

E-WALLET: A STEP TOWARDS FULFILMENT OF DREAM OF DIGITAL INDIA

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[E-wallet simply means electronic wallet. It is basically a combination of computer software and user database for the purpose of online payment through digital cash stored in it. A user will transfer amount from his bank account to e-wallet and then he can pay out of the amount loaded in his e-wallet. It is the most significant step towards building of a cashless economy. This paper tries to identify the main reasons behind acceptance of e-wallet and also the main barriers in its successful implementation through the primary data collected by survey. It also attempts to assess the role of e-wallet in the Digital India campaign.]

Keywords: E-wallet, Digital India, Digital Cash]

'Survival of the fittest' is the law of nature and nobody can deny it. It is the basic reason behind continuing process of inventions and innovations in all spheres. With the passage of time and development in technologies, we gradually become so habitual of using new products and newer techniques that they become an integral part of our lives. After practicing for some time we do not feel any hesitation in using new items or techniques; for instance, in 1950s nobody can imagine about usage of LPG cylinder or induction top instead of wood and coal for the purpose of cooking. And now LPG cylinder has become an essential part of our daily life.

Monetary system has also witnessed tremendous changes over the time. In the financial world, medium of exchange

keeps on changing with the passage of time. Earlier, there was barter system. Thereafter, metallic money i.e. coins come into existence and after some time paper money, i.e. notes become the main medium of exchange all over the world. After that, plastic money (debit cards, credit cards, etc.) was invented and it becomes very popular in a short time span especially in developed countries. But in developing countries like India, we are still in introductory phase of using plastic money for our daily transactions. We still have more faith and feel more comfortable in using paper money rather than plastic money. In the present scenario, we are in a transition phase from paper money to plastic money. But in the mean time, it has moved a step forward and now we have the concept of e-wallet.

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What is an e-wallet?

E-wallet simply means electronic wallet. The purpose of a wallet is to store cash for making payments and when this task is done in electronic mode then it is termed as e-wallet. It is basically a combination of computer software and user database for the purpose of online payment through digital cash stored in it. It deals with virtual cash. Actually e-wallet is like a prepaid account secured with password in which user stores his money for online payments to be made in future. It differs from plastic money in the sense that there is no physical form of e-wallet. It is purely a way of making payment through internet without any physical existence. It also differs from net banking as it is not a bank account. It does not possess all the characteristics of a bank account. It is used only for payment out of virtual or digital cash stored in it. There is no question of any interest or overdraft facility. A user will transfer amount from his bank account to e-wallet and then he can pay out of the amount loaded in his e-wallet. It is the most significant step towards building of a cashless economy.

CEN/ISSS Electronic Commerce Workshop initiated the e-wallet project in mid 2001 assuming a need for standardization in the field and defined e-wallet as a collection of confidential data of a personal nature or relating to a role carried out by an individual, managed so as to facilitate completion of electronic transactions.

As per Wikipedia a digital wallet refers to an electronic device that allows an

individual to make electronic transactions. An individual's bank account can also be linked to the digital wallet. Digital wallets are composed of both digital wallet devices and digital wallet systems. But usually when we talk about e-wallet we refer only to the system and software which is activated with the help of computer or Smartphone.

Review of Literature

There were some studies relating to electronic payment which acted as a basis for writing this article. Some of the main conclusions are as follows:

- A legal definition of electronic money is provided in Article 1 of the European Parliament and Council Directive (2000/46/EC). According to this definition, "electronic money shall mean monetary value as represented by a claim on the issuer which is: (i) stored on an electronic device; (ii) issued on receipt of funds of an amount not less in value than the monetary value issued; (iii) accepted as means of payment by undertakings other than the issuer."
- Tomi Dahlberg, Niina Mallat & Anssi Oorni studied in their paper entitled "Trust enhanced technology acceptance model – Consumer acceptance of mobile payment solutions" (2003) that whether the Technology Acceptance Model (TAM) describing user acceptance of technology offers comprehensive explanation for consumer decisions related to adoption of mobile payments. Their analysis suggests that the Technology Acceptance Model (TAM) provides a good basis to explain use of mobile payment solutions; yet, data

proposes that a new construct, trust, should be included into the model to augment the present descriptors in explaining consumer adoption decisions in the mobile payment context.

- Nordea Bank Finland (April 2005) explained that E-payment is an electronic payment method in which a buyer selects purchases and pays them within a single Internet session. The payment can be transferred to the seller immediately or on a later date.
- Shin (2009) tested a comprehensive model of consumer acceptance in the context of mobile payment. It used the unified theory of acceptance and use of technology (UTAUT) model with constructs of security, trust, social influence, and self-efficacy. Structural equation modeling was used to construct a predictive model of attitudes toward the mobile wallet.
- An article that was published on 1st of July 2015 in The Economic Times stating that “*Whether you have to pay for a taxi ride or teach your child the basics of managing money, a preloaded mobile wallet could be the answer.*” This article described the increasing importance of mobile wallet among Indian public.
- Jatinder Singh (2017) in his article titled “Hardware Level Security in e-Wallet: Today’s Need” suggested some security measures at hardware level to make e-wallets more secure in India so that frauds in this context can be reduced.
- J. Raja, M. Senthil Velmurgan, & A. Seetharaman in their article “E-Payments: Problems and Prospects

discussed the evolution and the growth of electronic technologies, which can provide more advanced technical supports for electronic payment systems.

Types of e-wallet

e-wallet is an effective medium or way of electronic payment. There are many variations of e-wallet which can be mainly categorized into three groups:

Bank e-wallet

Other than net banking, banks provide another method of online payment which is known as e-wallets by banks. ICICI bank, Axis bank, even SBI also provides e-wallet facility such as SBI Buddy. Different banks follow different policies regarding implementation of e-wallet. For example, Axis bank provides e-wallet valid only for one transaction or a period of 48 hours. After completion of one transaction, e-wallet is deactivated or in case of not using the e-wallet for 48 hours it is blocked and money is returned to the bank account. Bank e-wallets are not very popular among its clients. People prefer to pay directly through their debit card or credit card, instead of firstly transfer money to e-wallet and then making payment out of it. A reason behind less popularity of bank e-wallets is that usually banks do not provide very lucrative offers to its clients.

Generic online e-wallet

It is the most popular category of e-wallet providers. Paytm, Mobikwik, Oxigen are some leading players in this field. These internet companies provide generic or pure form of digital wallets. Customers

can use these wallets for many purposes such as online shopping, bill payment, ticket booking, recharge, money transfer, etc. These e-wallet providers offer many attractive schemes of cash back, discount, free tickets, vouchers, etc. to enhance their customer base. These offers are the main reasons behind popularity of such wallets. Many companies provide payment option of their products through these e-wallets.

A major difference between bank e-wallets and generic online wallet is that in case of some bank e-wallets there is a provision of returning money to the original bank account where client will earn interest on his bank balance but there is neither any option of interest on balance in generic e-wallet nor any option of returning unused money to bank account.

Company specific e-wallet

There is another category of e-wallets which are issued by specific companies and are applicable for purchasing products or services of only that specific company. These are also known as closed wallets. Telecom companies, cab services, restaurants, departmental stores etc. issues such type of wallets and provide different additional offers to customers on usage of these wallets. For example, there is a company called Mr. Dewsis in Allahabad which deals in food delivery, medicines and grocery. They issue Dewsis

Level of Knowledge

Q. How much do you know about e-wallet?

<i>Response</i>	Almost Everything	Little bit	Nothing	Total
<i>% of Respondents</i>	34%	56%	10%	100%

wallet which is credited by cash back offered by the company and customer can use amount loaded in this wallet for their subsequent orders. But these wallets cannot be used for the products of other companies. Companies adopt this method for attracting and sustaining customers for their specific products. People tend to be associated with the company for getting benefit of their pre-loaded wallet.

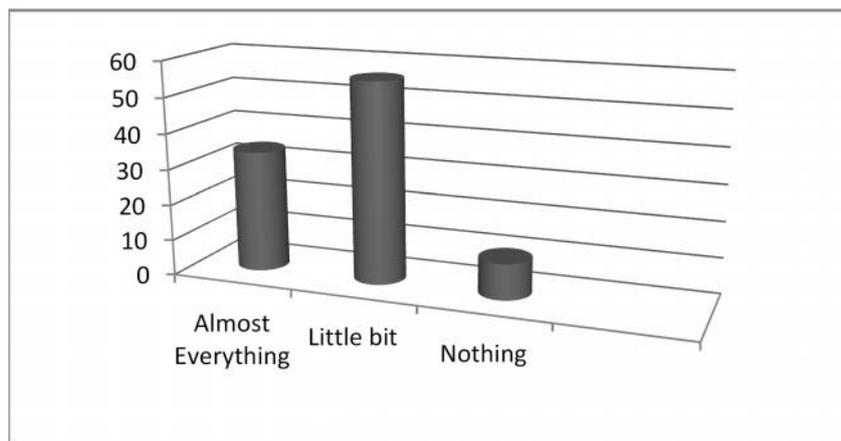
There is another upcoming trend in the field of e-wallets. Due to the popularity among people, some e-wallets are converting themselves into banks such as Airtel payment bank, Paytm bank.

Research Methodology

This paper tries to find out the awareness and perception of people about e-wallet. For this purpose, a structured questionnaire has been administered to 100 respondents. These respondents comprised of students, professionals, businessmen, etc. ranging from age group of below 20 years to above 60 years.

Data Analysis and Findings

The questionnaire consisted of various questions regarding awareness, spending habit, knowledge, perception, usage of e-wallets. Responses are tabulated and percentage of responses have been analyzed. Major findings of the survey are listed below:



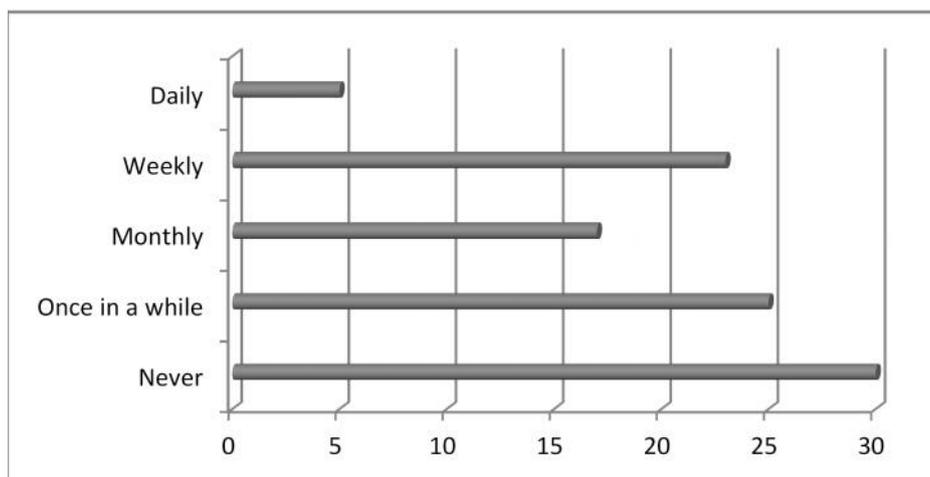
These results show that there is a very high level of awareness among people regarding e-wallets. There are only 10% of such people who say that they don't know anything about e-wallet. 34%

people claim that they know almost everything while 56% population at least know something or a little bit about it. It clearly shows the increasing tendency of awareness.

Frequency of Using e-wallet

Q. How often do you use e-wallet?

Response	Never	Once in a While	Monthly	Weekly	Daily	Total
% of Respondents	30%	25%	17%	23%	5%	100%



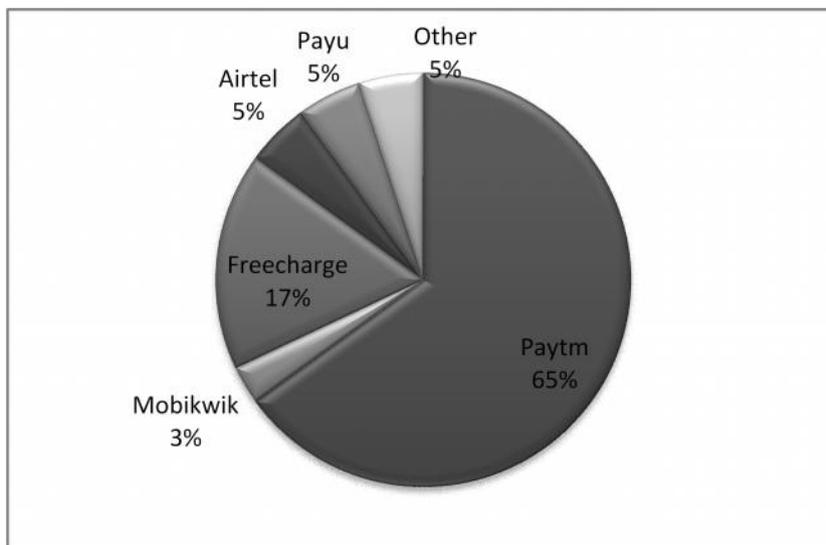
Survey results indicate that 30% people have never used e-wallet and 25% people used it only once in a while. There is only 5% people who uses it daily for making payment while 17% used it monthly and 23% used it weekly. These results are a

clear indication that more than 50% people are not inclined towards usage of e-wallet. Furthermore, only a very small portion of population (i.e. 5%) is interested in its daily use.

Popularity of e-wallet provider

Q. Which e-wallet do you mostly use?

<i>Response</i>	Paytm	Mobikwik	Freecharge	Airtel Money	Payu	Other
% of Respondents	65%	3%	17%	5%	5%	5%



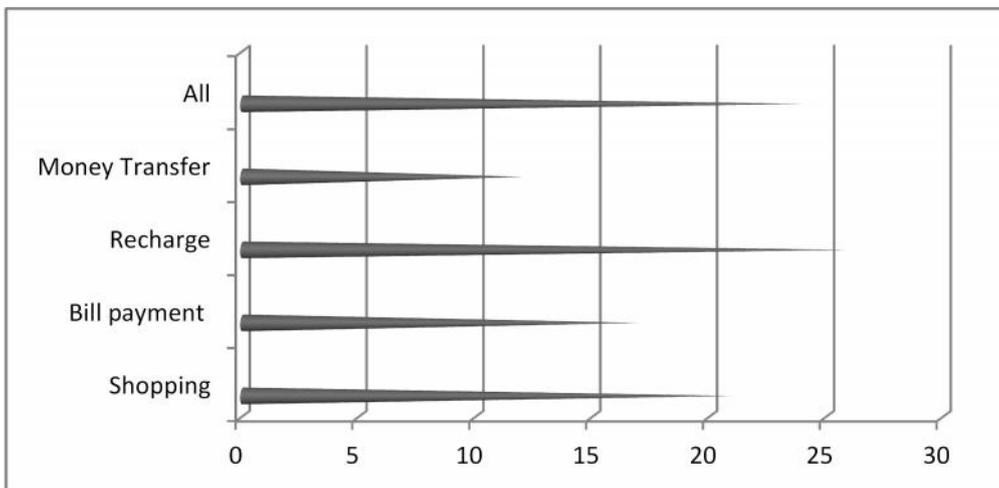
The collected data clearly shows that Paytm is the first preference among users of e-wallet. It is undoubtedly the leader in the field of e-wallet providers as it is used by 65% population. Freecharge is

also preferred by 17% users. Other providers like Mobikwik, Airtel, Payu, SBI Buddy, Vodafone MPesa etc. is preferred by approximately 5% users.

Purpose behind using e-wallet

Q. For which purpose do you use e-wallet?

<i>Response</i>	Online Shopping	Bill Payment	Recharge	Money Transfer	All the above
% of Respondents	21%	17%	26%	12%	24%



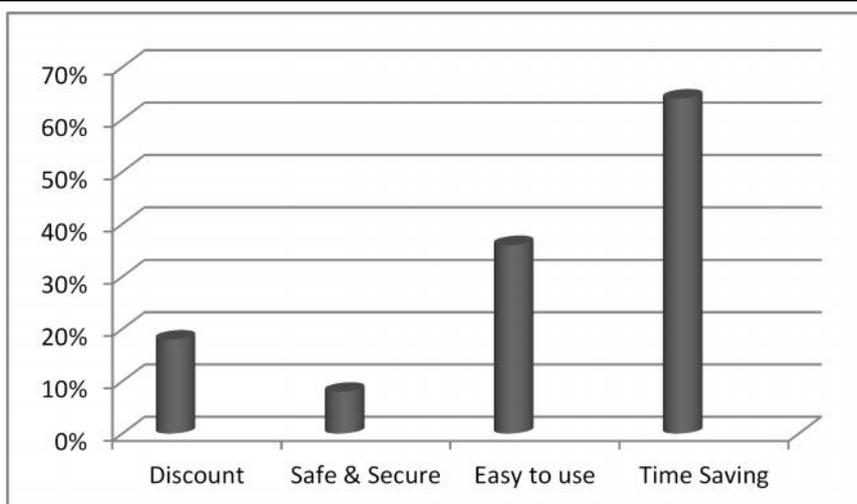
Results of the survey show that maximum people (i.e. 26%) uses e-wallet for the purpose of recharge. 21% used it for online shopping whereas 17% used it for bill payment and 12% used it for money transfer. The most interesting fact is that 24% respondents uses e-wallet for all the

purposes mentioned in the questionnaire (i.e. shopping, bill payment, recharge and money transfer). These findings indicate that people who are habitual of using e-wallet they use it for various purposes but the main purpose remains recharge of mobile phones.

Attraction behind using e-wallet

Q. Why do you use e-wallet?

<i>Response</i>	Discount	Safe & Secure	Easy to use	Time Saving
% of Respondents	18%	8%	36%	64%



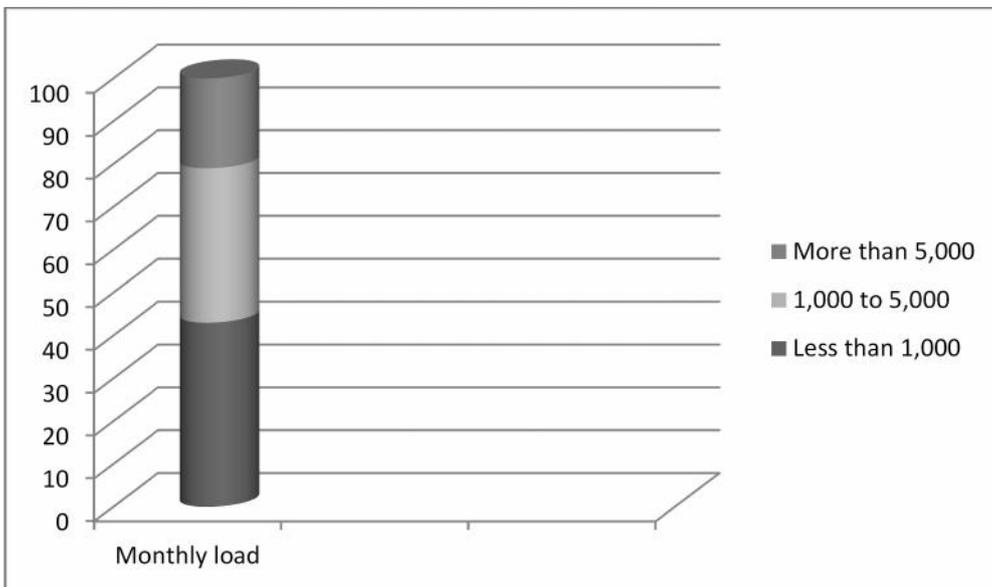
The results show that 18% people used e-wallet to take benefit of discounts offered by companies. 8% people used it due to its safety and 36% people

preferred it because it is easy to use. Time saving is the main attraction behind usage of e-wallet as 64% people uses it for this reason.

Financial dependence upon e-wallet

Q. In a month, how much money do you transfer to e-wallet?

<i>Response</i>	Less than ₹ 1,000	₹ 1,000 to 5,000	More than ₹ 5,000	Total
% of Respondents	43%	36%	21%	100%



The results indicate that in a month, 43% users transfer less than ₹1,000 to their e-wallet while 36% users transfer between ₹1,000 to 5,000 whereas only 21% users

transfer more than 5,000. It clearly shows low level of financial dependence upon e-wallet. Users are not ready to transfer much amount in their wallet.

Problems relating to e-wallet

Q What problems do you face while using e-wallet?

<i>Response</i>	Security of payment	Danger of losing money	Too time consuming to set up	No possibility of international transaction	No Problem
% of Respondents	34%	33%	7%	1%	25%

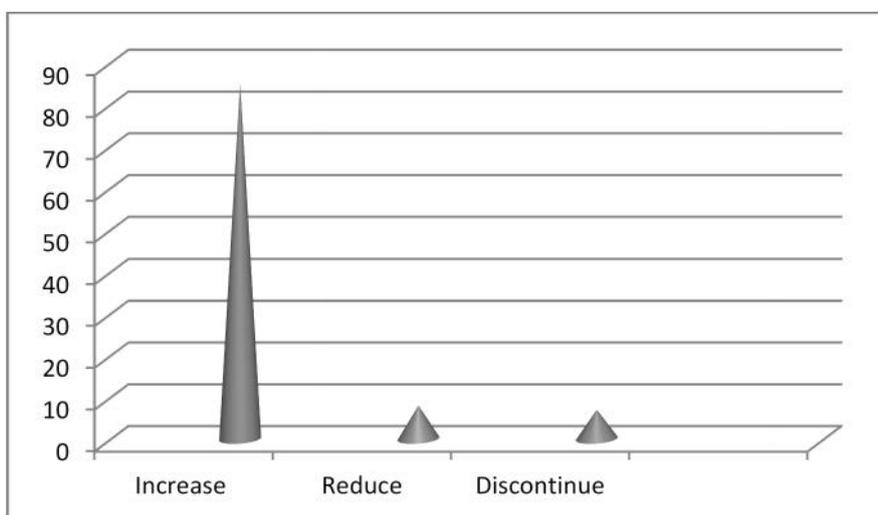
Results show that 34% people have problem regarding security of payment while 33% users have fear of losing money. 7% users say that they find it too time consuming to set up the whole process whereas only 1% people does not

prefer to use e-wallet because of no possibility of international transaction. The most interesting fact is that 25% users have no problem regarding usage of e-wallet.

Future of e-wallet

Q In future, how will you continue with e-wallet?

<i>Response</i>	Increase its usage	Reduce its usage	Discontinue its usage	Total
% of Respondents	85%	8%	7%	100%



Results of survey show that 85% respondents have intention of increasing the usage of e-wallet whereas only 8% respondents have intention of reducing its usage and there are only 7% respondents who want to discontinue it. This is a clear indication of bright future of e-wallet.

On the basis of the results of survey, major reasons for acceptance of e-wallet and the main problems in its implementation can be stated as follow:

Reasons for acceptance of e-wallet

In a very short time span, e-wallets have become very popular and people started to accept it for making payments. Some of the reasons behind this acceptance are as follows:

- **Simple to Use** – The entire process of using e-wallet is very simple. The user does not need to fulfil complicated formalities of opening a new account with bank. He can create his account with an e-wallet site by providing only some basic

information. The procedure of loading money into wallet and making payment out of it is also very easy. The user need not be a technical expert for doing all these tasks.

- **Safe and Secure**—The main reason behind popularity of e-wallet is safety and security of payment. All the transactions are password protected. Furthermore, since it is not directly related to bank account, hence, there is no danger of losing money from bank account. Many people hesitate in doing net banking on account of fear of hacking. But as far as e-wallet is considered people tend to transfer only a limited amount to it so they don't have to worry about losing their entire bank balance.

- **Flexibility**—e-wallets are very flexible in itself. A person can load any amount in his wallet whether it is ¹ 10 or ¹ 10,000. Also, it does not require maintaining a minimum balance amount so there are no restrictions upon the user regarding maintenance of certain balance. Although in case of some e-wallets maximum monthly limit of payment is specified but it should not be seen as a limitation because wallets are used for smaller payments only.

- **Time saving and easily accessible**—The biggest benefit of using e-wallets is saving of time. Payment can be made only with a click. The user can pay anytime and anywhere. He does not need to carry cash or card with himself. He can pay even through his mobile phone. Only internet connection is needed for using the wallet. Thus, a person can make payment

with the help of his smart phone or tablet or laptop or desktop carrying net connection.

- **Offers and discounts**—Various e-wallet companies provide different offers and discount to its users like cash back scheme or chance to meet a superstar or free movie ticket, etc. Such types of offers are not available in case of payment by cash or cheque. Hence, it is an additional benefit for the users and it's a human nature to be attracted towards free gifts or discounts.

These are some of the main reasons behind increasing popularity or acceptance of e-wallets among general public.

Challenges in the use of e-wallet

There is no doubt that usage of e-wallets among general public of India is increasing very rapidly but still it is in its introductory phase. There are many problems or challenges in the way of its successful implementation such as:

- **Digital Literacy** — The basic requirement for using e-wallet is internet connection and knowledge regarding procedure of online payment. Although maximum people carry smart phones today but it is true only in case of urban areas. Still a major portion of Indian population lives in rural areas that might have started using mobile phones but they don't know how to use internet. Hence, there is no question of using e-wallet. Even a major portion of urbanites are also not digitally literate. They hesitate in doing online transactions due to lack of knowledge and faith.

- **Lack of faith**—People have still more faith on traditional methods of payment. They don't have trust in authenticity of online transfer. On the one hand, it is difficult for them to accept the concept of digital cash and on the other hand they also have fear to lose their money. The biggest challenge before e-wallet companies is to build faith and confidence among people regarding usage of digital wallets.

- **Technical problems**—Many times user has to face technical problems such as slow speed of internet, server breakdown or connection termination, etc. In such cases transaction does not get successfully completed. The user has to try again and again for completing one transaction. Sometimes it becomes so irritating that user prefers to leave the transaction instead of trying again. If the user is having network problem then he cannot pay out of his e-wallet even having balance in it. If a person is unable to use his wallet at the time of his need then there is no use of keeping the wallet.

- **High cost of customer acquisition**—From the point of view of merchants providing e-wallet service, high cost of customer acquisition is a big challenge before them. Number of customers for e-wallet is very limited and different service providers compete for same set of customers. They provide different offers and discount for attracting customers. Such kind of schemes prove to be a financial burden for the companies and sometimes this customer acquisition cost turned so high that it becomes difficult

for the companies to continue their service.

- **Security threat**—The biggest hindrance in the way of e-wallet is security threat. The major concern among consumers regarding e-wallet is security of payment. There are chances of hacking and incomplete transaction. In case of unsuccessful or cancelled transactions sometimes customers face problems in getting their refund. Similarly, sometimes, due to slow speed of network, customers don't get their OTP in specified time and fail to complete the transaction. Thus, on the one hand security mechanism of e-wallet is not full proof and on the other hand due to strict security system customers face problems in completing their transaction.

Digital India and e-wallet

Digital India was launched by the Honourable Prime Minister of India Shri Narendra Modi on 2nd July 2015 with an objective of connecting rural areas with high-speed Internet networks and improving digital literacy. **Digital India** is a campaign launched by the Government of India to ensure that Government services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology. The vision of Digital India programme is inclusive growth in areas of electronic services, products, manufacturing and job opportunities etc. and it is centred on three key areas – Digital Infrastructure as a Utility to Every

Citizen, Governance & Services on Demand and Digital Empowerment of Citizens. The Government of India hopes to achieve growth on multiple fronts with the Digital India Programme. Specifically, the government aims to target nine 'Pillars of the Digital India' that they identify as being:

1. Broadband Highway
2. Universal Access to Mobile connectivity
3. Public Internet Access Programme
4. E-Governance –Reforming Government through Technology
5. E-Kranti - Electronic delivery of services
6. Information for All
7. Electronics Manufacturing
8. IT for Jobs
9. Early Harvest Programmes

Use of online payment is imperative for the success of digital India campaign. Digital empowerment is impossible without use of digital cash. Heading towards a cashless economy is an important part of fulfilling the dream of Digital India and use of e-wallet is certainly an inevitable step towards building of cashless economy.

Conclusion

In the changing scenario, e-wallet has become the need of hour. We are marching towards a digital era where digitization will be implemented in all the major spheres to fulfil the target of achieving Digital India. All the spheres are connected with monetary requirement in direct or indirect manner. If we use the

traditional system of payment through hard cash then we will not be able to pursue the objective of digital empowerment in real sense. Hence, the time has come when we should be ready to adopt the digital cash in place of hard cash as a convenient means of payment. e-wallet is one of the most simple methods of digital payment. The survey results show that simplicity, flexibility, time saving, offers and discounts provided are some of the most important reasons behind the increasing popularity of these e-wallets. The survey results also show that more than 50% people have never used or very rarely used e-wallets. Lack of faith and also lack of digital literacy are the most important barriers to be removed for increasing the usage of e-wallets. But the most significant conclusion drawn from the survey is that 85% people want to increase the usage of e-wallet in future which is obviously a clear indication of its bright future. Efforts should be made to increase the internet speed, making the system more secure and solve the server related problems so that people's faith on e-wallet can be increased. There is also an urgent need to improve the level of digital literacy for the success of e-wallet and digital literacy is the basic pillar of Digital India. Hence, it can be said that e-wallet is the gateway of Digital India.

References

- Batra Roopali, Kalra Neha "Are Digital Wallets the new currency", Apeejay Journal of Management and Technology' January 2016 ,Vol.11 ,No:1

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- Dahlberg, T., Mallat, N., & Oorni A. (2003). Trust enhanced technology acceptance model consumer acceptance of mobile payment solutions: Tentative evidence. *Stockholm Mobility Roundtable*, 22, 23.
 - J. Raja, M. Senthil Velmurgan, & A. Seetharaman in their article "E-Payments: Problems and Prospects" 'Journal of Internet Banking and Commerce'
 - Kalyani Pawan, "An Empirical Study about the Awareness of Paperless E-Currency Transaction like E-Wallet Using ICT in the Youth of India" Journal of Management Engineering and Information Technology (JMEIT) Volume -3, Issue- 3, Jun. 2016
 - Salodkar Ambarish, Karan Morey, Prof. Mrs. Monali Shirbhate, "Electronic Wallet", 'International Research Journal of Engineering and Technology (IRJET)' Volume: 02 Issue: 09 | Dec-2015
 - Singh Jatinder "Hardware Level Security in e-Wallet: Today's Need" 'Indian Journal of Science & Technology' Volume 10 Issue 11, March 2017
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