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Emerging Rails and Cashless Payments

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Abstract: With the technological advancement, the scenario of transactions has changed all over the world. The "cash and carry" system has changed its face to the cashless system of today. The cashless exchange system has transcended all the boundaries of the currency exchange or the need of visiting brick and mortal banks. Journal publication is an effort which involves combined work of writers, editors and artists from different countries, each of them transacting in different currency. With people from so many diverse countries and economies participating together, the emerging payment rail and cashless world sounds more like the solution for the payment problems in journal publishing. This paper takes a look at various options of cashless payment available in the current scenario and if they can be used for overcoming the geographical and economic boundaries of the payment. The cashless system covered in the paper includes the current successful payment options of P2P FX, Crypto Currency, Mobile Money and even the Mobile Payment and Streamlined Payment. The paper also notes various ways the system can be altered to suit the needs of the journal publication market.

I. INTRODUCTION

With all kind of technical miracles in the field of Internet, software, wireless communication, computers, and data analytics, the way the people transact financially has come a long distance. Every aspect of how consumers manage, spend, and borrow money is undergoing a transformational shift. Disruptive innovation is decentralizing money. Now you can buy a cup of coffee or pay bills with the click of a button on your smartphone. Our very perception of monetary value is changing. Currently the following major payment system have been fully utilized: Cash, cheque, ACH, Credit/debit/stored value cards and the electronic transfer transfers.

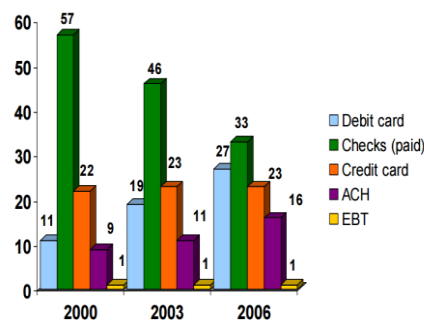


Figure 1: Current Scenario of Non-Cash Transactions

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This figure indicates the situation of cashless payment in the current scenario. As seen the cards and the cheques still win the race. While earlier the only means of payments available were cheques and cash, the scenario has changed considerably now. The first revolution in the world of payment came from the electronic fund transfer system. This Electronic Transfer System allowed one to transfer the money directly from one bank to another. There was no more need for the cumbersome cheque collection or physical meeting to make the payment.

Although this was a huge step in the field of payment, it still did not help the journal publications much. Because a journal is not limited to any particular geographical boundary; a journal includes the effort of number of people, some of which may be residing in the different countries and different economic system. The input from diverse writers and editors from all kind of states and countries can help in better dissemination of knowledge in journal industry. But payment to these writers and editors is still a problem.

Initially sending the cheque to the different country, in different currency was indeed difficult, and payment through cash was far more impossible, the writers have to satisfy themselves either with a copy of the journal, or the journal had to give up on the expertise of the foreign writers. Electronic fund transfer indeed made the things easier within one country; it did not ease the pain of international transfers as most of the banks did not allow international fund transfer electronically. The only option before the Journals was to make the payment via third party mediums like PayPal or Western Union which charges a big chunk of fees. They become infeasible option especially in case the transfer amount is too small.

Another problem that the journal contributors face through these transactions is that they have to contact bank, or have a bank account in order to be able to cash the amount. This becomes a hassle if the banks are not nearby or if the contributor is from the company where banking is still a developing feature. This leaves a journal with only two options—either to forgo the writers who do not have access to the banks or credit card, or just send them a contributor's copy as the compensation which is not a motivating practice for the authors.

But the emergence of cashless world and payment rails looks like the answer to all the problem of journal publishing. These systems are portrayed as an answer to all kinds of national and international payment issues. Although these systems sound too good, the paper takes a look at whether these cashless systems are truly the solution to the journal publication issues or are there some issues which can arise in the application of these systems.

There are many types of cashless rails which are emerging in current system like P2P FX, Crypto Currency, Mobile Money, Mobile Payments, Streamlined Payments, and Integrated Billing etc. These systems ensure the payment via mobile or bitcoins without the involvement of any brick and mortar banks. The future of the finance industry looks very bright with these systems. But then, the same has not been analyzed with respect to the payment options. The purpose of the paper is to analyze these cashless payment rails vis-à-vis difficulties in the payment in journal publishing. For the same, each option is individually analyzed with its pros and cons and its usability in the payments via journal publishing.

II. CASHLESS SYSTEMS AND EMERGING RAILS

For a long time, the attempts are being made to develop a financial system where people can actually go cashless. Debit Cards and Credit cards are innovation in these lines, but payment by these card is not the right answer for all kinds of payment as the transaction charges are too high, especially if the payment amount is too less. That is why the industry is still searching for a way to overcome such problems.

To overcome this problem, the solution of using electronic fund transfer was introduced, which served some purpose of transferring the amount, but not all the way as most of the Electronic Fund Transfer is within the country itself. International transfers are difficult or almost nil with these fund transfers. Even if such transfers are allowed, the amount deducted in the process is quite high. These high charges are unjustified for the smaller amount which might need to be transferred.

Another problem faced by these transfers is the necessity to have the working bank accounts. In the developing continent like Africa, there are many countries which only have one to two banks and queue before these banks is so long that the person will take hours to turn the money into cash. Electronic transfer is also not very fruitful as there are remote places where availability of infrastructure for accessing the account is quite a bit sketchy.

To overcome the many weaknesses of the debit/credit card system and electronics system, the world is leaning more and more towards the cashless system. Bill Gates has been rightly said, "Banking is essential. Banks are not." The people are realizing this fact and with the help of technology have broken down the barriers of retail finance sector. While earlier the payments needed to be transferred physically, or through credit or debit card, these days it can be done directly. Two major technologies which have affected this change are the ubiquitous use of mobile and crypto currency.

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A. Cashless Mobile payment Options

With the widespread use of mobile devices, a new type of channel, called mobile commerce, is emerging. This involves transacting using mobile. This can be a P2PFx transaction of the transaction using the M-Pesa or similar such application.

A mobile payment or m-payment is the kind of payment which is done initiated, authorized and confirmed using a mobile in return for goods and services offered. It is an alternative to the electronic payment done with the help of telecommunication technology. Mobile devices include all electronic devices which can connect to the mobile networks like mobile phones, PDAs, wireless tablets etc.

To make these payments two different technologies are used—short messaging service (SMS) and Near Field Communication (NFC).The example of companies using SMS for providing m-payment service involves PayPal and TextPayMe. An example of company using NFC is VIVOtech, which partners with companies such as Phillips, American Express, MasterCard, Visa, Symbian, and Sprint, etc. Mobile serves a platform for bringing together the service provider and clients providing them with a place to serve their basic need of transaction.

The basic process of the mobile payment can be shown as follows where in the client and the product/service provider transact with each other using the Payment Service Provider. This payment service provider can be a bank or the card itself. It is the responsibility of this payment service provider to authenticate the payment from the end of the sender and then establish a link with the receiver. The amount is finally credited in the account of the receiver directly.

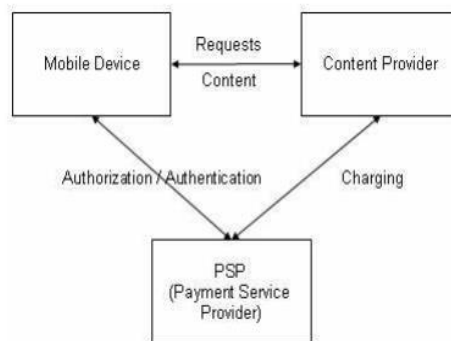


Figure 2: A Mobile Payment System

This figure shows the process of mobile payment system as the transaction happens between mobile device, content provider and the Payment Service Provider.

A user purchases the service or the product and then initiates the payment using Payment Service Provider. He may be called for entering a PIN or a password to authenticate the transaction and then the amount is transferred to the content provider’s account.

Sometimes the mobile payments are done using a third party provider as well who then collaborates with the Payment Service Provider which can be the bank or the credit card to provide the ease of transaction to the customers.

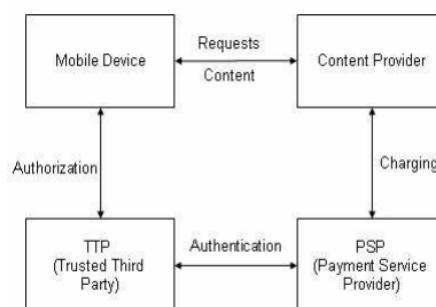


Figure 3: A Mobile Payment System With Participate fro TTP

This figure shows the process of mobile payment system as the transaction happens between mobile device, content provider and the Payment Service Provider

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Many of the European countries, and Korea, Singapore and Japan have already gone far down the path of technological innovation, systems design, implementation, adoption, use and refinements.

This system offers huge advantages in terms of its usage:

- 1) *SocioEconomic Condition: Most people in developing economies do not hold any alternative to cash like bank account or the credit card. There are states in countries like Africa where the number of banks is too less for the population and the individuals have to stand in line for hours to encash their paychecks. Mobile Payment is a boon for such as that can be directly encashed for them while being used for the service.*
- 2) *Informal Social Security: In the countries, especially in developing countries, where there are no means to transfer the cash quickly, mobile payment plays a very important role as it allows the families and friend to provide instant cash in times of emergency.*
- 3) *Rapid Diffusion of Mobile Phones: The mobile phones have penetrated even the remotest areas of the countries. Even for the developing countries, mobile is an easy alternative to receive a payment.*
- 4) *Ease of Financial Transaction: Mobile phones offers an ease of transaction as one does not have to visit a brick and mortar bank physically to get the currency. Instead if once received in mobile, it can be directly used for further purchase of the products and services. Mobile platform also allows transferring the amount directly using the M-payment platform.*

But not all is rosy in the world of mobile payment. Mobile payment is fraught with some different challenges, the biggest being the presence of multiple platforms. There are many options of mobile payment available right now and these platforms do not communicate with each other. This becomes a bigger problem when the payment is made via a medium which the other person does not prefer or vice versa. Similarly not all the vendors accept payments from all kinds of the mobile payment platforms. The mobile platforms are a perfect solution if both buyer and seller prefer the single platform of mobile payment solution. Another factor which comes into play is the development of an app for all kinds of mobile platforms, which in turn is quite an expensive process.

Last but not the least, mobile payments are still not secure because most of the sensitive data required for the payments is stored in the cache of mobile, mostly as something called saved cards. Anybody who has the access to the phone has the access to this information. Probably that is the reason many people are still not opting for the mobile payments. Moreover the security of the payment is differs between the different mobile payment options.

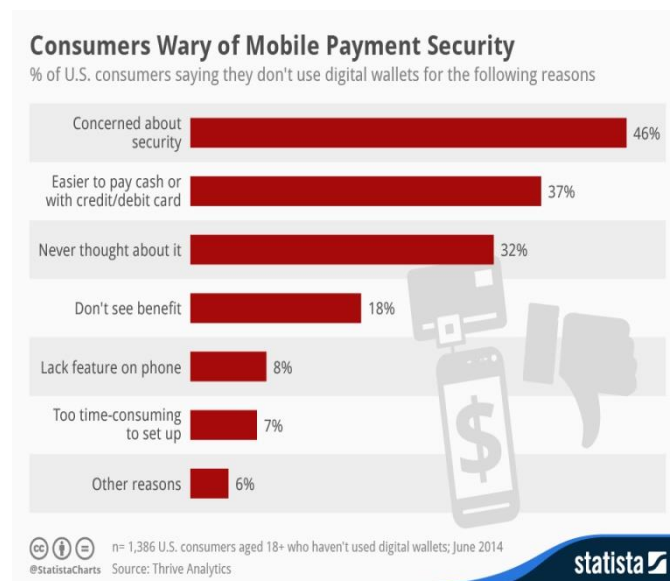


Figure 4: Reasons Why Consumers Do Not Prefer Mobile Payment

The above graph from the website of Statista clearly elaborates the various reasons why the mobile payment has not succeeded despite all its promises. Many of these problems are applicable for the Journal payment as well.

B. Peer to Peer FX System

Another cashless system which can be utilized using mobile is P2P Fx system or Peer to Peer Forex Transfer. The biggest problem people face while transacting across the world is how to send the money abroad. The banks and third parties currently charge huge amount of commission for this kind of transfer. This is the problem which is solved by peer to peer currency exchange. This platform provides an opportunity to send the currency across the geographical locations without denting the amount through commissions.

The concept of the Peer to Peer exchange is quite different. In these, the two people looking for the exchange are connected together.

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Fig 5: Representation of Peer Exchange

Peer Exchange has been represented using this figure which shows how both the parties exchange their currencies with each other. For example, let us assume A wants to exchange Dollars to Euros, and there is B somewhere who wants to convert Euros to Dollars. The peer to peer exchange company will bring both A and B at a mutually agreeable rate so that they can exchange the money as per the agreed rate. There is no payment involved. No currency leaves the site. The currency only exchanges hands from one user to another. The currency fair, one major such site offering this service has elaborated this process in the following image.



Fig 6: Working Process of Peer Exchange

The Logo of the peer exchange currency website clearly indicates how the process functions.

The sites which allow this service are: CurrencyFair, Kantox (for businesses), and TransferWise. The users can either accept the predefined rate or bid for the lower rate. The P2P Fx platforms also provide the liquidity even when no match is there through their own funds. In such cases, some amount of money is charged for the service. The major advantages of the system can be listed as follows:

- 1) *Ease of Exchange:* As evident from the whole process, there is an ease of exchanging the currency. One does not need to search for a reliable vendor for currency exchange and one can get the amount exchanged from the comfort of home itself.
- 2) *Economical Currency Exchange:* Most of the time, if the right rate of exchange is found, the currency exchange becomes quite cheaper on these platforms rather than while dealing with the direct vendors.
- 3) *Easy Liquidity:* Even if the right match is not found, the above mentioned communities still provide the exchange for a nominal charge which is still lesser than that offered by the vendors in the market.

As explained above, the biggest advantage of this platform is the cost-saving options it provides. A person has the capacity to save on the huge commissions that they would have otherwise paid with these platforms. But the platform suffers from a disadvantage as well. There are chances that the customer might not be able to get the corresponding match if the amount is too small or too big. In such cases, the customer is forced to go for the higher exchange rate than expected or bid by them. Also, this is a perfect way to exchange the currency, but this does not serve as a payment medium exactly. The companies do not provide an option of transferring the exchanged currency to somebody else's account and hence the system is not very successful as the payment medium. There have

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been attempts for integration of payment system with P2P Fx, the success of the platform as a future payment platform is still in doubt.

C. Crypto Currency

This is the third and currently most sought after cashless payment system. Crypto currency is a different kind of cashless transactions in a manner that it does not involve any kind of currency or the fiat currency published by the government.

While the above two transactions involve the currency, the only currency crypto currency involves is the electronic currency. These currencies are not printed, like dollars or euros – instead they're produced by people, and increasingly businesses, running computers all around the world, using software that solves mathematical problems.

These are generated or mined electronically, transacted electronically and spend electronically as well. The most famous of crypto currency available is the Bitcoins. The biggest difference between the cryptocurrency and the cash is that the crypto currency is decentralized. No bank holds the right of printing the crypto currency; no single institution controls the crypto currency.

The system relies on public-private key technology and the decentralized clearing of payments to enable quasi-anonymous transactions.

The system of bitcoin can be explained with the following example scenario. Suppose there are two parties—A and B both parties in a transaction have a public and a private key. The payer A uses its private key to verify that it is the rightful owner of the cryptocurrency. The payer, A, then identifies the payee, B by the latter's public key. To make a transaction, payer A submits this information to the bitcoin software that so and so transaction is taking place. Submitting this information via the bitcoin software effectively amounts to requesting that all other peers on the network acknowledge the transaction is valid.

Once the transaction is authenticated (discussed below), all other peers are notified that the payee now holds the balance transferred from the payer. To spend these coins, the new owner repeats the process— becoming the payer to a payee identified only by its public key. The following flow chart clearly depicts the working of the crypto currency like bitcoin. As evident from the drawing below, the bitcoins are generated by a pool of the user who then circulates these among the peers. The peer can further purchase the product and services using these bitcoins. At some places, these bitcoins are also being used for making the payment for the product, while there are some facilities which allow the use of bitcoins for withdrawal of the actual currencies.

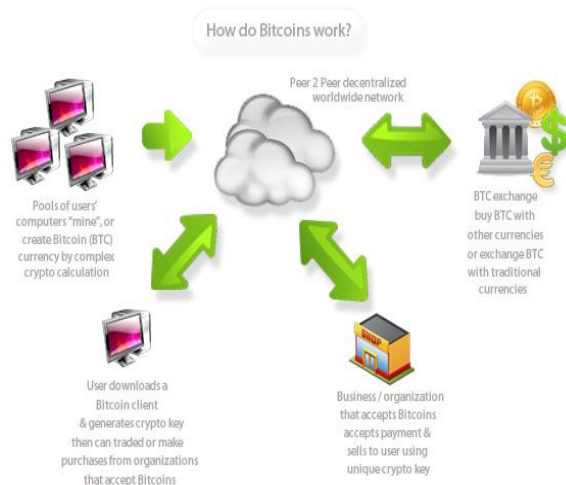


Fig 7: Working Process of the BitCoin

BitCoins, the most famous of Crypto currency, can be used to understand the process of working of the crypto currency. The above figure indicates the steps from minting of the BitCoins to the exchange of BitCoins.

The major advantages of the process are:

- 1) *Decentralized Process:* The process is decentralized and is not controlled by any particular authority, which means there cannot be a meltdown because of one institution. This gives a huge amount of confidence to the users who can utilize this system without the fear of collapse.
- 2) *Easy to set up:* Doing transaction is quite easy via this system as this does not involve going anywhere or contacting any third party.
- 3) *Anonymity is possible:* While it is not possible to transfer the amount anonymously in any other media, this medium allows transferring the money quasi-anonymously to anyone. Even the receiver can be anonymous with this medium.
- 4) *International Payments:* Because the crypto currency work as a single currency throughout the world, sending the currency via this crypto currency to different country is also possible. Moreover one does not have to pay for the hefty conversion charges if such the payment mode is selected.
- 5) *Economical:* Currently there are very little to zero charges in the bitcoin transaction. Hence sending the money in terms of bitcoins cost less than the actual transfer of the money.

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6) Bitcoins have already established themselves in quite a few market. The following graph indicates the number of bitcoins traded from the year 2010-2013.

7) Record: Every transaction is well recorded in the Bitcoin ledger. So even if there is anonymity, it is actually possible to trace back the history of each transaction.

8) Protection from identity theft: One of the biggest fears while sharing the account number and other details is that one's identity might get misused. The use of crypto currency keeps the identity hidden behind the veil of address and hence it is a much safer option.

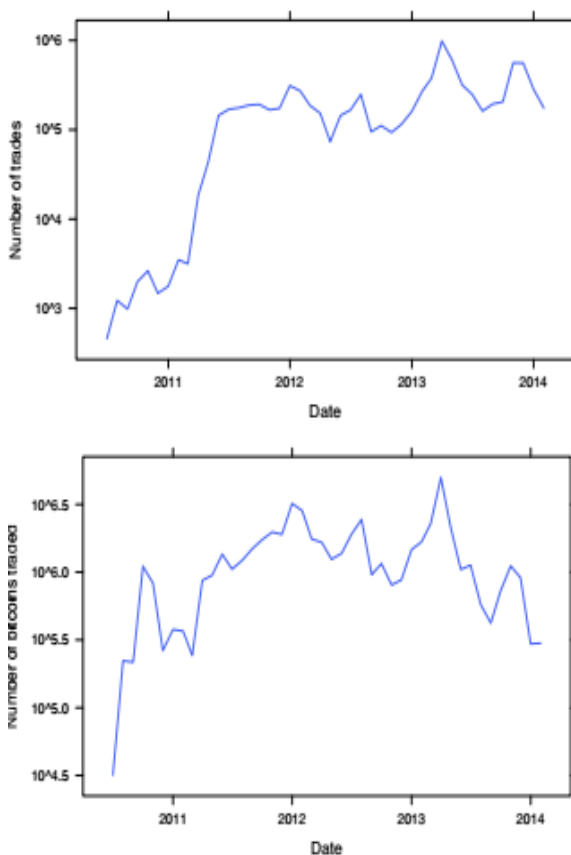


Fig 8: Increasing Popularity of the Bit Coins

The above graph shows how the bitcoins have become more famous and have gained popularity. The top graph indicates the rise in the number of traders for the bit coins, while the bottom graph indicate the number of bitcoins traded from 2010 to 2013.

The above list of advantages show that the crypto currency is indeed the future of the payment system, but it is not without its disadvantages. The biggest setback for the currency is the people are not aware about the process of cryptocurrency. People do not know what the benefits of these crypto currencies are, and those who know consider that as the means to purchase illegal stuff. For crypto currency to succeed, awareness about it needs to be generated.

Another disadvantage the crypto currency suffers from is its acceptance partners. There are few partners which offer the accept bitcoins but their number is quite less as compared to that of the other platforms. Hence it is not usually the preferred means of the payment.

Another disadvantage is the government's non-support in many countries. The countries on the brink of bankruptcy believe that bitcoins impact the economy negatively and that because of this negative economy it is not possible to control the inflow and outflow of cash. Due to this, the transactions through bitcoins were considered illegal for a long time.

With all these roadblocks, it does not look feasible for the crypto currency to become the most favorable means of the payment in the near future.

III. EVALUATION OF THE CASHLESS SYSTEM

We have already identified the various advantages of the cashless options available. This section compares those advantages vis-à-vis journal publishing. To understand whether the system can be used or adopted for payment for journal publication we first need to understand the difficulties in payment in the field of journal publishing.

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1) The first and the biggest difficulty that arise in the journal publishing is of the geographical and economic boundaries. For a journal to present the multifaceted view, the authors, contributors and editors from different area should contribute. This contribution from authors of different countries will be a big help in dissemination of knowledge and keeping abreast of latest trends. But these widespread contributors and audience becomes difficult to handle financially. Most of the time, one has to either forgo the payment option while publishing with the international journals, or either the journals have to avail a service of the third part for making the payment. Cashless payment option like Peer to PeerForex, M-Payment and the crypto currency payment can be the answer to the problem of journals and magazines. They will allow the transfer of amount without any delay and can either be encashed in different countries.

2) Each journal involves multiple authors. Sending separate payment to them is a cumbersome job. Scheduling the payment and transferring the amount directly through the cashless medium can be a big help in such cases as this will allow scheduling the transfer beforehand through a single click or using the handy option like mobile phone for making the payments.

3) Another disadvantage the journal payment suffer from is the region of development. This problem is not faced in the developed countries, but in developing countries, where the problem is more pronounced because of non-availability of the cash in hand to the journals. These journals find it difficult to survive because of the problems associated with the payment. In such cases, payment through these mediums can go a long way in helping these journals to thrive.

4) The fourth disadvantage is for the authors who live in remote areas and who find it difficult to go to the bank because of their age or physical health or because of the absence of banks in their region. For such people, cashless payment is a boon as it will allow the authors to directly use the money for the purchase of the goods and services online. Be it M-Payments or the use of crypto currency, the currency in their phone and crypto-account is much more useful and liquid than the currency in the account.

The analysis of each system can give us an idea whether the method can be adopted for payment for the purpose of payment for journal publishing.

Mobile System is the most developed of cashless system. It has already been adopted in many countries and continents. M-Pesa is the preferred mode of payment for the countries of Africa. This Mobile Payment can indeed be used to make the payments for the journal. But for that, one will need to adapt to the needs of the contributors. There will be needed a common platform where all the details of smooth payment can be checked upon. A payment mode should be such that it should be convenient for both the payee and the payer. On individual scale, mobile payment has been experimented in many of the developing countries. For the payment of taxi fares, for the payments of food, for grocery payment—many companies have their introduced their own wallets. Beyond this as a common platform, many of the telecommunication companies have tied up with the wallet of M-Pesa. With the widespread advent of M-Pesa as the preferred mode of the mobile payment, this indeed looks like a feasible option in the very near future.

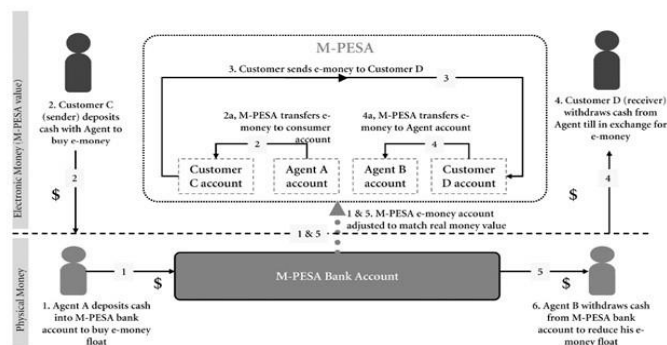


Fig 9: How M-Pesa Works

M-Pesa is the most well-known among the mobile payment platforms and is being utilized widely. This is the only platform which has the capability to be used as a single platform for the payment throughout the world.

The international transaction through mobile payment has not yet been explored, but if explored mobile payments will be a perfect solution to all the problems faced in the journal publishing.

Peer to Peer Foreign Exchange looks like an answer to half the solution of the foreign payment problems as it will allow the easy transfer of the payments beyond the geographical boundaries without any excessive conversion charges. But till date the peer to peer exchange has only be used as the method of funds exchange rather than payment in itself. It means that although peer to peer foreign exchange allows the currency to be exchanged through its platform, it does not allow deposition of the exchanged amount in a different account.

Hence even though peer to peer foreign exchange sounds like a promising solution, it has a long way to go in terms of development. Integrated means of payment along with the peer to peer exchange needs to be established. Furthermore, the current scenario means that the exchanged amount once received is again deposited in the bank. This means that in any condition the receiver will have to go to the bank to cash the amount. Thus peer to peer foreign exchange in itself is an incomplete answer to the problems of payment of the journal payment.

Crypto Currency is the most famous option among the financial gurus. It is an option, which many people are looking at for the future of investment and payments. Crypto currency overcomes all the problems of the payment in journal publishing. It does not

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involve going to bank either for deposition of the amount or for the withdrawal of the funds. It can easily solve the problem of the international payments, and it is also liquid enough and can be used directly for making the purchases. This looks like the perfect solution for the problem of payments in journal publishing.

The crypto currency has already established its place in the hospitality industry as well as the gaming industry. Gaming industries have been using the system like bitcoins for the purchase of the various resources while playing the game. This might not be the widespread use of crypto currency, but within a system, it is a perfect solution for the transactions between gamers from different parts of the world.

Similarly hospitality industry introduced the crypto currency in the loyalty points where in point collected through the different hotels of the network are used to pay for the stay and food.

So cryptocurrency in itself is not a new phenomenon. But despite all the factors this system also is still a far off dream. First of all, the problem is that the people are mostly unaware about how this system works. The general consensus among the people is that the system is used for the payment of illegal goods. So, in order to implement the crypto currency as the payment mode for journal publishing, a widespread awareness program will be needed which will ensure that people are aware about the system firsthand. Also, it is required that the system should be adopted by many sellers as well so that the contributors who receive the money can utilize it.

So, implementing the crypto currency as the means of the payment is indeed a difficult goal.

But there can be an option of using the crypto currency within the journaling arena till that time. That is like in the gaming system, a journal environment can be created throughout the world for the different journals. The payment of the contributors can be in standard form of crypto currency and the purchase of the journal can be in a similar way. This will ensure that if nothing else, the contributors can at least purchase a copy of the journal they need.

But this system can be successful only if the journals worldwide or interestwide accept the same norms of payments. Else, the crypto currency will be on hold till the time when more partners adopt the payment through these currencies.

IV. ROAD MAP TO FUTURE

Despite various advantages, the financial payment rails suffer from many disadvantages as well. In order to adopt these financial payment rails as the part of the daily transactions, there is an inherent need to reduce these disadvantages, so that the people can utilize the advantages offered by these payment rails. The road to future seem fraught with lot more roadblocks. In order to switch to these cashless payments instead of the regular payment, following roadmap may be utilized in general.

1) *Awareness Programs: This is indeed the first step in adopting this kind of payment system. While developing countries are well-aware about the options of mobile payment system, they are still unaware about other cashless options available to them. Similarly, the developed countries are sitting on the sidelines to see how the cashless payment options will change the face of the financial landscapes. The first step in introduction of cashless payment as the means of the payment in journal publishing is to start an awareness drive. This awareness drive can be taken by either a few or all the journals together. This will ensure that the contributors as well as customers are aware about this system as an option for receiving and advancing payment.*

2) *Development of Legal Framework: Currently the system of cashless payment is not fully developed because there are no central guidelines or regulatory framework in place to secure these payments. Each platform runs on its own set of rules which also varies from region to region. There is a need to establish a proper legal framework in association with these emerging payment rails. Right now, there is no option of getting redressal in case the payment go awry. Most of the legal and judiciary systems do not even recognize these emerging rails.*

3) *Setting up of Regulations: As explained in the above point as well, the need of the hour is to develop a central framework. Crypto Currency does have some inherent code like specifying the maximum number of bitcoins that can be mined at a given time, but all such rules and regulations need to be centralized and integrated in the similar manner so that the users do not feel lost and insecure.*

4) *Development of Common Platforms or Integrated Platforms: With so many platforms coming up in different regions and different countries, for seamless cash transfer, the need is that these platforms should communicate with each other. For example if take two mobile payment platforms, it is important that the mobile platform talk to each other and allow transfer to each other's platform. This will increase the usage of the payment sent using these methods. Similarly cryptocurrency also need to be integrated with other methods including mobile payments and bank transfers so that the customer can realize the true value of the funds transferred as the crypto currency.*

5) *Seal of Acceptance from the banks: This might seem like an anti-cashless system argument, but the fact is that despite all the modern means of payment and options, customer's trust on bank system is more as compared to any other system. In order to truly integrate the cashless payment system, seal of approval from bank and government authorities is needed. This will ensure that people feel confident in transacting over the platform and the fear of security is taken care of.*

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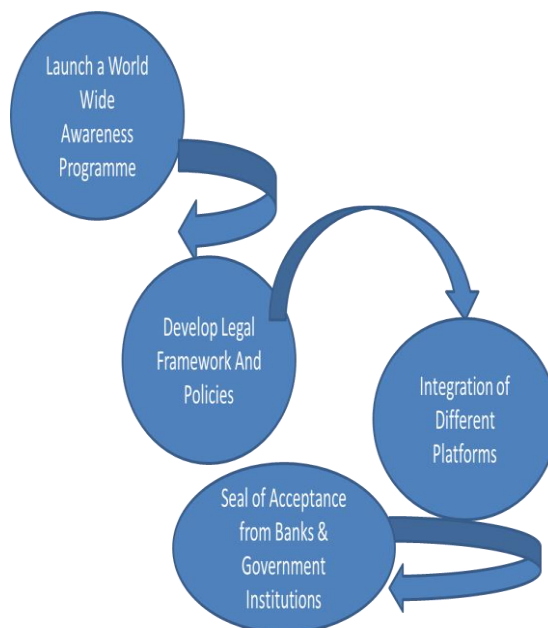


Fig 10: Roadmap for Future

Future of the Cashless Payment and Emerging Rail is quite bright if the system can take care about allaying the fears of the people.

In order to establish the system of cashless payment in the field of journal publishing the steps needed will be almost the same. First is the awareness programme which should be slowly used to spread the idea about different kind of payment modes available to the contributors. The next step will be to integrating the world of journal in a single platform. This single platform of payment, be it the crypto currency or the mobile payment network can then be used as a single platform by all the journals. The platform can be customized to suit the need of the journals. Such customization has already been seen in the gaming industry as well as in the industry of hospitality. In a similar manner, the cashless payment option can be simplified and adjusted to suit the need of the payment options in journal publishing. Last but not the least step is to develop a seamless system which will instill the confidence in the mind of the contributors.

V. CONCLUSION

As the details above indicate, the cashless payment indeed offers an interesting choice for the payment in journal publishing. It has already taken world by storm, and by the virtue of its ease of transaction, lower commission, and wider reach, it is a perfect solution for journal payment options. Also evident is the fact that the emerging rails and cashless modes of payment indeed offer the great advantage. But despite this, these are not yet accepted means of payment for the following reasons:

- 1) *Many of these cashless modes of payment are not considered secure. Despite the various security measures being taken to control the transaction, there have been many instances of misuse of the currency.*
- 2) *These cashless payments do not enjoy full blessings of the government and associated authorities and hence are not considered quite safe. There are even the places where crypto currency is considered illegal. This kind of uncertainty creates a doubt both in the mind of the authors and those of the publishers and hence the payment is not really preferred through the cashless payments.*
- 3) *Cashless payment has not gained momentum yet. Although many companies are accepting these cashless modes, the people in remote countries are still unaware about the various options of cashless payment.*

Not only the publishing world, but the whole industry is sitting and waiting on the sidelines to see how the security and the infrastructure issues will be resolved by the system. The same is the case with the journal industry. There definitely are the advantages of going for the cashless system of payment and there is no doubt that this system will solve the constant battle of the payment journal industry face. This kind of payment system will also help in attracting the talent from the different geographical locations. For the developing countries, this can be a perfect answer to the lack of knowledge in a particular area. This will also attract more buyers from the different areas, thereby increasing the circulation of the journals in the market. But for it to be adopted, the system for the cashless payments is not fully in picture yet. The required infrastructure, security means, and regulations are still under the process of development. The government authorities throughout the world have not yet given their nod to these payment systems. Moreover, there is not common platform to integrate these systems throughout all the locations. Owing to all this, the cashless payment seems like a far-fetched dream. But then with the kind of development the technology has seen in past decade, it is entirely possible that the security measures and infrastructure for the cashless payment will undergo a drastic change in the near future.

The most probable option for now looks like the mobile payment, which can at least be currently also adopted in the particular geographic region if not worldwide. The countries in Africa and Asia, where mobile payment has already established its roots, can go

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forward with the payments through the mobile payment. Crypto currency is still quite far away because of the prejudice and the government's disapproval hanging like a cloud over its growth. But once implemented, crypto currency is by far the best solution one can visualize for the payments using the cashless system. Peer to Peer Foreign Exchange, although a feasible and very helpful method, is very far off in the race of payments. It will take a lot of integration and development of infrastructure for the idea through this platform to fly off.

All in all, we can say that although journal payments cannot use the cashless system directly, the day is not far off when both the contributors and publishers will find their answer to the payment woes in the cashless system.

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