International Journal of Current Advanced Research
ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: SJIF: 5.995
Available Online at www.journalijcar.org
Volume 6; Issue 9; October 2017; Page No. 6770-6775
DOI: http://dx.doi.org/10.24327/ijcar.2017.6775.1013

Research Article

CASHLESS ECONOMY: OPPORTUNITIES & CHALLENGES

Saima Javaid[1] and Naseem Ahmed[2]

[1]Department of Finance, Faculty of Economics and Administration, King Abdulaziz University, Jeddah, KSA
[2]School of Mgt. Studies & Economics BGSB University, Rajouri, J&K

A R T I C L E I N F O

Article History:

Received 18th July, 2017
Received in revised form 10th
August, 2017 Accepted 5th September, 2017
Published online 28th October, 2017

Key words:

Cashless Economy, Cyber-security

A B S T R A C T

Cashless economy offers number of opportunities and challenges which is likely to change the entire business and financial matrix. Greater usage of digital payment system will not only achieve wider tax base, check counterfeit currency, curb terrorist funding but also save trillions of rupees for Indian Economy as it will bring down the cost of printing & distribution of currency notes which is estimated at 1.7% of GDP. The digitization empowered by demonetization is engaging customers, employees, optimizing process through disruptive innovations and transforming the industries to face the various challenges thrown up by the cashless transactions. There is a greater need to ensure cyber security, develop adequate infra-structure by involving Digital experts, and enact stringent data protection laws to reap the fruits of cashless or digital economy.

INTRODUCTION

India's crusade for a cashless economy seems to set to speed into a gallop with FM proposing a slew of measures designed to encourage people to embrace digital transactions. The resultant cashless economy aims to:

- Achieve wider tax base, improved credit access and financial inclusion,
- Have increased transaction history and transparency,
- Reduce risk and cost of carrying cash,
- Minimize the cost of printing currency notes
- Check counterfeit currency and curb terrorist funding
- Save time and enhance efficiency in banking transactions

What is Cashless (Digital) Economy?

Cashless Economy can be defined as a situation in which the flow of cash within an economy is non-existent and all transactions must be through electronic channels such as direct debit, credit cards, debit cards, electronic clearing, and payment systems such as Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) in India.

In a cashless economy most of the transaction will be done by digital means like e banking, debit and credit cards, PoS (point of sales) machines, digital wallets etc. In simpler words no liquid money or paper currency will be used by the people in a given country. In a cashless economy the third party will be in possession of your money. He will allow you to transact that money whenever it is needed. If it is not needed then the third party can use that money. Third party can be a government or any other public or private sector bank. (Tawade, 2017)

An economy based on digital computing technologies also called "Internet economy covers new economy areas like digital payment, ecommerce, B2B, B2C Internet business, mobile/internet startups, digital use in smart cities. Thus, a cashless economy is in which all monetary transitions are done through cards or by any digital means which render the circulation of currency notes to the minimum.

In Cashless India the size of digital transactions is set to double in three years. As the digital economy makes inroads into our daily lives, regulations for the new economy- often from the industrial era- are still catching up [(1)] (ET2017)

REVIEW OF LITERATURE

The study by Tawade (2017) covers the current position, advantages, disadvantages and future prospects of Cashless India. He suggested the government needs to take the necessary steps and make some policy considerations when they are preparing for a cashless economy. The payment systems have to be protected from the cyber-attacks which are the major threat for cashless transactions. Government should take measures to increase liquidity into the system so that people face less inconvenience. Government should also try to improve overall infrastructure so that more and more

Corresponding author:* **Saima Javaid
Department of Finance, Faculty of Economics and Administration, King Abdulaziz University, Jeddah, KSA

people can come into banking net and internet. In a research made by Bansal (2017) covers the opportunities and challenges of cashless economy and concluded that Indian economy is in its nascent stage of its transformation from branch based model to technology driven cashless economy. Today it is confined to highly develop urban areas, transformation of rural areas is the biggest challenge in front of Indian economy. But few initial steps taken by Indian government paves the way for its transformation in long run from traditional branch based model to technologically driven cashless economy in order to bring transparency, flexibility, efficiency, convenient, customer friendly banking facilities in India.

Al-Dalaien (2017) examines the benefits of cashless economy to the general public by collecting data with the help of questionnaire designed on a five point Likert scale. The sample size of the study is 112 respondents consist of students, teachers, and businessmen. One sample t-test has been applied to test the hypothesis. The results revealed that cashless economy is not beneficial to the general public.

The paper by Shendge *et al.* (2017) focuses on impact and importance of cashless policy in India. According to Government of India the cashless policy will increase employment, reduce cash related robbery thereby reducing risk of carrying cash. Cashless policy will also reduce cash related corruption and attract more foreign investors to the country. In many countries introduction of cashless economy can be seen as steps in the right direction. It is expected that its impact will be felt in modernization of payment system, Reduction in the cost of banking service, Reduction in high security and safety risk and also curb banking related corruption. Outlines the benefits of this move have now started trickling in with more and more people switching to digital modes of receiving and making payment. India is gradually transitioning from a cash-centric to cashless economy. Digital transactions are traceable, therefore easily taxable, leaving no room for the circulation of black money. The whole country is undergoing the process of modernization in money transactions, with e-payment services gaining unprecedented momentum. A large number of businesses, even street vendors, are now accepting electronic payments, prompting the people to learn to transact the cashless way at a faster pace than ever before.

The research by Garg and Panchal (2017) studied the views of people on introduction of cashless economy in India. The study was conducted in Delhi region & data was collected with the help of structured questionnaire and analyzed using simple percentage method. Responses from respondents shows that cashless economy will help in curbing black money, counterfeit's fake currency, fighting against terrorism, reduce cash related robbery, helps in improving economic growth of our country. Major challenges that can hinder the implementation of the policy are cyber fraud, High illiteracy rate, attitude of people, lack of transparency & efficiency in digital payment system. The study shows that the introduction of cashless economy in India can be seen as a step in right direction. It helps in growth and development of economy in India.

Objectives of Study

The main objectives of the study may be underlined as follows

- To assess India's rank among cashless economies of the world.
- To assess possible gains arising during the post cashless period.
- To ascertain the trend of various modes of cashless transactions during the post demonetization period.
- To pinpoint the various challenges while going cashless and exploring the opportunities on the way.
- To suggest ways & means to overcome such challenges.

Where India stands among the Cashless Economies of the World (at a Glance) as on, 30, Nov.2016 (Degree (%) of cashless)

Belgium **:** 93% Penalty for use of cash for high value transaction.
France :92% Banned cash transactions above € 1000.
Canada :90% Stopped printing currency notes of high value.
UK & Sweden :89%
Australia :86%
Neatherland **:**85%
USA :80%
Germany **:**76%
South Korea :70%

And
India = 5%

NORDIC Countries less than 10% transactions in cash

Source: www.worldatlus.com

Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. Faceless, Paperless, Cashless is one of the professed role of digital India.

The changeover from cash economy to cashless economy looks very simple but ground reality is totally different. At present only 5% Indians make digital payments, while rest use cash. In order to give big push to *'Digital India programme' Hon'ble Prime Minister Shri Narender Modi* took the drastic step of demonetization *(*INR 500 & INR 1000) on 8th Nov, 2016. It is the biggest exercise carried out in the world impacting 86% of the currency in circulation. Demonetisation made digital the best option to pay but as cash withdrawal limits wind down my mid March, Cashless transactions may be affected thereafter. The government plans to boost digital payment numbers includes a push to deploy 10 lakh new POS machines by March and 20 Lakh Aadhar pay POS machines by September 2017.

Already the BHIM App. Developed by National Payment Corporation of India (NPCI) and based on UPI, has been downloaded 125 Lakh times. That is great start towards a digital economy. But it is not enough. Govt needs to massively improve infrastructure and security. USSD and the like are generally forced used cases and actually deter the customers. Frauds have gone up in tandem with rise in digital transactions. Digital payment App. Paytm reported a jump in suspect transactions from an average of INR 4 crore a month to INR 11 crore a month post demonetization [2](2017)

Reserve Bank of India data for digital transactions showed a 10% decline in mid January, compared to a month earlier as access to cash got easier. Overall the number of digital transactions (debit cards, credit cards, electronic transfers, E-

wallets and mobile banking) fell to 923 million in January 2017 from 1028 million in December 2016.

The main hurdles to scale up digital transactions include:

1. Return of cash (Remonetisation): over 95% transactions are in cash
2. Stable mobile connectivity: Frequent call drops, buffering, patchy coverage in remote areas.
3. Not easy to use: Too many steps are required to complete the digital transactions
4. Ecosystem not fully mature i.e. interoperability is an issue
5. Security: frauds increased and will continue as digital payments increase.
6. Carrot will disappear: The Central Govt's INR 340 crores "Lucky Grahak Yojana" where it is giving cash prizes to digital users will end on April 14, 2017.

Digital Transactions Growth

Mode of Payment	Months					
	November		December		January	
	Volume (Million)	Value (INR crore)	Volume (Million)	Value (INR crore)	Volume (Million)	Value (INR crore)
IMPS	36.2	32480	52.8	43190	62.4	49210
UPI	0.3	90	2.0	70	4.2	16.6
Cards (Dr&Cr)	20505	35240	311.0	52220	253.1	45830
USSD	7.0	7302.6	102.2	103718.4	64.9	1206.7

Source: RBI, ET, 21-02-2017

The close analysis of the table shows that after government banned ₹ 500 and ₹ 1000 notes in November 8, 2016, digital activity levels were low in the initial weeks as people were busy depositing or exchanging the old currency but it increased from December 2016 as remonetisation progressed. Growth was good in October 2016 mainly an account of festive season but it continued further from November 2016 to January 2017 as well. This was positive fallout of demonetization. However, pace of growth moderated somewhat in February 2017 as is evident from following figures.

Month wise figures (Y – o – y%)

D.Mode	October		November	December	January	February
NEFT*	Value	37.6	38.3	40.8	60.2	49.5
	Volume	17.1	30.1	40.0	40.4	50.1
CTS**	Value	2.9	8.6	13.0	19.3	0.8
	Volume	- 1.1	23.0	58.4	52.7	20.2
IMPS***	Value	150.7	135.9	186.6	196.7	184.2
	Volume	116.7	89.6	157.2	177.7	150.4

Source : RBI, ET, 22-03-2017
*National Electronics Funds Transfer
** Cheques Transcation system
*** Immediate Payment service.

Government Measures

The govt. should ease the use of digital methods of payment by developing infra-structure quality and network. India has about 350 million internet users, about one – third being Broad Band users which may grow to 500 million by 2020. Barring USSD which is SMS based and best suited for features phones, other plans like UPI and BHIM need internet connectivity. To boost connectivity the Govt. has increased the outlay for Bharat Net-touted as world's largest rural Broad Band Connectivity project to INR 10,000 crores in 2017-18. The project will help deploy high speed connectivity across 1.5 lakh gram panchayats. Rail Tel Wi-Fi, the Indian Railways project with google to deploy free Wi Fi, is live at 110 stations and shows ample appetite for online transactions.

As per the reports in Economics Times dated 21st Feb, 2017, limited use of debit and credit cards could slow down digital adoptions. China with 1.4 billion people has 5 billion cards whereas in India there are only 800 million cards. However, it is expected that mobility of products will result in users preferring digital payments. The upcoming launch of Aadhar Pay (a merchant version of digital payments) and deployment of POS machines are steps in right direction.

RBI Assessment

The RBI in its first assessment report (after demonetization) noted that 9 of 11 digital platfarms i.e. Unified Payment Interface (UNI) & Aadhar Enabled Payment System (AEPS) show a consistent rise in value (INR) and volume (No.) of transactions post demonetization. All other forms have shown decline either consistently or in one or two months in four month period. While UPI links mobile applications to a person's bank account directly, AEPS is an Aadhar linked biometric identification system used for cash transfers under Govt. schemes.

Overall Digital Transactions trend November 2016 to February, 2017

	Volume (In Millions)	Value ("000" crores)
November 2016	671.58	94.0
December 2016	957.5	104.1
January 2017	870.4	97.0
February 2017	763.0	92.6

Source: RBI Assessment Report March 2017

As per RBI assessment, "the catalytic push from demonetisation has-tened migration to wards digital payments in November & December 2016. However, ease and availability of cash by progressive remonetisation, impacted the pace of growth of digitization in February, 2017. 205 million swipes transacting INR 35200 crores in November 2016, to 212 swipes transacting INR 39200 crore in Feb, 2017. 'As the cash is in circulation will settle at a higher normal than the pre-demonotisation level, digital payments will settle at a higher normal and continue its upward trend as before, said Singram Singh, Head of Cards and Payments, Axis Bank. Card transactions improved to 311 million swipes transacting INR 5200 crores in Dec.2016 showing a 50% rise in transactions and 48% rise in value transacted over a month. But pace of addition in debit & credit cards has not been matched by a equal focus on POS terminals. In comparison to 800 million cards that have been issued till now, the no. of POS terminals have not been adequate as per RBI Deputy Governor, R Gandhi. Cash available with people which reduced from INR 17 lakh crores just before demontisation level to INR 7.81 lakh crores on Dec. 9, 2016 and then increased to 11.74 lakh crores on March 3, 2017 [(3)] (March 6, 2017 Mint Article)

To expedite the process of digitization, govt has given following incentives

1. Discount of 0.75% on digital payment at Central Govt Petroleum PSU.
2. 0.5% Discount for monthly seasonal tickets on digital payments from 1st January 2017 on suburban in railways network.

3. Discount credit of up to 10% on the insurance premium sold through the customer portals of PS insurance companies on digital payment.
4. 10% discount for toll payment on National Highways using RFID card/Fast Tags in 2016-17
5. No service tax on digital transaction charges/MDR up to 2000 per transaction.
6. Rural Regional banks and Co-operative banks to issue Repay Kisan Card to 4.32 crores Kisan Credit Card holders . Govt to support this through NABARD
7. 2 POS devices to be deployed in 1 Lakh villages with population of less than 10,000. Govt to extend Support Through NABARD.
8. Central Govt Departments and PSU to bear transaction fee/MDR charges for digital payment, State Govt being advised to do the same.

Source: Tax Research Team (4 Nov, 2016)

National Institute of Public Finance & Policy. New Delhi

Issues, Challenges and Opportunities

There are number of issues and challenges to convert cash dominated economy into cashless one, where 95% of transactions are in cash which constitute 13% of India's GDP. ATM is used (92% of cards) mainly for cash withdrawals and not for settling online transactions. Further, there is limited availability of POS terminals. Only 1.44 million POS machines have been installed by July 2016 and that too mostly in urban areas.

So far as mobile internet penetration is concerned, it is very low in the rural areas. However JAM infrastructure can encourage digital transaction culture with 33 million internet users, 90 crores mobile phones & 124 crores Aadhar Identity Cards and with 11 digital payments methods (such as AEPS, IMPS,UPI,RTGS/NEFT, Debit/credit cards USSD, M.Wallet, POS, Internet banking, Mobile banking & Micro ATMs), we can transform India into cashless economy However, There are many issues & Challenges in the process of digitization.

Cyber security and protection of privacy

Indian banks and financial institutions are least secured in the world. The majority of banks run their ATM through Window XP with old software (without any security feature) & poorly configuration network, chances of hacking accounts and illigimate transfer of money is quite possible. And all transactions should be treated personal like their cash transactions. For this govt. must enact a law to ensure that data relating to bank transactions are protected.

Growing digitization and use of data for decision making increase risk of hacking and fraud manifold. The drive towards cashless economy is spurring demand for digital security. As digitization goes up security aspect will be crucial. There will be huge demand for people who can make transactions through digital channels (Mobile banking, internet banking, E. Wallet etc). Even big companies such as Sony and Yahoo have faced cyber attacks. This underscores the need for devising for robust cyber security system [(4)] (ET 3 Jan, 2017).

A study by Assocham PWC shows a surge of about 350% in cyber crime cases registered under the IT Act 2000. Following are highlights of some of the cyber crimes.

(2014-2015) [2015-2016(till dec 15)]

1. Frauds spike through ATM/Net Banking 13083 11997 (Credit card/Debit Cards transactions)
2. Spate of Attacks in October 2016 3.2 Million (Card details were stolen in India. Matter is still under investigation
3. In November 2016 Cyber Criminals broke into UK's Tesko Banks Computer and made off with about $ 5 million from the accounts of 9000 customers.
4. On August 2, 2016, Bitfinex, a Hong Kong exchange for trading digital currency- where accounts of some of the customers were hacked and bit-coins worth $ 65 million were stolen.
5. In Feb. 2016 Bangladesh Bank was the target and an attempt was made to steal $1 billion and the attackers got away with $ 81 million
6. In Feb, 2015 Cyber criminals infiltrated 100 banks in 30 Countries and siphoned off $1 billion
7. Top 51 Banks lost INR 485 crores between April 2013-Nov-2016
8. 56% of money lost is due to Net- banking thefts and card cloning.
9. 15 ransom - ware attacks per hour in India and one in three Indians fall prey to it.
10. Indian Banks spend few million dollars on I.T
11. Global banks set aside 12-15% of the IT budget for cyber security

[(5)](Source:ET15-02-2017)

Some Tips for keeping Cyber criminals at Bay

- Treat your smart phone as a bank
- Use strong unique passwords on every website
- Keep your operating systems, apps and antivirus up-to-date
- Enable two factor authentication wherever available (particularly for e mail and financial sites)
- Type out the link in the address bar of web browser instead of clicking on links.
- Avoid links or attachments sent from unidentified persons (sources)
- Click the lock in your browser to ensure your connection is secure
- Monitor your accounts for unauthorized transactions.
- Avoid sending financial information by email.
- Avoid clicking links or entering personal information on pop-up windows.

Besides, RBI and Central Govt. should formulate cyber security law in consultation with cyber security experts to plug loopholes and help strengthen cyber security of digital payments & win back the confidence of public at large. AEPS is also suffering from lack of Data security, Privacy protection and Biometric security. Aadhar is a risky technology for online transactions. Once bio-metrics of an individual is gone, you cannot change and your biometric & digital identity is gone forever. Govt. must safeguard users form digital manipulation through new cyber laws & innovative technology.

Inadequate Infra-structure

Better internet facility is the key to success of cashless economy which should be supported by 24 hour power supply. Financial illiteracy, lack of access to bank & digital literacy pose a serious challenge in the process of digitization. Factually, one of the challenges pertaining to digitisation is bridging the literacy gap. This will require a combination of

biometrics, regional language programming and graphical UL design. Companies such as Apple that have managed to successfully pull these hardware, software and design elements together have managed to drive sustainable competitive advantage. These skills are not readily available in India and employers will need to find people with core technical aptitude and train them into specification to design, develop and implement different regional Language programmes. The persons have to be knowledgeable about the latest technology trends, be able to work in team settings. People with knowledge of robotics, artificial intelligence and machine learning will become quite valuable to the digital revolution**.** [(6)] (www.Economics Times.Com)

Need for Digital Experts

These are the people who can translate business requirements into digital language and when digital geeks come up with solutions they can connect that to the core- business strategy. There will be huge demand for such people who can connect what technology provide with business solutions to create new opportunities.

In consumer facing business such as automobiles, FMCG, aviations, real estates etc, there are three main challenges thrown up by digitisation viz externally serving customers, internally leveraging digitization across organization to unlock efficiency and looking at digital technology to transform and disrupt digital models. The digital expert will pay a crucial role in acting as a bridge between solutions and business processes.[(7)](ET. 03-01-17**)**

Need for Digital Cxos

Digital Cxos are people who understand digital trend and think strategically about digitization to unlock value. This category includes key decision making people such as chief technology officer, chief digital architect etc. This is the new role that is evolving and coming into lime light more with the transition into a digital economy. He will look at customer facing, product facing functions and unlock the value chain. He will also ensure customer connect is made as efficient as possible. Product digitization for creating customer experience; training the digital architecture to provide satisfying customers experience and for this, a senior business professional with knowledge and understanding the core business & customers is required. [(7)](ET 03-01-17)

Stringent Data Protection Law

One area that demands immediate attention is the need for a strong legal frame work for privacy and protection of data shared by individuals and entities. Legislative reforms are not as quick as technological innovations and this leads to doubts regarding the enforceability of rights. Hence, simultaneous legislative reforms would be required as part of the digitization programme. The legal right and liabilities arising out of handling of data of individuals and entities require a careful examination. Presently the IT Act 2000 and rules there under cover the existing framework on privacy and data protection in India. Section 43A, 69 and 72A of the IT Act embody the law on data protection. In 2014 a bill named, The personal Data Protection Bill 2014 was introduced in parliament which had a limited focus. All these provisions are minimal, the legal frame work in the shape of contracts under the Indian Contract Act 1872, comes to rescue if there is any violation of privacy right. With every innovation in technology an innovation in the act of misuse and fraud, also takes place. India, unlike countries such as UK, Australia and other Europeon Countries, does not have dedicated "Data Protection Law". Hence, a comprehensive 'Data Protection Law' is required for the enforceability of rights by owners of data. The punishments under this legislation should be made stringent. This will safeguard the interests of citizens. Penal provisions should be exemplary. Panel provisions of fine including issuance of disgorgement orders, non compoundable offence etc. should form part of such law. Security measures required by the data collectors and controllers to prevent misuse should be stipulated. Collection, processing, usage and the grounds of exceptions from the provisions of this law should be clear. A comprehensive data protection legislation will guarantee a sense of safety to the owners of data. [(8)](ET Feb 15, 2017)

There must be laws for different aspects such as cyber security, cyber crime, cyber forensics and E- Discovery etc. Digital payments must be governed by specific law for proper usage. There is no effective mechanism to make Banks, E. Wallet service providers, paytm etc liable for loss. The accountability must be made clear to ensure protection of hard earned money.

Business Innovations opportunities

Digital transformation is driving companies to step up innovations across products, services, and pricing and rethink existing business models. This shift towards digital is creating on opportunity for business to innovate, differentiate and create success stories. By highlighting how digital transformation is driving growth, Micro soft and the Economics Times Digital Transformation series created a unique platform for industry leaders. By bringing these eminent business leaders together, the sharpest minds in the business brain stormed on the ways in which today's business could ride this digital wave successfully. While disruptive in nature, the technological revolution provides an opportunity for value creation like no other, The thrust is on reinventing and reimagining every touch point, revamping processes to take advantage of existing technologies and realigning product to be in line with modern realities. Thus, this digitization process is engaging customers empowering employees, optimizing process and will transform the economy as a whole [(9)](ET. 9-2-2017)

The E-Commerce market in India has grown from $4.4 billion in 2010 to around $16 billion in 2015 and this further expected to hit by $76 billion by 2021. Number of online buyers has increased to 90 million in last three years. Raising trends of online purchasing backed by many forces such as strong value proposition offered by online merchants, proliferating payment platform, strengthening delivery channels, logistics, home delivery, 24*7 active market, increasing mobile & internet penetration etc. Increasing penetration of E-Commerce is also a contributing factor for digital transactions in India. (Bansal, 2017)

Poor Penetration of Plastic Money

Most distressing feature of Indian economy is that India has large no of currency notes as compared to many other large economies. India had 76.47 billion currency notes in circulation in 2012-13 compared with 34.5 billion in the US. According to data released by Reserve Bank of India money

in circulation stood at INR 17.97 trillion as on 4 November 2016. In this way increase of currency notes in an economy creates demand and supply gaps accelerating inflation rates to new heights. Tracking of transactions and expenditure is not possible in case of physical exchange of currency notes in unorganized market. India uses too much cash for transactions. The ratio of cash to gross domestic product is one of the highest in the world-12.42% in 2014, compared with 9.47% in China or 4% in Brazil. In this way unaccounted circulation of currency notes creates a ditch between rich and poor people because it provide enough scope for speculative activities in stock market, real estate, money laundering etc. This is the biggest hindrance in promoting cash less transactions in Indian economy. (Bansal, 2017)

Digital Literacy

India is a country of over 650,000 villages with an illiteracy rate of more than 25-30%. Digital literacy is just 10% in India. In the absence of digital literacy we can't expect the transformation of Indian economy form traditional branch based model to virtually exist cashless economy. (Bansal, 2017)

Limited Banking Penetration

Limited banking penetration in the biggest challenge, India has comparative less number of branches in comparison to its other counterparts. Currently India has 13.5 number of commercial bank branches per 100,000 adult population. Only 40% of adult population has bank account, 13% population have debit cards, India is a country of over 600,000 villages but only 5% of village habitants have commercial bank branch in India. There were 50,554 bank branches in rural areas in 2016 Lack of sufficient banking Infrastructure for such as huge population it becomes a challenging task to promote digital payments where 95% of payments are made physically. (Bansal, 2017)

Increasing Urbanization

A trend of urbanization is continuously increasing in last three years with an annual growth rate of 2%. Urban population constitutes 33.136% of total population in 2016 in India. Increasing urbanization raising education level, increasing disposable income, changing life style, increasing mobile and internet penetration are all the factors shifting the Indian customers towards E-commerce proliferating digital transactions in India. (Bansal, 2017)

Increasing Internet Penetration

Internet penetration in India is continuously raising in last three years. According to a report published by Internet & Mobile Association of India and market research firm IMRB mobile internet users reached to 420 million by June 2017. And the proportion of data component raised from 45% to 65% within a short period of five years. Further launching of Reliance Jio last year and other telecom companies come up with affordable data packs continuously increasing the internet penetration in India.

Due to increasing internet penetration Indian banks continuously increasing their technological infrastructure to provide innovation, affordable, user friendly services to enhance consumer experiences and gain competitive advantages. Internet and mobile banking are gaining rapid foothold in Indian economy especially in last one year. Digital payments touched INR 200,251.32 billion in May 2017 as compared to 176,001.51 billion in May 2016. Digital payments mechanisms such as RTGS, Retail Electronic cleaning, Prepaid installment payments, cards, m-wallet, interbank & intra banking transactions are continuously gaining momentum in last one year. Indian customers are now shifting from traditional branch banking to internet banking due to ease and convenience around 44% of users are using net banking , it emerged as the favorite mode of payments among internet users in India.

CONCLUSION

Thus it can be concluded that in the absence of legal, technological, supervisory and regulatory clarity and institutional capacity of enforcement, dream of cashless or digital economy can turn sour. It should be remembered that there is always a resistance to change. Age old practice of hoarding wealth and habit of cash transactions will take time to adapt to new technology, new methods and new ways of settlement. In view of financial and technological illiteracy among the general masses, a all purpose common card may be developed (like octopus card in Hongkong) which may be used for payment of transportation parking, retail outlets, school/college/university fees and for any other on-line payment throughout the country. The newly designed such card can be used conveniently by literate and illiterate alike only when the dream of cashless economy will become a reality.

References

Al-Dalaien, B. O. A. 2017, Cashless Economy in India: Challenges Ahead. Asian *Journal of Applied Science and Technology* (AJAST) 1(7): 168-174

Bansal, S. 2017. "Cashless Economy: Opportunities and Challenges in India." *World Wide Journal of Multidisciplinary Research and Development*, 3(9): 10-12

Garg, P. and Panchal, M. 2017.Study on Introduction of Cashless Economy in India 2016: Benefits & Challenge's. IOSR *Journal of Business and Management* (IOSR-JBM) 19(4): 116-120

Shendge, P. A., Shelar, B. G.and Kapase, S. S. 2017. Impact and Importance of Cashless Transaction in India. *International Journal of Current Trends in Engineering & Research* (IJCTER) 3 (4): 22 – 28

Tawade, P. H. 2017 "Future and scope of Cashless Economy in India." *IJARIIE*, 2(3): 117-181.

How to cite this article:

Saima Javaid and Naseem Ahmed (2017) 'Cashless Economy: Opportunities & Challenges', *International Journal of Current Advanced Research,* 06(10), pp. 6770-6775. DOI: http://dx.doi.org/10.24327/ijcar.2017.6775.1013