Safer E-Wallets

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Abstract:-Using the basic concepts of Embedded Systems, an idea for changing the future of Cards(Banking, Petro, Health, Tele-voice, etc.) is proposed in this paper. Requirement of a special card reader, limited lifetime, acceptance being the main disadvantages of today's traditional cards, led to the design of e-Wallet. The main objective of e-Wallet is to make paperless money transaction easier. The main idea behind this paper is to bring in a cheaper, more versatile and much more easily usable kind of a card. Using this e-Wallet, the transaction procedure can be as simple as: the customer goes to the point of sale (POS), does the purchasing and when it comes to the payment, the customer submits his e-Wallet to vender who connects it to his terminal (PC).E-wallets are intended to replace the existing physical wallet, with its notes, coins, plastic cards, ATM card sand loyalty cards etc. E-wallet is a convenient, easy-to-use, secure payment system. It is flexible "Electronic payment system" with a number of payout and pay-in options via a bank account.

Keywords*:* Embedded system, E-wallet, Electronic payment, Cashless, Cards, Security, Digital Revolution

1 INTRODUCTION

Since the beginning of mankind, there has been a need of exchanging services and objects. At first, as one can imagine, valuables were exchanged in kind, later coins came up, then followed by paper money. Now-a-days, the need of time is pushing new digital payment methods. The actual methods as those with plastic money have many disadvantages (e.g. account based, no anonymity, no offline transfer, fees for every transaction) and are accordingly not a satisfying and acceptable replacement for coins and bills in the area of ecommerce.

The digital revolution continues to transform most aspects of our daily life. In particular, the digital revolution has resulted in the vertical convergence of business channel capacities. The digital revolution also continues to transform the public sector organizations and services. A next step in the digital revolution is the transformation of the time honoured traditional physical wallet into the e-wallet.

WHAT IS E-WALLET?

An encrypted storage medium holding credit card and other financial information that can be used to complete electronic transactions without re-entering the stored data at the time of thetransaction.

E-wallet is a system that stores a customer's data for easy retrieval for online purchases. Since completing forms as part of an e-tail transaction can be a reason for aborting a transaction, an E-Wallet service can reduce this inconvenience for the consumer.

An electronic wallet is a program or web service that allows users to store and control their online shopping information, like logins, passwords, and shipping addressand credit card details, in one central place. It also provides a convenient and technologically quick method for consumers to purchase products from any person or store across the globe. Generally, the payment process is (before that a user must done their registration and collect their PIN):

1) User login their account using their ID andPIN.
2) Choose their suitable payment method and perform the operation.

The electronic wallet (e-wallet) provides all of the functions of today's wallet on one convenient smart cardeliminating the need for several cards. The E-Wallet will also provide numerous security features not available to regular wallet carriers. E-Wallet is a digital wallet which allows users to make electronic transactions quickly and securely.

HOW E-WALLET WORKS?

E-Wallet is a small browser extension that users "carry" as they travel from one Web site to another on their shopping spree. It holds all the usual credit info that users otherwise must type into e-commerce sites over and over. After surfing a site and making choices, users just need to click the E-Wallet icon in the Windows task bar, enter the PIN digit, and drag their plastic of choice onto the site's order form. E-Wallet then automatically fills in the required data and the site will prompt users to complete any empty space. Users also are free to overwrite any field e-Wallet has completed wherever they feel needed.

2 BENEFITS OF E-WALLET

A. **Bill Payments**

Pick any e-wallet and the one feature that each of them will have is bill payment and recharge for mobile phones and DTH television service. You can pay bills using online also visiting individual website and paying using cards or from the account. In this you have to enter your password or account number every time to make the transaction. In case of e-wallet, you can do a one click payment for a repeat transaction. For the first you will have to go through the registration process, but not every time.

B. **Shopping**

Say you want to buy a pair of shoes from an e-commerce website. Usually you would visit the individual website scroll through the options, choose what you like, add the product to the cart and checkout the payments options such as net banking.

C. **Grocery and store**

Most e-wallet providers are now creating a network for offline transactions as well. Currently the focus is to include as many merchants as possible in the digital money space and empower them to accept money on mobile. As part of the strategy e-wallet providers have partnered with offline stores.

D. **Locating a store**

The e-wallet app will use GPS on your smartphone and locate a store near you that accepts E-Wallet payments.

3 SURVEY ON E-WALLET:

What is your Gender?

- o   Male
- o   Female

What is your age?

- o   <18
- o   18-23
- o   24-30
- o   31-40
- o   41-50
- o   >50

Do you have mobile phone with Internet connection?

- o   Yes
- o   No

Have you ever used the paytm payment below?

- o   Transfer/Quick pay/Wallet
- o   Book air ticket
- o   Mobile Recharge
- o   Payment of DTH
- o   Electrical Bill

How often do you use function of paytm payment above?

- o   I heardly use them
- o   within five time in a month
- o   within ten time in a month
- o   More then ten times

Compare to other payment options what payment function of paytm do you feel are inconvenient
Mark only one oval.

- o   Not so secure
- o   Place where I can use it limited
- o   we have to enter all the debit and credit information every time to make a payment
- o   Other

Have you ever used below online / Mobile payment?

- o   Credit card online payment
- o   Apps on mobile
- o   PayPal
- o   Paytm
- o   Other

Which electronic currency do you prefer for online /Mobile payment?
Mark only one oval.

- o   credit card
- o   Octopus card
- o   Bank saving account
- o   I do not prefer online payment
- o   Other
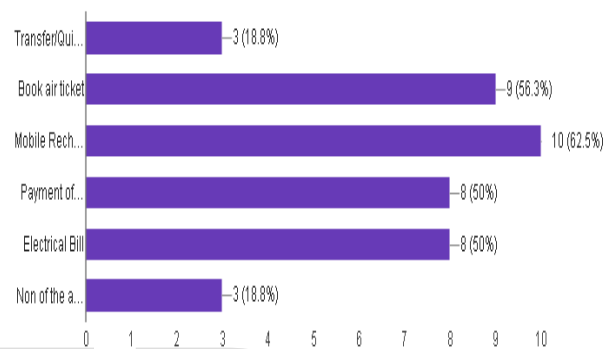
How much do you spend on online and Mobile payment per week?

Mark only one oval.

- o   500-1000
- o   1000-3000
- o   3000-5000
- o   <5000

Does the online /mobile payment helpful?
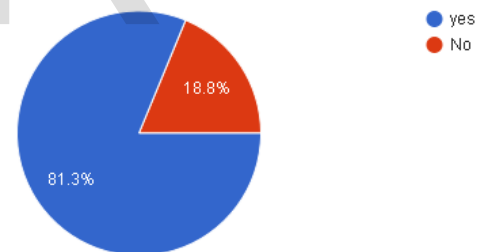Mark only one oval.

- o   yes
- o   No

II.   IMPLEMENTATION, RESULT AND DISCUSSION

Have you ever used the paytm payment below. (16 responses)

Does the online /mobile payment helpful ? (16 responses)

4 CONCLUSION

The key discussion of the paper is "E-Wallet" an Electronic payment System which replaced the old wallet that comprises notes, coins, checks and Credit/ Debit/ ATM cards. E-Wallet is one of those programs which it is an actual pleasure to use and it has been so well thought out. There are lots of features and the program remains so very simple and easy to use. Consumer can overlook all the customization and use it just as efficiently with the default settings and selections. Although E-Wallet still have some draw backs in term of interoperability and standardization of security and formats but still e-Wallet is the best in transaction use compare to others .On the basis of survey we find most of the population use E-wallet. Among these the 81% population say it is really helpful and 18% not agree with that due to lack of knowledge.
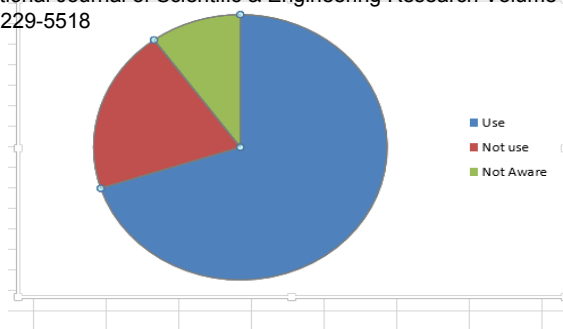
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