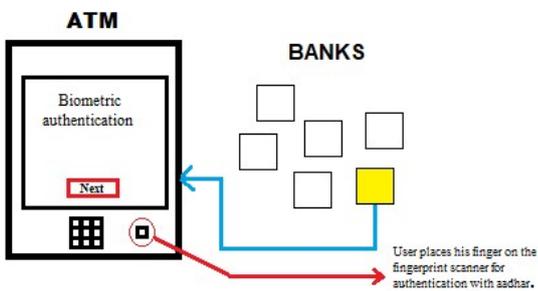

Fig 4.6

7. After successful authentication, the user will be able to complete his transaction process.

Expected Result

If the above research proceeds successfully, it is expected that the motive of this research will be achieved that is the person would not require ATM cards to withdraw money from ATM machines. Apart from this, ATM transactions would become more convenient for people as they could transact just by using their mobile numbers verified by aadhaar biometrics.

References

1. http://www.dcbbank.com/pdfs/DCB_Bank_Press_Release_Aadhaar_ATM_launch_in_Itarsi_Madhya_Pradesh__3.pdf ,visited on 15 sep 2018.

2. https://www.axisbank.com/docs/default-source/press-releases/press-release---axis-bank-introduces-iris-authentication-over-micro-atms.pdf?sfvrsn=7277b455_0,visited on 15 sep 2018.

1.

I.