

# Fast Premium Immediate Money Transfer Using Mobile Number

Mahendra Deore<sup>1</sup>, Priyanka Dharurkar<sup>2</sup>, Lajawanti Lanjekar<sup>3</sup>,  
Minal Chavan<sup>4</sup>, Raksha Gound<sup>5</sup>

<sup>1</sup>(Assis Prof., Department. Of Computer Science)

<sup>2,3,4,5</sup> (Department of Computer Science, Savitribai Phule Pune University)

\*\*\*\*\*

## Abstract:

The use of mobile technology has become widespread with astonishing speed all over the world, particularly among the poor. The more mobile phones go to the hands of people who formerly lacked access to financial services, the more the notions of mobile money, mobile payment and mobile banking become pervasive as a means of financial inclusion. Micro-business enterprises in the developing world are increasingly deploying the use of mobile payments to enhance the quality of their services and increase growth. The pace of transformation in the micro business sector has speeded up with more micro businesses realizing the potential of using the mobile payments in their service delivery.

This paper aims to investigate the success factors related to the use of mobile payments by micro-business operators. Accessing your accounts with a mobile application is fast and simple, so it's easy to do things like check balance, transfer money from one account to other. Staying abreast of your finance is as easy as picking up your phone. So considering all this an application is developed in which main feature person to person payments are using mobile number. In this application mobile number acts as proxy account which hide details of bank account i.e. user can make payments without sharing or telling his bank account number. This application is only for small amount transactions.[3]

**Keywords: - P2P, Mobile payment, Proxy account, Payee list, Transaction history**

\*\*\*\*\*

## I. INTRODUCTION

For 30 years, financial institutions have been on a quest to satisfy their customer's need for more convenience. First came up the automated teller machine (ATM) which evolved over time to become a true bank-away-from-bank, providing a full suite of financial transactions. Then internet banking is come up in the mid 1990s, which enabled consumers to access their financial accounts using a home computer with an internet connection. Despite its promise of ultimate convenience, online banking was slow and tentative growth as banks worked out technology issues and built consumer trust. Banking at the living room computer still has some serious limitations. The biggest issue, however, is mobility. Even with a laptop, it's almost impossible to stay connected in virtually any location on the planet.

This is not the case with mobile phones. Mobile technology viewed as a payment or banking channel that can be carried anywhere and is accessible by an enormous number of people. That makes the mobile phone an ideal medium through which banks can deliver a wide variety of services. With the rapid growth in the number of mobile phone subscribers in the world, banks have been exploring the feasibility, of using mobile phones as an alternative channel of delivery of banking services.

User can safely carry money in their mobile phones. Low value payments can be done using mobile number. User can make payment to individual person by selecting mobile number through lists.[1]

Electronic money transfer is the alternative way for paper based mechanism like cash. It

provides best payment facility for user. Web services are used to validate user, mobile number, bank account number. User friendly GUI using HTML5, CSS, JavaScript has been done. There are understandable options for user to easily access application. Notifications can be generated on each transaction and each action. User can safely carry money in their mobile phones.[2]

For many reasons Friends can use FastPremium like small parties, small events, trips or regular money transfer. Family members too use it for daily routine transaction. Classmates, hostel mates can also use it for sharing money between them.

## II. WORKING

The aim of this application is providing best payment facility for user. There is an interaction between user, P2P mobile account and Bank administrator. Bank administrator is responsible for managing the database of user's bank account. Application provides user friendly interface. It supports all major mobile platforms such as iOS, Windows, Blackberry, Android, etc.

First user has to install this application on android mobile. Then user can register by giving bank account details, contact details to create P2P mobile account. After successful registration user can login any time with mobile number as user name. Application provide many option for user such as Add payee, make payment, funding, withdraw, check balance, add note, transaction history.

Suppose user wants to transact money to other person then he must choose "make payment" option and then add payee from payee list. Then send request to receiver. If request accepted by receiver then it will ask for transaction amount and reasoning. If transaction amount is less than P2P account maximum amount limit then transaction happens. Otherwise user has to withdraw money from bank account. After successful transaction user will get notification.[3]

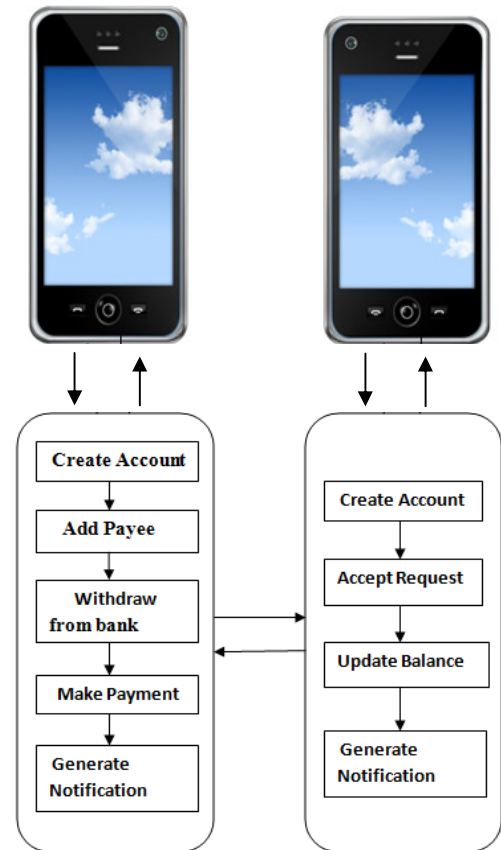


Fig 1: Block Diagram for money transaction

P2P mobile account contains some amount which user can withdraw from their bank account. User can make payment using P2P mobile account. P2P mobile account contains reasoning field (reason for payment), withdraw and funding options. Mobile device is client side and any computer containing database is server side. P2P Application shows current balance and transaction history, generate notification and alert messages. After successful transaction user fund their amount to the bank account.

Devices are connected through internet to use application. Application requires web services to validate user, mobile numbers, and bank account number. In live system, payment gateway is use to do transaction.

Technologies used by application are Phonegap, HTML5, Web service (REST), CSS, JavaScript, Json, MySQL, jQuery. PhoneGap is platform independent, language independent and open

source. It enables software programmers like us to build platform-specific APIs like those in iOS or Android, BlackBerry, Microsoft's Windows. It is easy for wrapping up HTML, CSS and JavaScript code depending upon the platform of the device.

HTML5, CSS is used for richer development of GUI. A REST Web Service is used for communication between two electronic devices over a network. JQuery is HTML5 based UI system JS library. It is compatible with frameworks and browsers. JSON is Language independent data format and alternative to XML. It transmits data between server and web application. MySQL is open source relational database management system. Manage large volume of data at very high speed.[4]

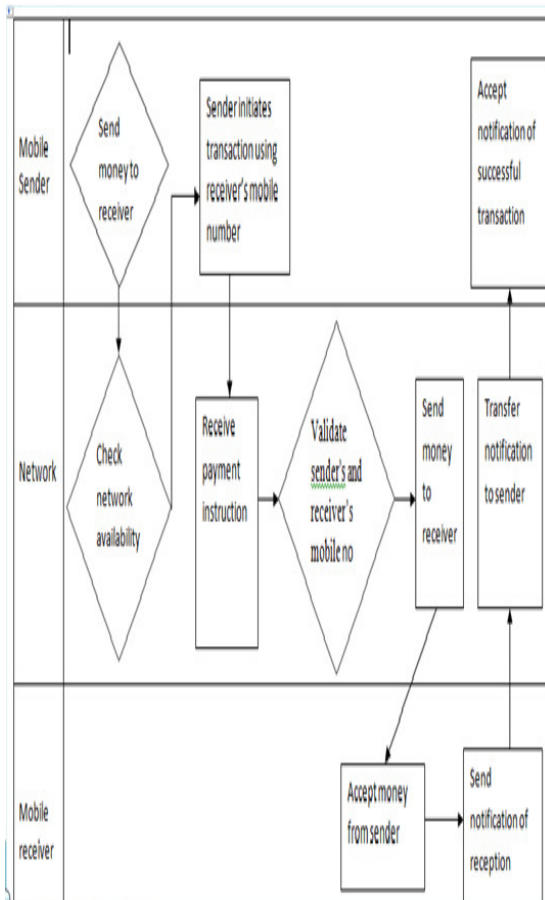


Fig 2: Work flow diagram

### A. Security Algorithm

Security level is increased using algorithm like DESEncryptionDecreation. It works in following steps

- Suppose that a message has 12 bits and is written as  $L_0R_0$ , where  $L_0$  consists of the first 6 bits and  $R_0$  consists of the last 6 bits.
- The key  $K$  has 9 bits. The  $i$ th round of the algorithm transforms an input  $L_{i-1}R_{i-1}$  to the output  $L_iR_i$  using an 8-bit key  $K_i$  derived from  $K$ .
- The main part of the encryption process is a function  $f(R_{i-1}, K_i)$  that takes a 6-bit input  $R_{i-1}$  and an 8-bit input  $K_i$  and produces a 6-bit output.

The output of the  $i$ th round is defined as:

$$L_i = R_{i-1} \text{ and } R_i = L_{i-1} \text{ XOR } f(R_{i-1}, K_i)$$

The decryption is the reverse of encryption.

$$[L_n] [R_n \text{ XOR } f(L_n, K_n)] = \dots = [R_{n-1}] [L_{n-1}]$$

### III. CONCLUSION

This paper deals with mobile banking offers many advantages, such as good security, easy access and plentiful applications for smart phones. When users are on the go, they are no longer tied to a home computer, a nearby ATM or local branch for basic banking needs. Accessing accounts with a FastPremium is fast and simple, so it's easy to do things like check balance, transfer money from one account to other. This paper also tells about DESEncryptionDecreation algorithm.

### Acknowledgement

We would like to thank Principal Mam, Dr. M. B. Khambete for giving us this beautiful opportunity to deliver the project. We would like to special thank our project guide Mr. M. P. Deore sir. The consistent guidance and support provided is very helpfully acknowledged as the key role played by him in providing us with his precious ideas, suggestions and help that enabled in shaping the project seminar.

## References

1. Marion Mbogo, ***“The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya”***, The Journal of Language, Technology & Entrepreneurship in Africa, Vol. 2. No.1. 2010, ISSN 1998-1279
2. Diniz, Albuquerque and Cernev, ***“Mobile Money and Payment: a literature review based on academic and practitioner-oriented publications (2001-2011)”***, Mobile Money and Payment: a literature review Proceedings of SIG GlobDev Fourth Annual Workshop, Shanghai, China December 03, 2011
3. Cynthia Merritt, ***“ Mobile Money Transfer Services: The Next Phase in the Evolution in Person- to-Person Payments”*** Retail Payments Risk Forum White Paper Federal Reserve Bank of Atlanta ,August 2010
4. [www.w3schools.com](http://www.w3schools.com)