E-ECONOMY: AN EMERGING AND USEFUL WAY TOWARDS DIGITAL INDIA

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Abstract:

No individual can progress in the objective of E-economy unless the entire bureaucracy is involved with fidelity and punctiliously. India has been cash reliant from ages. There can be several reasons, to match up with international standards it is very necessary to transform into cashless such as need of transparency and scalability in transaction which results in growth and development of country.

India is still dealing with corruption, lacks in usage of technologies with respect to the world due to some obstacles such as infrastructure, illiteracy etc. In order to get rid from this, it is important to make efforts towards some emerging technologies such as e-wallet, AEPS, UPI and many more to go India cashless. The only thing you need is a computing device that is mobile phone to do electronic transactions.

With realization of this fact, our honorable prime minister took historic move of demonetization. The major goal of demonetization was not only to fight against corruption and get black money off but also to move towards cashless economy. Several initiatives have been taken by government to provide literacy to people and let them aware of its importance. After effects of demonetization is extremely impressive. In 2016 India emerged as a second largest smart phone market with approx 220 million users which are next to only china. We surpassed us market this year which is an emerging step for these technology.

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1.   Introduction:

"Cashless transactions will lead to the better scalability, accountability and transparency in the economy by using emerging technologies".

Instead of transferring currency notes for payments, the transaction through the electronic channel which has no physical existence is considered as cashless. It can be done using e-wallets, debit or credit cards, net banking, aadhar card. Earlier the only means for cashless transaction was through cards and were less secure but as we are in the 21st century, Technologies has made these transactions easier, faster and secure. In India only 5% of total transactions are cashless. Cashless economy will improve credit access and financial inclusion, reduces tax avoidance, greater efficiency in welfare programs, curbing black money, controlling corruption. It also reduces the risk of carrying cash along. It will indirectly increase our GDP.

Major efforts should be made in urban areas as it is contributing 70% in India's GDP. Government needs some plans and schemes to migrate people towards e-payments.

2. Technologies to make cashless economy:

2.1. Digital infrastructure:-

Digital infrastructure assists the use and connections between data, content, hardware and software which controls the sharing over the network. Digital infrastructure includes data and software and the main concern is to make them work together firmly so that they can be shared, managed and combined for possible collaborations.

It includes stable and dynamic representation of physical world of how these automated devices interact to operate. Some of the major concerns related to this creation are quality and transmission.

2.2. Delivering services digitally:-

Various digital services provided for cashless transactions:-

2.2.1. AEPS (Aadhaar Enabled Payment System): This is an aadhar card based technique .This is a new initiative by the government of India. As the most of the bank accounts are linked with aadhar card, transactions are done recognizing finger prints at different platforms. This ID-proof has become a new means of transaction.

2.2.2. E-Wallets: As everyone has a smartphone these days so this is one of the most convenient methods for payments. Before demonetization this was rarely used in urban areas and rural areas. In this technique we charge our wallet with some amount which comes from our bank account which we can further use for transactions. Some of the widely used applications are paytm, mobiKwik, FreeCharge , MyLeastPrice, SBIbuddy.

2.2.3. UPI (Unified Payment Interface) : This is a kind of mobile based application which provides an interface for payments, fund transfer . This is more secure because here the amount is transferred from one account to another through bank server without any intervention of other servers. One of the recent UPI is Bharat Interface for Money (BHIM). It is a mobile application developed by National Payments corporation of India (NPCI). This app is also made to support the direct payments through bank accounts. This app supports all the Indian banks which allow direct transfer from one recipient to other.

2.2.4. Debit / Credit Cards: This is easiest and prevailing way. Banks provide Debit/Credit cards for operating their Bank accounts and these cards are further used for transactions using PoS machines.

2.2.5. USSD Transfer (*99#): This was an initiative for the people which don't have smartphones and in rural areas where there is lack of digital literacy. In this technique mobile number must be registered with your bank accounts. As *99# code connects to the telecom operator's server and then reaches the bank's server. Hence, it gives you access to your bank account and performs various operations like balance check, fund transfer and some transactions.

2.2.6. Net Banking: Net banking is a way to use all the banking facilities from anywhere. The user is required to activate net banking from the bank account. This can be used for online payments. Users can transfer funds, check history of payments and various banking requirements using the payment method.

2.3. Digital Literacy:-

Among the people unaware of usage of these technologies the major portion includes senior citizen, people indigenous to rural areas and uneducated people, they lack in digital skills and afraid of security issues such as transaction failure, hacking and many more.

Knowledge of general new technologies &digital devices such as smartphones, laptops, computers, tablets comes under digital literacy. Its main focus is developing digital skills and understanding the functionalities of networking devices.

2.3.1 Digital Dakiya/postman:

It's an initiative by the Madhya Pradesh Government with their colleagues and college students to provide digital literacy to common people of the city. The objective was to promote digital transactions and a vision of e-city. Finance minister of MP has inaugurated the scheme on 14 January 2016 in Indore. This campaign's was especially for the women and older people who don't know much about it. In this scheme volunteers in their uniform visit door to door to make people aware of online transactions and its benefits.

3. Moves by Indian government towards cashless India:

Demonetization was a colossal step taken by Indian Government against black money, fake currency and a step towards cashless economy. A Cashless Future was the Real Goal of India's Demonetization Move. On 8 November 2016 Mr. Narendra Modi, Prime Minister of India declared that 86% of Indian currency was declared illegal by the next day. This 86% includes the big denomination i.e. 500 and 1000 rupee notes. Due to less supply of new currency in the market, it has created chaos among common people. Long queues outside banks and ATMs, limited flow of cash, these were the few problems faced by the country that gave a big boom to cashless transactions. It increased electronic payments from 17 lakh to 63 lakh per day through e-wallets and 3.8lakh to 16lakh per day through Rupay cards. People started using e-wallets for daily products and services. Most of the youth switched to these payment techniques because these were more easier and convenient way.

On 1st January Mr. Arun Jaitley , Finance Minister of India announced some special benefits on online payments i.e. 0.75 percent discount on purchase of petrol and diesel,10 percent and 8

percent on general and life insurance for buying new policy or paying premium online via PSUs websites.

Also, there was a declaration of 0.5 percent rebate on railway ticket payment and also accidental insurance of up to 10 lakh rupees. If people follow the e-transaction in case of railway catering, accommodation and retiring room they will also have the benefit of 5 percent.

High interest rates on taxes were reduced on electronic payments. Most of the transactions have become tax free to increase the numbers of online payments.

New plan has been proposed by the Government in budget 2017-2018, in case of cash transaction more   than 3lakh rupees receiver will have to give penalty equal to the cash received.

4. Benefits of cashless Economy:

4.1. User perspective:

4.1.1. Convenience: How easier these financial transactions become, is one of the most convincing benefit for any customer to go digital. There is no need to carry cash which is risky, no need to wait in a queue for seeking cash outside any ATM. It becomes much easier when it comes to have cashless money while travelling too. You can make transactions on your cell phones from any possible locations if we are having full network support, you can use debit/credit cards for making any kind of payments and if you lost your card then you can block it immediately for preventing further issues.

4.1.2. Discounts for users: To further accelerate the mob towards use of plastic money, the Central Government has declared a package of incentives for assisting more cashless economy in the country. These incentives are provided for transaction up to rupees 2000 or more, 0.75% of discount on digital purchase of fuel.

4.1.3. Tracking Records and budgeting: Since all the online transactions are recorded as history it will be quite convenient for keeping the track of spending. For income tax and all formalities we need proper documentation of transaction and online payments make it easier

because it is already documented. This record also helps in proper budgeting. We can make certain decisions on the basis of past records for future investments. I

4.2. Government perspective:

4.2.1. Eradication of black money: Black money was a major concern for step towards demonetization which further accelerated the initiative of cashless India. Black money was the funds kept illegally by any person. Due to demonetization new currency notes came into account and government had given all the citizens a duration of 30 days to exchange all the cash people had. But some limitations were imposed on the amount they were exchanging because they had to give proper documentation from where that money came from. In this way all of black money suddenly came out.

4.2.2. Transparency in transaction: It will increase more banking facilities because we don't need an   infrastructure we just need to be digitalized. Bank accounts of recipients are connected, so the money is directly transferred to required bank account and hence the process becomes transparent

. 5. Hurdles with technologies to go digitalized:

5.1. Network security:

The major issue affecting the monetary framework of India Banks and financial institutions are most vulnerable world across the in terms of security. Indians not only prefer cash to avoid tax but there is always a trust issue after all its all about money.

We need to emphasize on usage of upgraded operating system which facilitates with best security patches and strengthen the configured network in institutions and banks.

5.2. Internet availability:

Nearly 70% is rural India, therefore one of the biggest challenge is availability of internet in these areas. In the world of digitalization, we are still dealing with the poor connectivity of internet. Realizing the worth of internet several telecom companies are taking steps to target rural India .To overcome this challenge, we need better infrastructure in undeveloped areas.

5.3. Hacking and cyber theft:

Attackers will release fake website & online payment apps in the market that can steal your personal and banking details like net banking login ID and passwords, credit/debit card numbers, etc. One may also receive SMSs or WhatsApp messages recommending you to download mobile apps for online payments. These may not be genuine. Free, insecure Wi-Fi networks may be created by attackers to trick unsuspecting users. Fake links are most common among all. It steals your personal information and payment details.

5.4. Less use of PoS machines:

In India retailers doesn't prefer PoS machines. They always prefer payment in cash to avoid taxes unless they support India can't go cashless.

5.5. No Privacy laws:

The biggest problem lies in lack of policy framework in the area of data protection and privacy. Other financial institutes don't guarantee Data Protection, this creates a dissatisfaction among the consumers.

6. Conclusion:

In this paper there is a brief discussion about how India can step forward towards the gateway of cashless economy using IT technologies. In starting, we are having an introductory section, later on some challenges stroking in the development of country. Its optimistic side is shown which is more prominent.

Towards the journey from developing to developed India, this is one of the major decision taken but not completely implemented yet. But at least what we need is, In urban areas, most of the people should have awareness of these technologies and the magic of smart phones. Major transactions should become cashless because almost two-third GDP of country depends on these areas. Technicians are working tremendously on these technologies to make transactions easier and safe.

7. References:

1. The challenge of the digital economy, Francesco Boccia and Robert Leonardi, Palgrave Macmillan, Italy, 2012.

2. Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., and Venkatraman, V. 2013. "Visions and Voices on Emerging Challenges in Digital Business Strategy," MIS Quarterly (37:2), pp. 633-661.

3. Soumitra Dutta, Irene Mia. (2011). The Global Information Technology Report 2010–2011. (pp. 331-391). Geneva: World Economic Forum.

4. Akintoye, K. A., & Araoye, O. E. (2011). Combating e-fraud on electronic payment system. International Journal of Computer, 25(8), 48-53.

5. Laboy F, Torchio P (2007) Web 2.0 for the travel marketer and consumer: E-site Marketing and the International Association of Online Communicators Available at http://www.esitemarketing.com/web2-travel-marketing.php

6. World Economic Forum with The Boston Consulting Group, 2014. Delivering Digital Infrastructure. Advancing the Internet Economy. Available at: http://reports. weforum.org/delivering-digital-infrastructure/

7. Antonelli C. (2003). The digital divide: understanding the economics of new information and communication technology in the global economy. Information Economics and Policy. Volume 15, Issue 2, pp.173–199. URLs: http://dx.doi.org/10.1016/S0167-6245(02)00093-8

8. Simon P. (2013). Too Big to Ignore: The Business Case for Big. John Wiley & Sons, 256 p.

9. Biswas D. (2004). Economics of information in the Web economy: Towards a new theory? Journal of Business Research, Volume 57, Issue 7, pp.724–733. URLs: http://dx.doi.org/10.1016/S0148-2963(02)00355-7

10. Understanding the digital economy, Erik Brynjolfsson and Brian Kahin, The MIT Press, Massachusetts, USA, 2012.

11. E-Commerce and the digital economy, Michael J Shaw, ME Sharpe Publication, New York, USA, 2006.

12. www.Cashlessindia.gov.in

13. www.thehindu.com/opinion/lead/Notes-for-a-cashless-economy/article16760046.ece