

# [Absract: payment technologies create both opportunities and](https://assignbuster.com/absract-payment-technologies-create-both-opportunities-and/)

[Business](https://assignbuster.com/essay-subjects/business/), [E-Commerce](https://assignbuster.com/essay-subjects/business/e-commerce/)

ABSRACT: In the present system, only cash or card or online basedpayment 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. Bothtransmitter & receiver should be in peer to peer communication. Fingerprint of the receiver should be verified and a token is generated to thetransmitter part. Only after successful transaction, amount is transferred tothe receiver. we are implementing four different system using aadhar numbernamely, 1) cashless transaction, 2) ticket booking, 3) user behaviour analysis, 4) Qr code based money withdrawal.

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

INTRODUCTION: Advancementin the payment technologies has an important impact on one’s quality of life. Emergingpayment 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 isavailable.

1Thus, efforts have been underway to evolve and sustain awell-organized, efficient, reliable, and secure unified payment system, whichmay contribute to the smooth functioning of the market by eliminating obstaclesin business. This article presents an approach and module by which one card cancommunicate with another using near-field communication (NFC) technology todigitally transfer money from the payer’s bank to the payee’s bank. 2 This modelwill help for no need for physical cash and also serves all types ofpayment  and identity needs. Embodimentsof this approach furnish a medium for cashless card-to-card transactions. Themodule, which is called Swing-Pay, communicates with a bank via global systemsfor mobile communication (GSM). 1 The security of this module is intensifiedusing 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 ofthe card owner. A prototype of a digital card is also detailed.

This card canalso be used as a virtual identity (ID) card, accumulating the information ofall ID cards, including an electronic passport, voter ID, and driver’s  license. 1. we will draw money from ATMmachine using the matrix bar code (Qr code) in this development we will use thefinger print sensor to avoid the security breach and we will have facility ofusing the in as permanent pin and temporary pin.

Temporary pin provides onlyone time using facility. 3 E-commerce (or electronic commerce) is among the most popular servicesthat emerged as a result of the propagation of the Internet all over the world. Therecent advancements in technology for designing mobile devices coupled with therising Internet speed as well as mobile technology have made it possible forusers to utilise those devices at any location and time for performingelectronic commerce transactions 3 Advancement in payment technologies have an important impacton the quality of life.  The emergingpayment technologies create both opportunities and challenges for future4health technology provider MC10 and product solutions provider PCH are to commercialiseMC10’s wearable interactive stamp platform an ultra-thin, stretchable and disposable stamp worn onthe skin that will enable brands to develop a “ variety of consumer applicationworn on the skins” including NFC payments5. continuous improvements in technology and quality oflife have had a strong impact on the development of payment techniques. 12With the evolution of near-field communication (NFC) technology, contactlesspayment has received recent attention because of its short range. 6 We useRFID as the  Disadvantages of the existing system: 1)Cashtransaction is not tracked.

2)User’sactivity is not monitored. 3)servercrashing.  Advantages of the proposed system: 1)Peoplewill be monitored by aadhar number2)Everytransaction of money will be monitored3)Userpenalty details and other money transaction will be monitored. 4)No Needto maintain all debit card physically instead of we use QR code system in ATM. ARCHITECTURE DIAGRAM: ALGORITHM: TheRivest-Shamir-Adleman (RSA) algorithm is one of the most popular and securepublic-key encryption methods. The algorithm capitalizes on the fact that thereis no efficient way to factor very large (100-200 digit) numbers.  RELATEDWORKSwe are implementing four different system using aadharnumber namely, 1) cashless transaction, 2) billing system, 3) user behavioranalysis, 4) Qr code based money withdrawal. we deploy Aadhar card basedpayment system.

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

So that complete transactions are processed, through Aadhar card. In thisproject in cashless transaction we are going to develop an android application 6sothat the money can be transferred through the android application in thisapplication to transfer the money first we will register the application withthe aadhar details and will sign up to the application to transfer the moneyfrom payer’s bank to payees bank we will enter the aadhar number of payees inthe payer’s application then will enter the transaction amount in the moneycolumn. 11Later will verify our finger print using the sensor and the onetime password then a request will be sent to the receiver from the moneytransmitter to check whether the receiver is in online.

The receiver will enterthe onetime password and sends the information to the server that the receiveris also in the online and transfer the money to the payees account. In thismethod this transaction will be occurred only when the both the users will bethere in the online else the transaction will not be occurred. And will displayas error in the transaction. Another part of this project is about the Qr codebased money withdrawal from ATM. The user will scan the aadhar card Qr code tothe ATM machine camera then the machine will ask with finger print or withoutfinger print when the user selects with finger print then the user will scanthe finger in ATM machine then the machine will connect to the server andcompares the finger print which is already stored in the server whileregistering and provides access to the account then it will show the entirebanks that were linked to the aadhar card then the user will select the bank inwhich he would like to perform the transaction, then will enter the amountrequired and the transaction will be processed. And will collect the money. Ifthe user selects with out finger print then the user will have two options likeusing the permanent pin or using the temporary pin as one-time pin.

If the userenters the permanent pin then the user can perform the transaction as usual asthe transaction that was done in the using finger print. But the difference isabout only finger print and pin. If the user uses the temporary pin   thenhe can use this temporary pin to share with friends to perform the transactionso 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 aadharcard 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 entiretransactions 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 thiscard to scan with RFID scanner and pay the bill. When we should pay the penaltyto the police then he will scan RFID and takes the finger print and entersmoney in the device then the device connects the bank servers and then themoney will be deducted from the bank account14t. It helps to buy onlinebooking of movie tickets by entering the aadhar number in the payment gatewayand will be accessed by finger print and the otp received to the registeredmobile RFID13 is the chip which will be to store the data in the chip.

The Qrcode will be easily crack able to avoid the hacking we are using the RSAalgorithm which will help to avoid cracking the QR code. Existingmethodologies: •     AADHARREGISTRATION – ANDROID•     BIOMETRICENROLLMENT•     SERVER•     TICKETBOOKING•     FUNDTRANSFER EXISTING METHODOLOGIESAADHAR REGISTRATION – ANDROIDIn this module, we are registering aadhar number inNFC card for authentication. Because today aadhar card is important for allplace to know their identification. So, we use this aadhar number for bookingsystem. Both sender and receiver have to register their aadhar number in theirapplication. should register your aadhar with finger print.

The Qr code had theentire details of the user.     BIOMETRIC ENROLLMENTBiometric verification means by which a person can beuniquely 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 iscaptured and compared with the previous record in the database. If the data inthe new record matches that in the database record, the person’s identity isconfirmed.     SERVERThe Server will monitor the entire User’s informationin their database and verify them if required. Also, the Server will store theentire User’s information in their database. Also, the Server has to establishthe connection to communicate with the Users. The Server will update eachUser’s activities in its database.

The Server will authenticate each userbefore they access the Application. So that the Server will prevent theUnauthorized User from accessing the Application. TICKET BOOKINGIn this module user can book their ticket using mobileapplication. 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 METHEDOLOGIES: FUND TRANSFERIn this module, user will transfer their money toreceiver. Before transfer money sender have to put finger print forauthentication.

From his accountmoney will be deducted and SMS notification will be send to the sender. PAYMENT RECEIVER MODEFinally receiver can receivemoney from sender by giving his NFC authentication. 7 By this way receiverwill know senders money transfer details wherever he transfer money. If senderpay any penalty before those details will also shown to receiver. QR CODE ATMPeople don’t want to carrytheir all debit cards with self.

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

Here they don’t want to sharepermanent PIN to their friends. They can give temporary PIN and temporary QRfor each transaction. Data flowdiagram:  Conclusion and future work: Thus, by thisproject we can draw the money from the ATM without the ATM cards of banks wewill use single card as aadhar Qr code. and will perform cashless transactionsthrough 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 ShirshaGhosh, Joyeeta Goswami, Alak Majumder, Abhishek Kumar, Saraju P. Mohanty, andBidyut K. Bhattacharyya IEEE Consumer electronics magazine   january 2017. Through the digital paymentprocess was operational from 1960s, 2 N. Asokan, “ Fairness in electronic commerce,” Ph.

D. dissertation, Dept. Computer Science, University of Waterloo, Ontario, Canada, 1998. P2PMoney Transfer Using as Traditional Magstripe Cards Access Control TicketingVirtualization of ID Cards POS Payments3Burhan Ul Islam Khan Departmentof ECE Kulliyyah of Engineering IIUM, Malaysia, Rashidah F. OlanrewajuDepartment of ECE Kulliyyah of Engineering IIUM, Malaysia on A CompendiousStudy of Online Payment Systems: Past Developments, Present Impact, and FutureConsiderations4Shirsha Ghosh, Joyeeta Goswami, Alak Majumder, Abhishek Kumar, Saraju P. Mohanty, and BidyutK.

Bhattacharyya  5 R. Boden. (2016).

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

Gravråk, “ Capturing the promise of mobilebanking in emerging markets,” McKinsey & Comp., New York, NY, Apr. 2010. 7 Bo MengCollege of Computer Science and Technology Wuhan University of Technology Wuhan430063 P. R.

Chinaet. cn, QianxingXiong College of Computer Science and Technology Wuhan University of TechnologyWuhan 430063 P.

R. Chinain8th International Conference done Research on electronic payment model8A Chip less RFID Based onMultiresonant High-Impedance Surfaces done by Filippo Costa, Member, IEEE, Simone Genovesi, Member, IEEE and Agostino Monorchio, Fellow, IEEE in January2013. 9Dr. Sumanjeet AssistantProfessor Department of Commerce Ramjas College University, Delhi, NorthCampus, Delhi-7, INDIA.

on E-Mail: Merritt, RetailPayments Risk Forum White Paper Federal Reserve Bank of Atlanta August 2010 on MobileMoney Transfer Services: The Next Phase in the Evolution in Person-to-PersonPayments11Compass Plus Cumberland House35 Park Row Nottingham, UK NG1 6EE Tel: +44 (0) 115 988 6047 on mobile bankingservices. 12Chris Beshouri, Christopher P. Beshouri and Jon Gravrak, in February 2010, McKinsey journal13Marvin Barahona, DiegoBetancourt, and Frank Ellinger Chair for Circuit Design and Network TheoryTechnische Universität Dresden Dresden, Germany in IEEE on January 2014 on Decodingof Multiple Same-coded In-line Placed Chipless RFID Tags14A. 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.