Emphasizing the Online Payment Services & Recommending a new Framework for Improvising Electronic Payment System

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Abstract:- E-Commerce encompasses purchasing and sales of products and services through electronic systems. Recently E-Commerce is growing quickly for efficient transaction.Online shopping system utilizes electronic technologies to produce interactive media between clients and merchant and satisfies their financial demands.Electronic Payment System automates financial transactions for clients.It extends financial services through Online either at working place or using card at merchant areas with the help of financial institutions and telecommunication operators. Of course, both the systems have pros and cons.This report has discussed the topics and challenges of E-Payment Services and ultimately offered a methodology to improvise the offline E-Payment System.

Keyword: E-Payment, OTP, Online Services, ATM

I. INTRODUCTION

Electronic Payment system helps the Customers to perform financial transactions like credit an amount, debit, money transfer, bill payment etc. Financial Institution provides two kinds of services for accomplishing all the transactions without delay and mistake free.Two types of services are available

II. SERVICES THROUGH ONLINE AT ANYWHERE [PHYSICAL PRESENCE NOT REQUIRED]

In this service, Customer can avail all financial transactions through the internet at home itself. Physical presence is not required for this service. They can avail all through internet. Figure represents this type of Service

Figure 1: Services through Online at anywhere

III. SERVICES THROUGH ONLINE AT EXACT LOCATION WITH CARD [PHYSICAL PRESENCE REQUIRED]

Customers can avoid keeping Physical Cash for availing all financial transactions like purchasing, servicing, Transferring etc. They can avail during travel. The following figure illustrates the functionality of this service.

Objectives of the system

Figure 2: Services through Online at Exact Location with Card

Section II discussed in detail about the advantages and disadvantages ofboth the Services.Then Section III explained the proposed methodology to improvise the online E-payment through Card system. Section IV illustrates the generated framework. Finally, SectionV concludes this Paper with evidential proof.

B. Pros and Cons in E-Payment Services

1. Pros in Online Services at Anywhere

➢ Avoid to reach Bank Premises
➢ Avoid to keep Physical Cash
➢ Save Timing to search ATM Centre while Traveling
➢ Minimum Number of operations are taken to do Financial Transactions
➢ Transfer an exact money with Change [ie sometimes we don't have exact changes physically like 2 rupees, 50 paise etc]
➢ One Time Password is generated and sent to the corresponding Customer during transaction
➢ Card Size is too Small so Easy to carry
➢ Reduce the paper works like Cheque, Deposit Slip etc

2. Cons in Online Services at Anywhere

▪ **Needed High Speed Internet Connection**
Because sometimes if the connection is slow during the transfer, Customers will find difficulties like amount is debited from their account but still it is in progress to transfer, Customer has to contact their Parent Branch for avoiding this type of problems.

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▪ *Proper SMS Services are required*

During that transfer time, Customers need to type the OTP [One Time Password which is generated by financial institutions and sent it through SMS] if there is no tower in telecom services, Customers could not able to get that SMS for further transactions.

▪ *Demanding Authentication*

Sometimes, if Card and Mobile Phone stolen by theft, unauthorized persons can manage all transactions with OTP so as to tighten the Security with other encrypted techniques.

3. Pros in Services through Online at Exact Location with Card with Physical Presence

➢ Exact Money Transfer
➢ Avoid to keep Physical Cash
➢ Save Timing to search ATM Centre while Traveling
➢ Minimum Number of operations

IV. CONS IN SERVICES THROUGH ONLINE AT EXACT LOCATION WITH CARD

▪ *OTP is required*

Card Holder can avail all the services like purchase, service, transfer. So if the card is missing, anyone can access. In order to avoid that, OTP can generate and sent to Customers through SMS.

▪ *Needed Authentication*

Authentication Checking is required for avoiding anomalous transactions.

V. PROPOSED METHODOLOGY

In order to avoid unauthorized access, author suggested for introducing an OTP system in Offline Services also. Already this service is available in online transactions like if the Customers wish to transfer money or debit or recharge or Bill Payment, For every transaction Financial Institutions randomly generated OTP and transferred to corresponding Customers through SMS for avoiding anomalous transfer. After entering that OTP number only, Customer can further continue the transactions. Thus, this system strongly authorized.Likewise, in Offline Services if this OTP system may avail by Customers during Purchase or Service, their money will be secure.During each transaction, OTP is strongly needed for authorization.

Generated Framework:
The following framework explains the functionalities of Electronic Payment System.
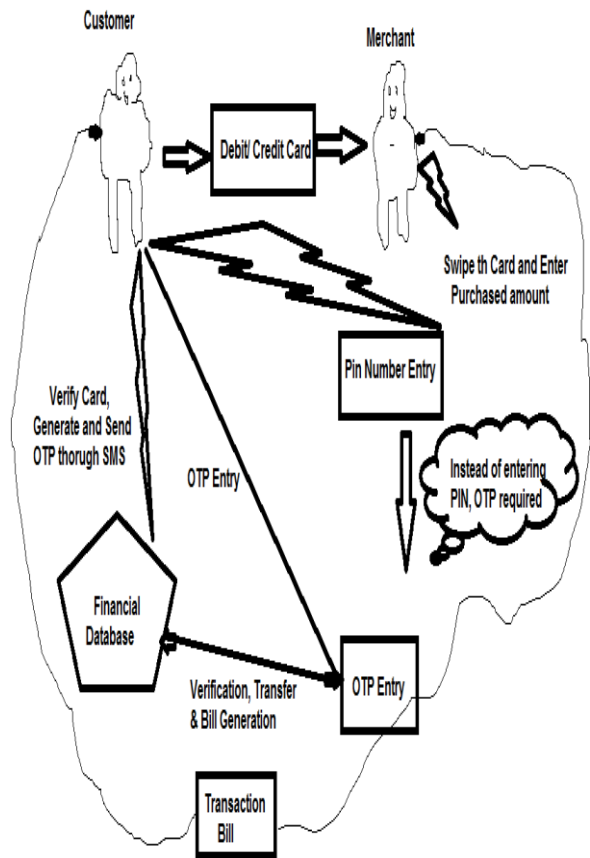

Figure 3: Framework explains the functionalities of Electronic Payment System

CONCLUSION:

Electronic Payment system provides efficient financial transactions through internetworking. This service reduces the Customers burden such as to avoid paper work, reach bank premises and keep physical Cash etc. The author discussed the benefits and drawbacks in Online and Offline Electronic Payment Services and suggested a framework for improvising Offline E-Payment System.

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