

Abstract: payment technologies create both opportunities and

[Business](#), [E-Commerce](#)



ABSTRACT: In the present system, only cash or card or online based payment is implemented so far, there is no peer to peer card based payment is available. In the proposed, Peer to peer to cashless transaction is implemented. Both transmitter & receiver should be in peer to peer communication. Fingerprint of the receiver should be verified and a token is generated to the transmitter part. Only after successful transaction, amount is transferred to the receiver. we are implementing four different system using aadhar number namely, 1) cashless transaction, 2) ticket booking, 3) user behaviour analysis, 4) Qr code based money withdrawal.

we deploy Aadhar card based payment system. Here Finger print module is connected and verified from the sender part. so that user can transfer money, do booking systems, pay penalties and all the activities are processed by the Aadhar card only. We are implementing Qr code to withdrawal money from ATM. We can analyse user behaviour using aadhar card. So that complete transactions are processed, through Aadhar card.

INTRODUCTION: Advancement in the payment technologies has an important impact on one's quality of life. Emerging payment technologies create both opportunities and challenges for the future. Being a quick and convenient process, contactless payment gained momentum, especially with merchants, with throughput being the main parameter. However, it poses risks to issuers, as no robust customer verification method is available.

1 Thus, efforts have been underway to evolve and sustain a well-organized, efficient, reliable, and secure unified payment system, which may contribute to the smooth functioning of the market by eliminating obstacles in business.

<https://assignbuster.com/absract-payment-technologies-create-both-opportunities-and/>

This article presents an approach and module by which one card can communicate with another using near-field communication (NFC) technology to digitally transfer money from the payer's bank to the payee's bank. This model will help for no need for physical cash and also serves all types of payment and identity needs. Embodiments of this approach furnish a medium for cashless card-to-card transactions. The module, which is called Swing-Pay, communicates with a bank via global systems for mobile communication (GSM). The security of this module is intensified using biometric authentication. We also present an app on the Android platform, which works as a scanner of the proposed module to read the identity details of the card owner. A prototype of a digital card is also detailed.

This card can also be used as a virtual identity (ID) card, accumulating the information of all ID cards, including an electronic passport, voter ID, and driver's license. We will draw money from ATM machine using the matrix bar code (QR code) in this development we will use the finger print sensor to avoid the security breach and we will have facility of using the in as permanent pin and temporary pin.

Temporary pin provides only one time using facility. E-commerce (or electronic commerce) is among the most popular services that emerged as a result of the propagation of the Internet all over the world. The recent advancements in technology for designing mobile devices coupled with the rising Internet speed as well as mobile technology have made it possible for users to utilise those devices at any location and time for performing electronic commerce transactions. Advancement in payment

technologies have an important impact on the quality of life. The emerging payment technologies create both opportunities and challenges for future health technology provider MC10 and product solutions provider PCH are to commercialise MC10's wearable interactive stamp platform an ultra-thin, stretchable and disposable stamp worn on the skin that will enable brands to develop a "variety of consumer applications worn on the skins" including NFC payments. Continuous improvements in technology and quality of life have had a strong impact on the development of payment techniques. With the evolution of near-field communication (NFC) technology, contactless payment has received recent attention because of its short range. We use RFID as the Disadvantages of the existing system:

- 1) Cash transaction is not tracked.

- 2) User's activity is not monitored.
- 3) Server crashing.

Advantages of the proposed system:

- 1) People will be monitored by Aadhaar number
- 2) Every transaction of money will be monitored
- 3) User penalty details and other money transaction will be monitored.
- 4) No Need to maintain all debit card physically instead of we use QR code system in

ATM. ARCHITECTURE DIAGRAM: ALGORITHM: The Rivest-Shamir-Adleman (RSA) algorithm is one of the most popular and secure public-key encryption methods. The algorithm capitalizes on the fact that there is no efficient way to factor very large (100-200 digit) numbers. RELATED WORKS we are implementing four different systems using Aadhaar number namely, 1) cashless transaction, 2) billing system, 3) user behavior analysis, 4) QR code based money withdrawal. We deploy Aadhaar card based payment system.

Here Finger print module is connected and verified from the sender part. User can transfer money, do booking systems, pay penalties and all the activities are processed by the Aadhar card only. We are implementing Qrcode to withdrawal money from ATM. We can analyze user behavior using aadhar card.

So that complete transactions are processed, through Aadhar card. In this project in cashless transaction we are going to develop an android application so that the money can be transferred through the android application in this application to transfer the money first we will register the application with the aadhar details and will sign up to the application to transfer the money from payer's bank to payee's bank we will enter the aadhar number of payee in the payer's application then will enter the transaction amount in the money column. 11 Later will verify our finger print using the sensor and the one time password then a request will be sent to the receiver from the money transmitter to check whether the receiver is online.

The receiver will enter the one time password and sends the information to the server that the receiver is also online and transfer the money to the payee's account. In this method this transaction will be occurred only when both the users will be there online else the transaction will not be occurred. And will display an error in the transaction. Another part of this project is about the Qr code based money withdrawal from ATM. The user will scan the aadhar card Qr code to the ATM machine camera then the machine will ask with finger print or without finger print when the user selects

with finger print then the user will scan the finger in ATM machine then the machine will connect to the server and compares the finger print which is already stored in the server while registering and provides access to the account then it will show the entire banks that were linked to the aadhar card then the user will select the bank in which he would like to perform the transaction, then will enter the amount required and the transaction will be processed. And will collect the money. If the user selects without finger print then the user will have two options like using the permanent pin or using the temporary pin as one-time pin.

If the user enters the permanent pin then the user can perform the transaction as usual as the transaction that was done in the using finger print. But the difference is about only finger print and pin. If the user uses the temporary pin then he can use this temporary pin to share with friends to perform the transaction so that the otp and Qr code will be generated randomly and perform transaction. In this process the user cannot see all the banks that are linked in the aadhar card he can see the bank only that the owner wishes to perform the transaction. 15 The entire data will be processed in the server and keeps the records of entire transactions done by the user. In another model of this project we will use 8 chipless RFID card to store the entire details of aadhar card then we will use this card to scan with RFID scanner and pay the bill. When we should pay the penalty to the police then he will scan RFID and takes the finger print and enters money in the device then the device connects the bank servers and then the money will be deducted from the bank account 14t. It helps to buy online booking of movie

tickets by entering the aadhar number in the payment gateway and will be accessed by finger print and the otp received to the registered mobile. RFID is the chip which will be used to store the data in the chip.

The Qrcode will be easily crackable to avoid the hacking we are using the RSA algorithm which will help to avoid cracking the QR

code. Existing methodologies: • AADHAR REGISTRATION –

ANDROID • BIOMETRIC ENROLLMENT • SERVER • TICKET BOOKING • F

UNDTRANSFER EXISTING METHODOLOGIES AADHAR REGISTRATION –

ANDROID In this module, we are registering aadhar number in NFC card for authentication. Because today aadhar card is important for all places to know their identification. So, we use this aadhar number for booking system. Both sender and receiver have to register their aadhar number in their application. should register your aadhar with finger print.

The Qr code had the entire details of the user. BIOMETRIC

ENROLLMENT Biometric verification means by which a person can be uniquely identified by evaluating one or more distinguishing biological traits. A record of a person's unique characteristic is captured and kept in database.

Later on, when identification verification is required, a new record is captured and compared with the previous record in the database. If the data in the new record matches that in the database record, the person's identity is confirmed. SERVER The Server will monitor the entire User's information in their database and verify them if required. Also, the Server will store the entire User's information in their database. Also, the Server has to

establish the connection to communicate with the Users. The Server will update each User's activities in its database.

The Server will authenticate each user before they access the Application. So that the Server will prevent the Unauthorized User from accessing the Application. **TICKET BOOKING** In this module user can book their ticket using mobile application. We are implementing this booking system in all sector like train, bus, airlines etc., wherever we are booking ticket this system will implement. In our project we are using this system for movie ticket.

PROPOSED METHODOLOGIES: FUND TRANSFER In this module, user will transfer their money to receiver. Before transfer money sender have to put finger print for authentication.

From his account money will be deducted and SMS notification will be send to the sender. **PAYMENT RECEIVER MODE** Finally receiver can receive money from sender by giving his NFC authentication. 7 By this way receiver will know senders money transfer details wherever he transfer money. If sender pay any penalty before those details will also shown to receiver. **QR CODE ATM** People don't want to carry their all debit cards with self.

Instead of all debit cards they have been used Aadhar QR code. When I want to withdraw money from ATM, show the QR code in ATM, it give two option with fingerprint another one is without fingerprint. The aadhar holder can use with fingerprint option and withdraw money from their bank account. Without fingerprint option for friends user. The aadhar holder can share their QR code with their friends also.

Here they don't want to share permanent PIN to their friends. They can give temporary PIN and temporary QR for each transaction. Data

flow diagram: Conclusion and future work: Thus, by this project we can draw the money from the ATM without the ATM cards of banks we will use single card as aadhar Qr code. and will perform cashless transaction through the android applications. Thus, using NFC, we are transferring money to other people.

We also view details about a person who transfer the money. For every transaction, their details will be shown on screen. REFERENCES: 1

Shirsha Ghosh, Joyeeta Goswami, Alak Majumder, Abhishek Kumar, Saraju P. Mohanty, and Bidyut K. Bhattacharyya IEEE Consumer electronics magazine january 2017. Through the digital payment process was operational from 1960s, 2 N. Asokan, " Fairness in electronic commerce," Ph.

D. dissertation, Dept. Computer Science, University of Waterloo, Ontario, Canada, 1998. P2P Money Transfer Using as Traditional Magstripe Cards Access Control Ticketing Virtualization of ID Cards POS Payments 3 Burhan Ul Islam Khan Department of ECE Kuliyah of Engineering IIUM, Malaysia, Rashidah F. Olanrewaju Department of ECE Kuliyah of Engineering IIUM, Malaysia on A Compendious Study of Online Payment Systems: Past Developments, Present Impact, and Future Considerations 4 Shirsha Ghosh, Joyeeta Goswami, Alak Majumder, Abhishek Kumar, Saraju P. Mohanty, and Bidyut K.

Bhattacharyya 5 R. Boden. (2016).

Wearable smart stamp to support NFC payments. smart-stamp-support-nfc-payment6 C. P. Beshouri and J.

Gravrák, “ Capturing the promise of mobile banking in emerging markets,” McKinsey & Comp., New York, NY, Apr. 2010. 7 Bo Meng College of Computer Science and Technology Wuhan University of Technology Wuhan 430063 P. R. China et. cn, Qianxing Xiong College of Computer Science and Technology Wuhan University of Technology Wuhan 430063 P.

R. Chinai n 8th International Conference on Research on Electronic Payment Model 8A Chipless RFID Based on Multiresonant High-Impedance Surfaces done by Filippo Costa, Member, IEEE, Simone Genovesi, Member, IEEE and Agostino Monorchio, Fellow, IEEE in January 2013. 9 Dr. Sumanjeet Assistant Professor Department of Commerce Ramjas College University, Delhi, North Campus, Delhi-7, INDIA.

on E-Mail: Merritt, Retail Payments Risk Forum White Paper Federal Reserve Bank of Atlanta August 2010 on Mobile Money Transfer Services: The Next Phase in the Evolution in Person-to-Person Payments 11 Compass Plus Cumberland House 35 Park Row Nottingham, UK NG1 6EE Tel: +44 (0) 115 988 6047 on mobile banking services. 12 Chris Beshouri, Christopher P. Beshouri and Jon Gravrák, in February 2010, McKinsey Journal 13 Marvin Barahona, Diego Betancourt, and Frank Ellinger Chair for Circuit Design and Network Theory Technische Universität Dresden Dresden, Germany in IEEE on January 2014 on Decoding of Multiple Same-coded In-line Placed Chipless RFID Tags 14 A. Vena, E. Perret, Member, IEEE, and S. Tedjini, Senior Member

IEEE, Grenoble-inp/LCIS, valance , France on A compact chipless RFID tag using polarization diversity forencoding and sensing.

15Arnaud Vena, Member, IEEE, Abdul Ali Babar, Student Member, IEEE, Lauri Sydänheimo, Member, IEEE, M. M. Tentzeris, Fellow, IEEE, and Leena Ukkonen, Member, IEEE in December 2013.

On ANovel Near-Transparent ASK-Recon? gurable Inkjet-Printed Chipless RFID Tag.