

Project Dissertation Report on
“CASHLESS ECONOMY AND DIGITALISATION
Shifting Patterns in Indian Payment Industry”

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EXECUTIVE SUMMARY

The purpose of this chapter is to describe the methodology used to achieve the research objectives of this study. This includes the type of the research, target population, the sampling techniques, the data collection and data analysis procedures.

The current study is based on primary data and the necessary data were collected from the websites, a convenient sampling was used in the study. A sample of 101 respondents was selected for the study and the study was conducted in the city of Delhi alone. Secondary sources were used to gather information on the “Cashless Economy and Digitalization”. Magazines, articles, research reports and government documents have been examined to obtain information on previous actions that stakeholders and legislators have already implemented. We have also researched websites of companies that produce research reports and online documents to carry out this research.

Self-administered questionnaires are distributed to 101 respondents in order to find out the adoption of digital payment system and perception and attitude towards Government initiatives during 2014-19 and the factors that positively contributed for the formation, change and maintenance of these attitudes.

Paper money and cheques have been the essential modes of payment and trade for the vast majority of the twentieth century in India. New Disruptive Technologies with new norms, service provision and consumption all having a digitalization as a basic feature have emerged. Many central banks and governments, in both developed and emerging economies, continue attempting to replace paper currency with plastic and endeavouring the usage of digital payment instruments. In order to encourage adoption of cards, the Indian government established frameworks for safety and security making the adoption of these new system easier. The path towards digitization started much earlier than Demonetization with internet penetration, telecom revolution leading to widespread availability of smartphones, 3G availability, and rise of e-commerce start-ups & e-wallet companies. All these led to people getting familiarized with digital platforms and online transactions. It's just that post demonetization the trend towards digitization and cashless transactions has significantly accelerated.

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INTRODUCTION

Cheques and Cash have been the basic methods of trade and exchange for dominant part of the 20th century in India. Recent decade saw a brisk spread of digitalisation in purchaser installment instruments, with improved bank(Charge/Credit) card systems, electronic-wallets, versatile installments with advanced monetary standards. Strategy creators and scholastics have supported the possibility of digitization of bills advertisement installments. The appearance of a cashless economy is a continuous method in bringing down the measure of money printing and distribution costs, boosting transmission of cash approach measures and budgetary consideration ending dark cash, tax avoidance and the sloppy area. Banks with the help of governments, both in developing as well as developed countries, keep endeavoring a switch from paper money with digital and attempting the use of computerized devices.

India, charge: Gross Domestic Product proportion, at around 19 percent, is one of the most reduced on the planet, likely in light of the fact that our nation, as referenced in the Union Budget of 2017-18, is an expense resistant nation. Tax avoidance and debasement are obstruction to monetary development. Acknowledging that India is a developing country, there are broad framework necessities which are in dire need of high consumption.

On November 8th 2016, the Government of India, in an unforeseen and an imposing move, demonetized two of the most noteworthy worth banknotes in stream: INR500 and INR 1,000. These banknotes represented right around 88 percent of monetary certificates available for use as far as worth. For a nation like India, which vigorously depends on money, this unexpected expulsion of legitimate delicate status of existing notes and the delayed nonattendance of new notes prompted across the country interruption inside the economy. This extreme move caused a major discussion among specialists, government officials and academicians about the inspiration driving and results of such activities. The ever-moving destinations of this move secured flushing out dark cash, and fighting tax avoidance, falsifying and fear mongering as indicated by the administration.

After this move over 99% of the cash was changed back to the national banks thus none of these intentions ended up being that applicable as they glanced in the beginning. Nonetheless, demonetization, which is an exogenous strategy shock to the accessibility of money, can have an increasingly conspicuous effect in a particular circle – installment digitization. In particular, the abrupt money crush may likewise start an upset towards a cashless monetary framework by means of quick appropriation of advanced installment alternatives and turned into a distinct advantage for the budgetary framework.

Progressions of advanced installments can likewise realize across the country adjustment in the monetary framework that may have broad and broad consequences. Digitization can drive the budgetary incorporation motivation, that is a need for policymakers, controllers and advancement organizations all inclusive. Digitization diminishes the charges and physical limits that have opposed significant money related and fiscal consideration endeavors by a method for giving chances of snappy development through further developed and available gadgets like PDAs and retail purposes of deals. We in this manner, see the effect of demonetization on digitization to decide plausible profoundly positive externalities of the plan. Since the time the installment business began to appreciate digitization with the formation of plastic cards in 1950s, banks have been the triumphant party in the circle.

Presently, the development and acknowledgment of Fin-Tech lately, explicitly computerized wallets, at an exponential speed, disturbed customary business endeavor by making fresh and compelling arrangement with installment. Retailers are the recipients of these installments and influence the worthiness and augmentation of virtual installment modes. The acknowledgment of more up to date installment modes by sellers is granting validity to and expanding the usability of advanced framework. Contrasted with charge cards, platinum cards fill in as a progressively appropriate alternative for paper money for two reasons. Initially, platinum cards are progressively bounteous inside the budgetary framework (620 million charge cards versus 23.5 million Visas were available for use in India as of October 2018) and are getting well known in the Indian setting with dispatch of RuPay card to be taken for instance.

Furthermore, not at all like charge cards, platinum cards do not have any short connection among utilization and installment. It is archived in different papers that there is a considerable increment in check card use after demonetization and the expansion is a lot of intense for unpredictable card clients with generally lower level of utilization. Volume of transactions increments by about 400 percent and exchange an incentive by 150 percent for non-standard card clients, while the indistinguishable numbers for customary clients are 28 percent and 43 percent separately. The client can move cash into the advanced wallet utilizing net banking, charge and Visas and even real notes through appointed bank offices and afterward utilize the e-wallet for installment of bills by various choices either by filtering the retailers Quick Response (QR) code or consequently through e-wallet. In a couple of cases, installments can likewise be made without requiring a functioning web association. Such simple and adequate computerized installment framework should expand the selection of e-wallets,

- a) By not all that well informed clients and retailers,
- b) By retailers/organizations in the chaotic segment.

Data from sites and surveys released by both government and exclusive organizations shows that the utilization of e-wallets saw a flood in view of demonetization in the two volumes just as worth. With respect to every exchange volume and worth, the exchange type examination uncovers a critical spike in included cash and P2P installments during demonetization and significantly increasingly raised sums after demonetization. In reality, even now, in light of various cash back offers, P2P installments are happening at a quick rate. While it is found that a 82 percent expansion in the proportion of money added to the e-wallet, P2P installments shows a development of more than 740 percent for move to singular clients and 405 percent for installments to retailers.

While a low risk esteem pre-demonetization brings about a greater rate increase, the outcomes show e-wallets were a well known installment strategy without money. Platinum cards showed the addition of 64 percent (on a greater base of 374mn) between October 2013 and October

2015, while charge cards created at only 23 percent (on somewhat base of 19mn) in a similar period. While the data from suppliers of installment related advancements permit inspecting just non-cash installments, the business data from a retailer makes us watch both cash and non-cash exchanges. Money down is the most conspicuous installment mode in India.

In any case, confining the business data into cash and non-Cash huge move towards non-cash exchanges in the repercussions of demonetization – considering both regard (addition of 93 percent) and amount (augmentation of 84 percent) of offers was built up.

Among the online installment modes, card utilize was significantly more in picture than e-wallets pre-demonetization and this example is as yet pervasive post demonetization . While it is a watched extension in e-wallet use, the majority of the money is expended by means of card installments at physical stores: card installments expanded by 136 percent in number and 129 percent in entirety spent.

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Relative numbers are 72 percent and 80 percent independently for e-wallet portions. The progression in spend through cards is a ton of lower for high-regard purchasers at around 45

percent in portions join and around 80 percent in entire spent. For e-wallet utilization, even high-regard clients show a 70 times increase in different trades while the complete spent augmentations by various occasions after demonetization.

While the valuation of E-transactions expanded, India kept on being a cash-heavy economy; with paper cash available for consumption portraying almost 18% of GDP, one of the best among the developing economies. A number of developed economies like the England , United States of America is around 4% to 8%. As of 2018, India's favourite digital payment method is COD with 58 percent of all online purchase falling in this section. Other payment modes are described as follows:

- Credit cards represented 15%,
- Debit cards 11%,
- NETbanking 9 %and e-wallets 8%.

The sudden surge of digital payments in the nation can be credited to various challenges. The biggest challenge is a low dimension of internet penetration. India, in 2017, had around 460 million internet users, approximately 59 % of which is in metropolitan cities. Out of which, 444 million were dynamic internet users.

This amounts for almost 30 percent of the nation's population utilizing the internet and around 24 percent accessing it through smartphones. This is a noteworthy increment from simply 7.5% of the population utilizing the web in the year 2010 and just 0.5 percent increment in the year of 2011. While these numbers, despite everything, stay a lot lower than other created economies with India not getting even in the top100 nations by web infiltration however the growth rate of internet users in India is the best in the world.

This foretells pleasantly , India's digitization dreams, even more especially concerning its advanced installment vision. A significant piece of Indian population keeps up on being unaware in terms of monetarily education , without accessibility to formal fiscal channels like banking, and for trade modes like money. This is demonstrated as an unreasonable level of COD (Cash on Delivery) demand continues tormenting the electronic internet business endeavor. Cost wasteful

aspects, insights insurance, expense conflict and client economics like a common urban parcel and age blast the challenges.

These challenges grow to be apparent with decreasing digital transactions, expanding zero-balance user accounts and union within the business as cash made a comeback after demonetization. The Nation's government has massively attempted to push forward its digitization goals through policies and guidelines. For example, so as to empower usage of cards, indian government has set up systems for safe and secure transactions, rationalised Vendor Discount Rates and has been issuing RuPay cards under the Pradhan Mantri Jan Dhan Yojana scheme. The endeavors likewise extend to other payment digitization modes, beyond cards.

Digitalized and Cashless Economies in the World

In the nation of Denmark, seeing clients pull money from their wallets has progressively gotten out of date. Truth be told, the Denmark's hold bank quit printing cash notes and shut down its sole accessible mint in the earlier year. We are well en route to turning into a cashless economy, grasping portable and advanced installments at a phenomenal rate. Denmark isn't the only one in this- - economies running from Western and Nordic areas to creating locales like India and Asia-Pacific are seeing a major move to a PDA based economy.

Investigate the figures. Starting at 2014, most American residents convey under \$50 in real money in their wallets and half convey under \$20. In 2016, A budgetary organization, Mastercard, found that, in United Kingdom, a normal individual conveyed under £5. By 2020, more than 66% of short proximity portable installments will be for things costing somewhere in the range of \$20 and \$100, which implies shoppers are getting progressively agreeable

making critical buys with their cell phone - not simply the incidental \$5 espresso.

Think about these measurements:

- In Denmark's neighboring Sweden, over 95% of exchanges are advanced.
- In 2016, India pulled 86% of existing money from flow so as to demonetize the nation's shadow economy and extend portable banking.

- Vietnam declared a striking activity to turn into a 90% cashless retail economy by 2020.

The cashless economy is politically confused, especially in creating economies. Be that as it may, from the viewpoint of business and innovation, it's unmistakably progressively proficient and profitable.

The Journey to go Cashless

In today's scenario, around 85% of all retail installment exchanges finishes with money, which likens to 60% of retail exchange esteem. Despite the fact that a significant part of the total populace approaches a wide range of choices for making installments other than money, money despite everything perseveres. Money sets aside effort to get is more hazardous to convey, money costs economy as much as 1.6% of overall gross domestic product.

Electronic installments, then again, have been demonstrated to support monetary development, while progressing budgetary incorporation. It is therefore that nations around the globe are attempting to make their installment frameworks less reliant on money.

Digital exchanges are anticipated to develop at Compound growth rate 12.7% universally with developing markets developing at 22% from 2016-20. Asia has 25% offer in these non-money exchanges. Administration of Australian government with new installment stages, has made the fundamental flexibly weak push for Australia's installment enterprise, working together with the money related segment.

OBJECTIVE OF THE STUDY

This study will examine people attitude and perception towards the central government and its schemes. This research will be focusing on demonstrating an overview of different policies and initiatives of Indian central government for promoting and improving digital infrastructure of the economy to make it a cashless economy.

It is also aimed to capture the scenario of how the world is moving towards the digitization and Digital payment systems.

- To analyze and demonstrate growth of cash less economy and Digitization in India during recent times.
- To analyze the overall impact on tax evasion due to the various regulations and policies of the central government during this time period.
- To analyze the penetration of various digital payment initiatives at grass root level.
- To analyze the perspective of the citizens of India towards the government initiatives using descriptive analysis

The studies will be restricted to check the adoption of digital payment modes and awareness and understanding of the digital India and various other programs during a time particular time period.

People response is a suspicious and intangible concept, and a possible transformation of a satisfied state can change from person to person and various schemes and reform initiatives.

LITERATURE REVIEW

Piyush Thukral, Assistant Professor, University of Delhi in his paper on “Cash LiteIndia: Boon or Bane?” focused on challenges and rewards of recent initiatives taken by the ruling government. As cash is primary medium of all the transactions in India, he mentioned several key factors that have impacted the current economic conditions in the country. The total number of cashless transactions increased exponentially after demonetization, but, with cash entering into the economy with time has decreased the numbers. He put light on noteworthy reception of PoS (Point-of-sale) terminal with considerable working expense ranging from Rs 3000-4000. A progressive move towards Cashless economy is recommended by him due to lack of financial literacy, unwillingness to adopt new modes of payment with steady endeavours to improve micro and macro policies implementation and acceptance.

Rajwinder Kaur have thrown light on modes of digital economy and various initiatives taken by the government to create cashless environment. Digital India Programme launched in 2015, UPI based payment system are some of the initiatives taken by the government. She highlighted some facts about NEFT or RTGS, AEPS (Aadhar Enabled payment system), USSD (Unstructured Supplementary Service Data), M-wallet, Mobilebanking, CTS (Cheque Truncation System) for the year 2015-16 and 2016-17. She also has studied the view of people regarding cashless economy and focused on progressive move towards digitalisation in a cash based economy.

Bharat Khurana also mentioned about the initiatives taken by the government mainly Digital India and how it could affect people and what challenges could government face while implementing the programme. He used secondary data sources to put light on Digital Locker system, Kisan Rupay Card, POS devices distribution, e-railway tickets, android apps, wifi hotspots, broadband highways etc.

Emphasizing on banking importance in a country like India and financial inclusion of Bottom of the pyramid, **Prof Khan N, Ansari S.** explains how banking sector is experiencing an IT revolution. Their study found that there is continuous increase in internet users as a proportion of

total increasing population during their study period due to which statistics have increased number of e-banking delivery channels such as ATMs, POS, Cards, NEFT, RTGS etc. Also, post demonetisation according to them, UPI and USSD was only two payments system that witnessed growth in usage between Nov 2016 and April 2017. They stressed upon security and privacy risk as well as trust and the marketing policies that need to be implemented effectively.

Kapil (2017) explored the results of “demonetisation in terms of rationale, the consequences, economic impact in the long as well as short run, and the fallout in social and political scenarios”.

Dhingra (2017) stated that “demonetisation is a powerful instrument of state policy that works like a powerful instrument and has to be used with utmost care and caution.”

Mr. Reddy in the next year of demonetization tried and grasp big picture of this scene and its way into these three major threads- analyze demonetization, discussion and explanation on the possible path that we can implement and “examination of new objective of digitalization.” Singh showed the grave danger of “black economy situation in India.”

DATA PRESENTATION AND ANALYSIS

Demonetisation

Demonetisation, since it was announced in November 2016 has been subject of uncommon media chat. Acceptably along these lines, since it has been various years since such a dangerous methodology test has been driven by the Govt. of India. Additionally, demonetization has no equals wherever else on the planet. At the focal point of this exceptional conversation is whether demonetization is a triumph or a mistake. Before we jump into that point, we should perceive what could have incited this decision. One of the fundamental reasons demonetization was accounted for is the tremendous number of organizations working at dark cash helped by the quantity of high-esteem notes (Rs 500 and Rs 1000) accessible for use in the Indian economy. As demonstrated by RBI, at the hour of demonetization, 15 trillion rupees incorporated these high-esteem notes were hovering in the Indian economy and a normal 33% of this 15 trillion rupees was streaming outside the proper bank economy benefitting. Such colossal proportion of dark money is a prompt delayed consequence of expense shirking, explicitly influencing the Government's pay.

Furthermore, it is responsible for speedy rising in asset costs be it land, gold, or various things as observed in India over the span of the latest decade or close.

Need for Demonetisation:

The maximum amount of money available for use as on 31st Mar, 2016 -16,420 billion rupees out of which currency of Rs.1,000 group represented 39 percent (Rs. 6,330billion) and Rs.500 represent 48.8 percent (Rs. 7,854 billion). The importance 500 rupee note had been expanding throughout the years, from 4.2 percent on 31st Mar, 1990 to 48 percent on 31st Mar, 2016. Essentially, the portion of Rs.1,000 note expanded from 1.6 percent in 2001 to 38.6 percent in 2016. The aggregate sum of five hundred and thousand rupees notes added up to Rs.14,080 billion as contrasted and India's Gross Domestic Product of 1,25,760 B out of 2015-2016 which is 12 percent of gross domestic product, expanding almost triple in 2002.

“The historical backdrop of Rs.1,000 note is fascinating. It was first presented in 1938 and afterward demonetised in January 1946. It was re-presented in 1954 and again demonetised in 1978 just to be re-presented in 2000. The Rs.500 note was presented in October 1987-88.”

Demonetisation before independence

During the year before independence, Indian currencies- Rs.1,000 and Rs.10,000 lost their significance.. Notes of higher denotation were not available to ordinary citizens around that time. Because of this, the cash boycott didn't have a lot of effect on the ordinary citizens and the Indian economy. However, it majorly affected the day to day activities of SBI as there were only 71 banks location around the time. The benefits of the bank additionally endured a failure and they were lesser when analyzed to that of earlier year. The securities exchange revitalized for two ceaseless years after the demonetization hovering effect monetary movement. Demonetisation of 1978

During the year of 1978, Indian govt.demonetised Rs.1000, Rs.5000 and Rs. 10,000 notes from the country. Like the situation in 2016, that step was kept private but then a statute was given to do the action. Be that as it may, that law contained enough precautions for transacting of former notes and obviously expressed the intensity of local government in covering the guidelines. There's political scenario with 1978 demonetisation because the then recently shaped Janta government needed to focus on a portion of the supposed degenerate components in the legal system. The effect of cash prohibition on average citizens was restricted as the demonetised notes framed just a little segment of the all out cash gracefully.

Demonetisation in BJP Government

The action of demonetisation was taken seriously by the PM of India in his Radio broadcast conversation where he referenced about finish of good season, need for solid precautions to protect India from the problems of fake notes and defilement. The administration, given the predefined arrangement of right to life, allowed transaction of old notes in government clinic for clinical treatment and purchasing medication with specialist's remedy, and making installments for milk and service bills. To guarantee comfort and opportunity of movement within the nation, acquisition of tickets for railways, transportation and air travel were allowed with old notes, and

cost for inter states was absolved. Thus, effortlessness period was there on buying of petroleum, diesel, and gas and LPG gas cylinders for home cooking. To guarantee agreeable worldwide travel, use/trade of old notes at universal air terminals was likewise allowed. Taking into account planting season, old notes were allowed to be utilized for acquisition of seeds. For general comfort installment of school charges just as arrangements for marriage capacities were additionally made. The Post Offices which have a fundamentally bigger nearness in provincial territories than business banks were additionally allowed to trade old notes. To address the rising issues, given that 86 percent of the cash was demonetised, 126 revisions were presented over the span of 51 days.

A Success or Failure

The best way to deal with evaluate the achievement of a movement or an event is by assessing the predefined focuses on that the Government was bound to set before executing that action or event. For this situation of demonetization, the, as it were, communicated destinations by the Govt. were

- Elimination of dark cash from the framework
- Curbing the phony notes course
- Attacking fear financing

On the last two purposes of phony notes and psychological warfare financing, we don't have satisfactory data yet to accomplish an end. On the Black money front, most recent data alluded to by RBI that a surprising 99 percent of the total demonetized money accessible for use has returned to the RBI/banks could be seen as dispute to explain that demonetization has fizzled. The other contention that has been alluded to communicate that demonetization is a failure and it has caused a drop in GDP development rates and has demolished the economy, especially the casual economy which makes up a lion's share level of Indian economy. The proportion of demonetized cash that has returned or rather the all out return of demonetized cash as a parameter isn't the right technique to condemn this present investigation's Success or disappointment. Since one has kept his demonetized money by and by into the bank doesn't change over that money into white neither does it infer that you have escaped charge assessment. Given that stores above Rs 2 lakh (including dubious little scope stores in zero equalization

accounts) signifying Rs 2.89 lakh crores are being examined by the annual duty office, it is more intelligent to keep an open viewpoint and envision a definitive outcome before condemning. Clearly, in the days to come in the event that it ends up being apparent that the organization has bombed in recognizing the dark money from the stores made and floundered in burdening those record stores and people behind, by then, it could be protected to express that demonetization is a failure in achieving its essential objective.

Digitization—The biggest beneficiary

Demonetization, whatever its first point, has realized one positive consequence—Digitization of Indian economy. Given that money, the basic and focal wellspring of money based exchanges was limited for the time being, people started adopting a gander at substitute strategies to settle on installments and complete agreements and understandings. That has provoked gathering of online installment strategies and flood in computerized installment frameworks the country over. One could see the volume of exchanges using check cards, Mastercards, e-wallets and POS terminals rise firmly. Also, the volume of exchanges through web based banking and NEFT saw brisk development. “To be sensible it isn't really the situation that digitization itself has started post demonetization. The path towards digitization started a ton before with web entrance, telecom goliaths provoking no matter how you look at it availability of mobile phones, 3G openness, and the ascent of web based business organizations like flipkart, snapdeal and e-wallet associations like Paytm. All these provoked people getting to know online installment frameworks and online exchanges. It's basically that post demonetization the example towards digitization and cashless exchanges has through and through revived. For example— the dispatch of BHIM (Bharat Interface for Money), an android application by Govt. of India. As opposed to a wallet, this application empowers one to make direct bank to bank exchanges without stacking any money from an outside source and furthermore not at all like credit/charge cards, this application doesn't require any POS terminal/swiping machine to trade money. At present, this is approaching 20 million downloads and invasion level is about 36% in rustic areas and significantly higher in urban zones.”

Another instance of a versatile based online exchanges framework propelled by Govt. of India is Bharat QR, which is a QR code based substitute installment answer for dealer in neighborhoods

than customarily used credit or platinum cards. The ideal position being the finish of POS (point of sale) machines incurring lesser capital costs, no burglary of card data, and interoperability with all of the banks in the country.

Formalization of Indian Economy—The other beneficiary

One of the positive results of demonetization has been the formalization of the economy. India's economy, basically the labor market is to a great extent informal i.e. about 80%. For India, to clock a high GDP growth rate it needs to make protected and well-paying employment for a growing number of individuals who are as of now under the umbrella of an informal economy. In spite of the fact that the quantifiable growth is by all accounts truly little now, in the long haul, one could observe the beneficial outcomes of demonetization in changing India into more a formal economy. Think about this for instance. A little firm which was paying wages to its workers in cash was compelled to make payments their individual bank accounts, post demonetization, at least for a couple of months till cash made a rebound.

That would have brought a large number of individuals into the formal banking framework temporarily and would have made a way for creating a bank account for them and getting credit in bank accounts already there. Aadhar and the opening of bank accounts under Prime Minister Jan Dhan Yojana (PMJDY) program gave the fundamental framework to make such a financial inclusion for masses. In spite of various issues, the execution of the GST is a key complementary change that will support formalization, as firms have a solid motivation to register with GST to acquire input charge credits and to pick up from compliance rating of their sellers. However, significantly more should be done if Govt. is extremely genuine about making individuals adhere to the formal economy.

Impact on Agriculture

India's 236 million farmer's arrangements for the most part in real money and a huge number of them couldn't get enough money to purchase seeds and manures for their winter crops. Without a doubt, Even the National Seeds Corporation (NSC) neglected to about 1.38 lakh quintals of wheat seeds. Significantly after the focal government permitted the old cash notes for wheat seeds deal to improve the general condition, the aggregate deal remained low. In the midst of that time, Indian farmers were either selling kharif crops or planting Rabi crops. Demonetisation

ousted money from the market which is significant part of exchange both of these harvest development particularly in India. Administering of day by day wages to ranchers and laborers additionally got hard for the greater landowners. (Civildaily, Nov 2018)

The administration's decision to boycott Rs. 500 and Rs. 1,000 notes on November 8, 2016, to assault dark cash and fear mongering financing through phony notes has evoked blended reactions. Demonetization has influenced the everyday existences of millions, especially those in the casual area—laborers, little scope sellers, and ranchers—however its effect in the long haul yet to be seen.

For now, demonetization has incited the quick reception of e-wallets, and acknowledges and checks cards as installment mediums. Such computerized installments have supplanted money based exchanges at any rate in urban territories up to certain degree. Many market investigators, business analysts and socio-political specialists accept that the nation's way to digitization was changed and the chance to accomplish a cashless society has been produced.

E-commerce with digital economy

The path toward digitization in India started with the e-commerce start-ups, such as FlipKart, Jabong, Snapdeal etc. Initially, most of these e-retailers conducted the major proportion of their business through cash, but what they move towards cashless progressively and is continuing to do to familiarize people with the convenience of online channels and cash less transactions.

While there is no proof of e-retailers profiting after around 86 percent of the cash available for use by an incentive in India was pulled back, business everywhere balance tech organizations, prominently called e-wallet firms, have developed. As per media reports, remembering for the Economic Times, exchanges in e-wallet organizations had expanded by over 700% in the initial barely any days after demonetization.

Gradually, advanced exchanges are getting well known. In India, however in different nations too; in spite of the fact that, the pace of appropriation changes. In nations, for example, the US and Netherlands, an enormous extent of the exchanges are through computerized methods of

installment, while in others, for example, Italy, money holds its principal position. In India, numerous individuals in country regions and the casual part don't have financial balances. About 40% need access, as per various reports, notwithstanding the administration's endeavors to improve money related consideration. Indeed, even the individuals who have financial balances might not have simple access to a physical branch or may dither before utilizing a ledger due to an absence of nature and dread about utilization. Dread of legitimate procedures can likewise be the explanation now and again. Be that as it may, the web and the sharing economy can't be constrained in our nation or abroad. As web infiltration and availability increment, the digitization of the economy is a characteristic movement.

As indicated by a Google and The Boston Consulting Group report, Digital Payments 2020, the complete installments made through advanced installment instruments in India are probably going to be about US\$500 billion by 2020, which is multiple times the present level. The report likewise evaluates that non-money exchanges, which as of now comprise about 22% of all shopper installments, will overwhelm money exchanges by 2023.

Additionally, as the quantity of 3G and 4G web associations rises and the cost of cell phones diminishes, the quantity of web clients have expanded at a quick rate. A Deloitte and Associated Chambers of Commerce and Industry of India (ASSOCHAM) study conjectures that India will have 600 million web clients by 2020. In spite of the fact that, range accessibility in metro urban communities in India is little extent of what is accessible in urban areas in other created markets, web infiltration is probably going to increment later on. In India, the present government (2014-19) is focused on a computerized change of the economy and government. This push has prompted the ascent of another classification of balance tech specialist organizations, installment wallet organizations, and all the more as of late installment banks.

Indian insurance enterprises with Digitisation

The protection business in India is likewise confronting colossal rivalry as a result of carefully empowered change. With the utilization of keen, advanced items and administrations builds, clients' interest for fast, effective, bother free, and instinctive items and administrations are heightening. Effective Collaboration and networking between Insurance companies can help

them sustain in this business. In other words, a system of multiple stakeholder's will power the next spurt of growth in the insurance industry, and the role of digital payments in facilitating the growth of such ecosystems is vital. Now, consumers have started comparing the policies of different players online and if they will not network and collaborate with each in coming years, competition might increase resulting in entry of new players in the industry.

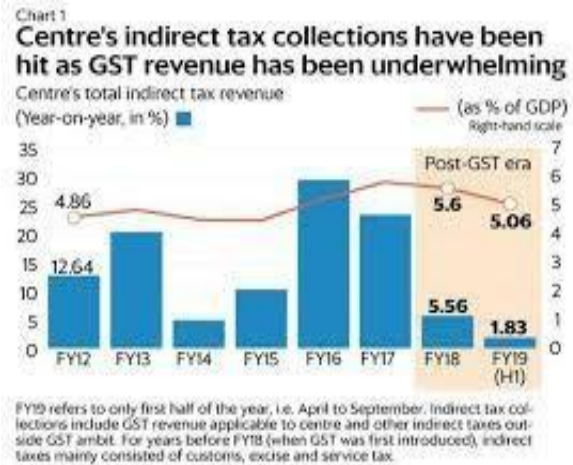
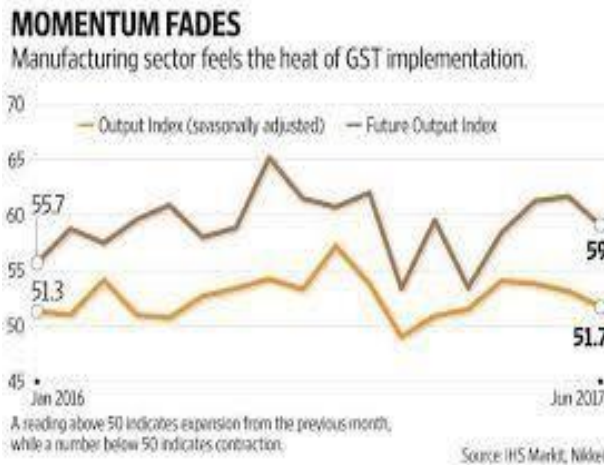
GOODS AND SERVICES TAX

The Goods and Services Tax (GST), actualized on July 1,2017, is viewed as a significant tax assessment change till date executed in India since freedom in 1947. GST was wanted to be actualized in April 2010, yet was deferred because of policy centered issues and clashing enthusiasm of partners. The essential goal behind advancement of GST is to subsume a wide range of backhanded duties in India like Central Excise Tax, VAT/Sales Tax, Service charge, and so on and actualize one tax collection framework in India. The GST based tax collection framework acquires more straightforwardness tax collection framework and builds GDP rate from 1% to 2% and decreases charge robbery and debasement in nation. The paper featured the foundation of the tax assessment framework, the GDP idea alongside critical working, examination of Indian GST assessment framework rates with other world economies, and furthermore introduced inside and out inclusion in regards to favorable circumstances to different segments of the Indian economy subsequent to showering GST and plot a few difficulties of GST execution.

The Council of GST, an authoritative body comprising of delegates of central government and government of different states, has met on a few events and taken significant choices identifying with charge rate structure, exceptions, rules, sythesis plot and so on. Over time, the body has suggested a decrease in duty paces of different merchandise and ventures. Likewise considering the different issues looked in terms of professional career and industry and trying to disentangle the new expense system and simplicity consistence. GST had been seen as a tax system of higher efficiency, with normal applications and snappy in distribution. The advantages are-

- Increasing tax base, necessary for lessening of tax rates and eliminating classification disputes

- Eliminating multiplicity in taxes and their cascading effects
- Rationalizing the tax system and simplifying compliance procedures
- Harmony between state and central tax administrations, which would reduce duplication and compliance costs
- Automation of compliance procedures to reduce errors and increase efficiency



MORE PEOPLE FILING TAX RETURNS

No. of income tax returns filed

FY17	FY18
5.43 cr	6.84 cr

Rationalization of Tax Rate

There are upwards of six sections, barring absolved products. Despite the fact that most merchandise fall in the 12%, 18% and 28% sections, there is a case for combining chunks to diminish multifaceted nature and order questions. The 12% and 18% section could be converged into one single piece in the 14-16% territory.

The Agency of Anti-profiteering

The organization, which was comprised for a time of two years, has been useful for around not many months and gave a couple of requests following examinations. The GST Council needs to conclude whether to wrap it up following two years or prop it up until the duty system develops as opposed to changing rates every now and again. GST has gotten positive just as negative reactions as befits its portrayal as a baby. Be that as it may, further advances will draw out the genuine feeling of One Nation One Tax.

Digital India

As the nation inches to the era of digitalization and paperless economy, the Govt. came up with new plans on 15th December, 2016 - "Lucky/Fortunate Grahak Yojana" and "Digi-DhanVyapar Yojana" to provide cash rewards to customers as well as sellers who uses computerized installment stages on singular exchanges for their own utilization. The prize prizes run was from Rs 10000 to Rs 1 crore with the transactions of Rs 50 to Rs 3000 allowed to keep up the emphasis on general public. The plans won't just give a lift to online installments, however would explicitly bring the lower class, lower white collar class and little scope organizations into the computerized installment overlay, and better methodology for eternity.

The most unfortunate will be equipped for remunerations by utilizing USSD, (the Unstructured Supplementary Service Data) System, accessible to mobiles. Individuals around provincial regions can take an interest with Aadhaar Enabled Payment System (AEPS). The proposition got operational with the main draw on 25th December, 2016 (as a Christmas present to the country) preparing to draw major attention on Babasaheb Ambedkar Jayanti on 14th April ,17.

The Grahak Yojana for Consumers gives a daily compensation of Rs 1001 to 15,001 fortunate clients during a tenure of 100 days with week by week prizes being Rs 1 lac, 10,000 and 5000 Rupees for clients who utilize the substitute methods of computerized Payments. Yojna will incorporate all types of exchanges like. BHIMUPI (Unified Payment Interface), USSD, AEPS and debit Cards, however avoid exchanges through Private Credit Cards and Digital Wallets. The Digi-DhanVyapar Yojana for Merchants gives Prizes for Merchants for every single online installment led and week by week rewards of Rs. 50,000, Rs 5,000 and Rs. 2,500.

“The Mega luckyDraw on 14th April – Ambedkar Jayanti. Rewards for customers worth Rs 25 lacs, 50 lacs and 1 crore for online exchanges between eighth November, 2016 and thirteenth April, 2017 to be declared on fourteenth April, 2017. For vendors as well, there will be three Mega Prizes worth Rs 50 lakhs, Rs 25 lakh, Rs 12 lakh for online exchanges from eighth November, 2016 to thirteenth April, 2017 to be announced on fourteenth April, 2017. The National Payment Corporation of India (NPCI), a not revenue driven organization, which has the command to direct India towards a cashless society, is the actualising office for the plans.” The

NPCI has been coordinated to check the specialized and security review of the plans to guarantee that the specialized honesty of the procedure is kept up. The Government will realize an expected use of Rs 340 crores for the plan (up to fourteenth April, 2017).

The Center has endorsed an enormous number of activities in February 2016 to empower advanced installments and a progress to trade lit economy out a key way. PM Narendra Damodardas Modi had featured these measures in his Man Ki Baat address in May 2016. Encouraging individuals to embrace computerized installments, he said "On the off chance that we learn and adjust to utilize cashless exchanges, at that point we won't require notes. Under-hand dealings will stop; the impact of dark cash will be diminished. So I claim to my compatriots, that we ought to in any event make a start. When we start, we will push forward without any difficulty. Twenty years prior who might have believed that such a large number of mobiles would be in our grasp. Gradually we developed a propensity and now we can't manage without those. Perhaps this cashless society expect a comparable structure. Be that as it may, the sooner this occurs, the better it will be.

At closure, the Govt. had propelled a significant drive for money related consideration by opening Jan-Dhanbank accounts, giving a legal reason for Aadhaar, usage of Direct Benefits Transfer, presentation of RuPay Cards and Voluntary Disclosure Scheme for money not accounted for, with the nation individuals. After the demonetization, there had been a spray in the online installments the nation over and both the size and measure of cash executed with advanced techniques saw seen complex increment since ninth November.

Be that as it may, as on date, about 95 percent of India's own utilization use exchanges are money based offering ascend to a huge casual economy, restricting the capacity of State to gather and raise charges. The day by day RuPay Cards exchanges in the nation have ascended starting 3.80 lacs on 8th November to 15 lacs on 7th December; the Electronic-Wallets exchanges have expanded from 18 lacs to 65 lacs and PoS (Point of Sale) exchanges from 50.2 lakh to 98.1 lakh.

Further, Govt of India reported on 8th December an appealing bundle to advance the utilization of Digital installments with different concessions like a discount of 0.75 percent of the deal cost to buyers, on the off chance that they pay online for petroleum or diesel. To improve the computerized installment foundation in country zones, the Central Government through NABARD chose to stretch out monetary help to qualified banking institutions for organization of two PoS gadgets each in one Lac towns with populace of under 10 thousand. ThePoS machines are planned to be sent at essential agreeable social orders, milk social orders and agrarian info vendors to energize horticulture based exchanges through online methods and serve around 75 crore populace.

No administration duty should be charged on computerized exchange charges for exchanges upto Rs.2000 per exchange. Railroad with its sub urban railroad arrange will give motivator by method for markdown up to 0.5% to clients for month to month or occasional tickets from 1st January , 2017, if installment is done through advanced methods. Govt has postponed administration charge charged while making installments through Mastercard, check card, charge card or some other installment card; compelling the waiver to installments up to Rs. 2,000 of every a solitary exchange

On 6th December, the Govt, as a major aspect of the arrangement to extend the advanced installments eco-framework and encourage the move towards cashless exchanges, concluded that an extra 10 lac new PoS terminals ought to be introduced by 31st March 2017. The Ministry of Labor and Employment and States' Administration sorted out 2,73,019 camps to open 24.55 lakh ledgers for chaotic specialists.

Prescribing a medium term procedure to advance the development of computerized installments, the Committee on Digital Payments established by the Ministry of Finance on ninth December presented its Final Report to the Finance Minister and needed the advantages to cover the monetarily and socially prohibited gatherings.

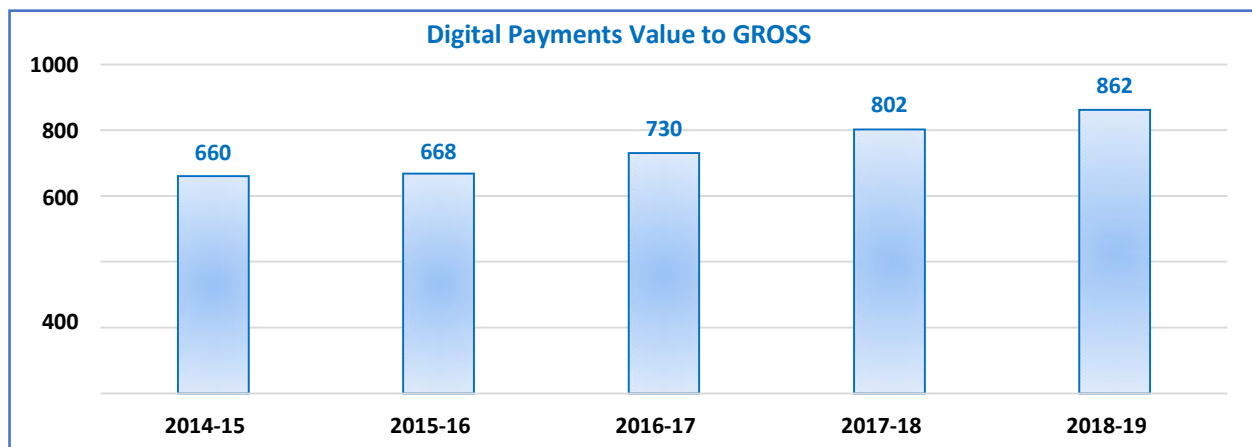
“Explaining the Government strategy before the Finance Ministry's Parliamentary Consultative Committee meet on fifteenth December, Finance Minister Arun Jaitley said that advanced exchanges were an equal system, not a substitute, for money exchanges and cashless economy was really a money light economy, as no economy could be completely cashless. The Finance Minister said that the Government was attempting to energize digitization however much as could be expected on the grounds that an over the top money economy had its own social and financial expenses and outcomes. The Government impetuses to individuals had evoked a positive reaction to move to advanced method of installment. Digital safety efforts, he stated, were being taken by the banks under RBI watch. (Deepak Razdan, 2016)”

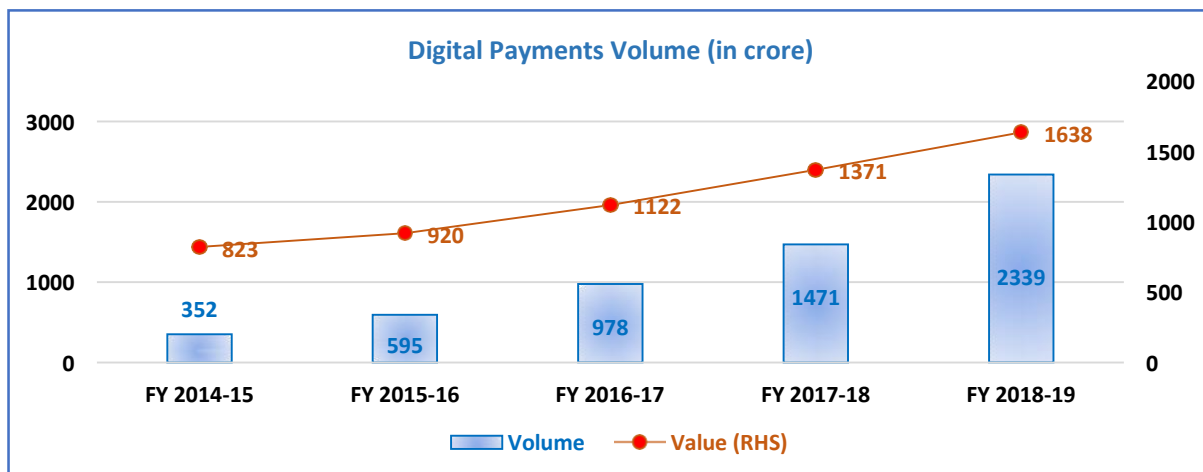
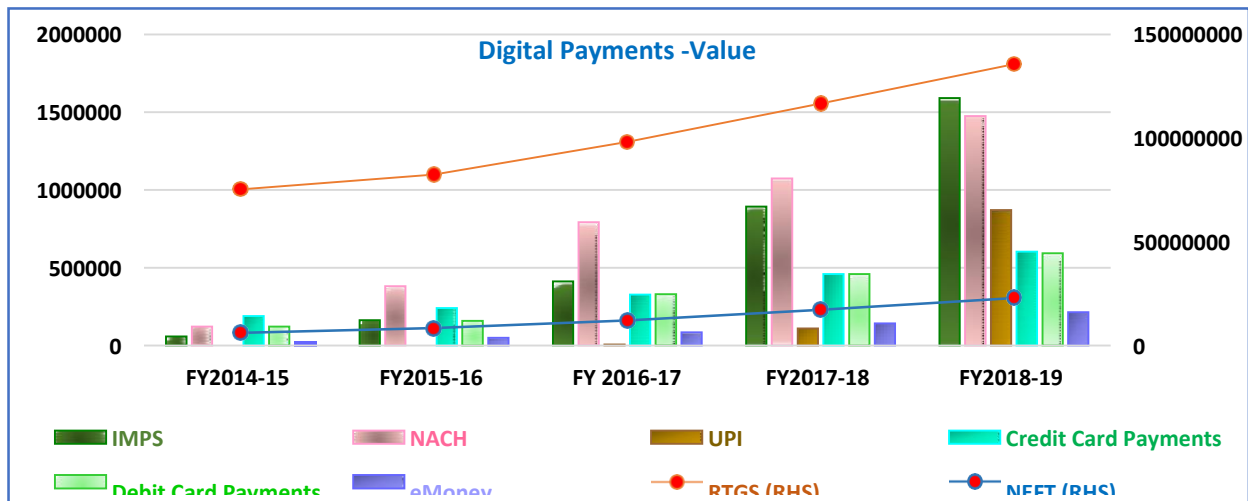
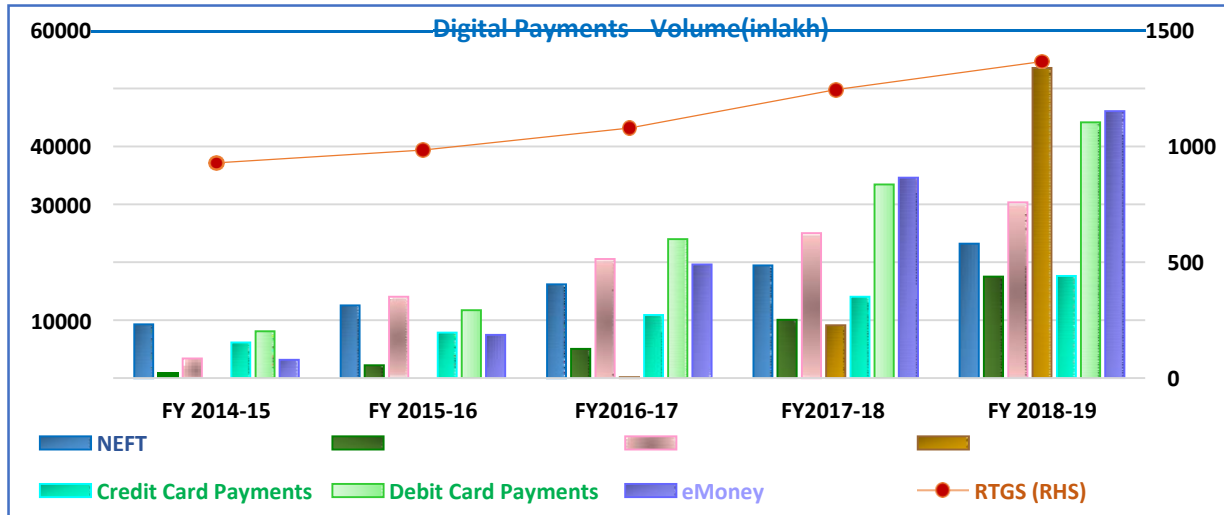
DATA ANALYSIS

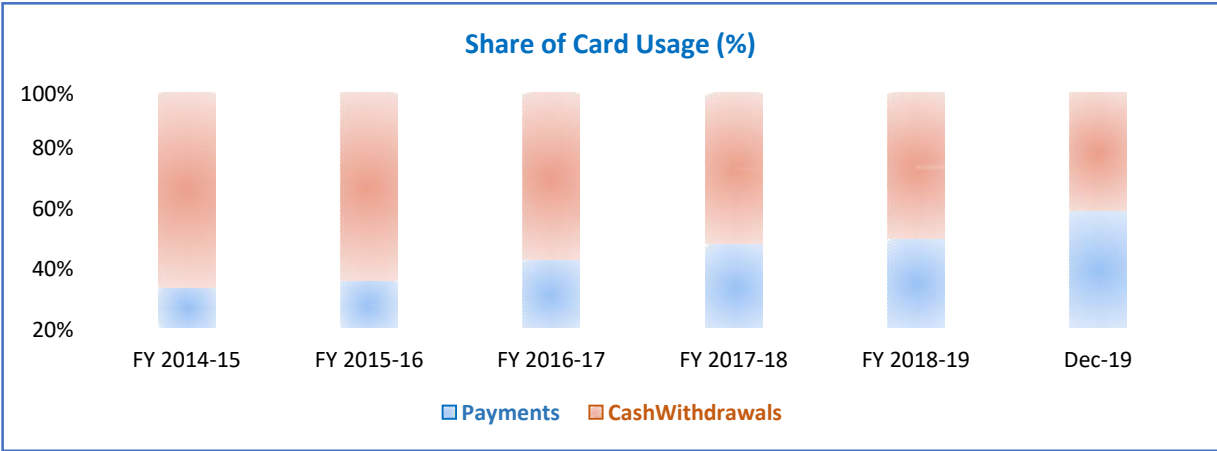
There had been an increment in close to home individual duty assortment (barring the protections exchanges charge) because of the measures attempted to check dark cash and empower charge formalization. Truth be told, its expansion from around 2 % of Gross Domestic Product during the year 2013-14 and 2015-16 to percentage of Gross Domestic Product in 2017-18 can be viewed as a memorable high.

“Demonetisation carried money to GDP proportion down to 9 percent from 12.4 percent. Truth be told, after a stale development for two successive quarters since demonetisation, the GVA has begun demonstrating improvement at 6.7 percent for the second from last quarter of money related year 2017-18. Improvements in the agribusiness area bear observing as the general planting was lower in both kharif and rabi, diminishing the interest for work. The real estate for kharif and rabi for 2017-18 is evaluated to have declined by 6.1 percent and 0.5 percent, respectively. Net fares despite everything keep on being a worry however. Remote trade saves have arrived at well above \$ 432 billion at end-December 2017. Request and Time stores have been expanding since demonetisation. Request stores especially arrived at an amazing peak at Rs. 12.94 trillion subsequent to backing out for a brief term have bounced back to a similar state during September 2017. The bounce in 2019 isn't inconsequential either.”

Examination of Digital Transactions-Value and Growth rates



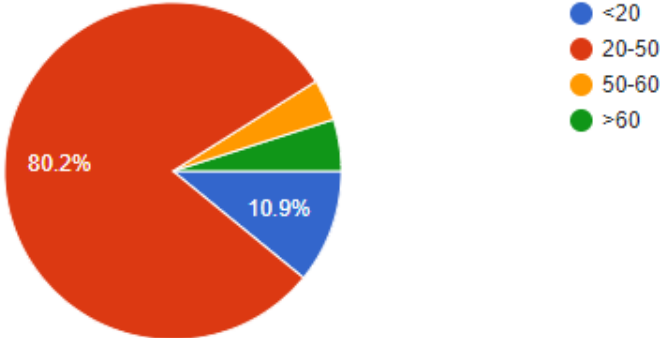




QUESTIONNAIRE AND ANALYSIS

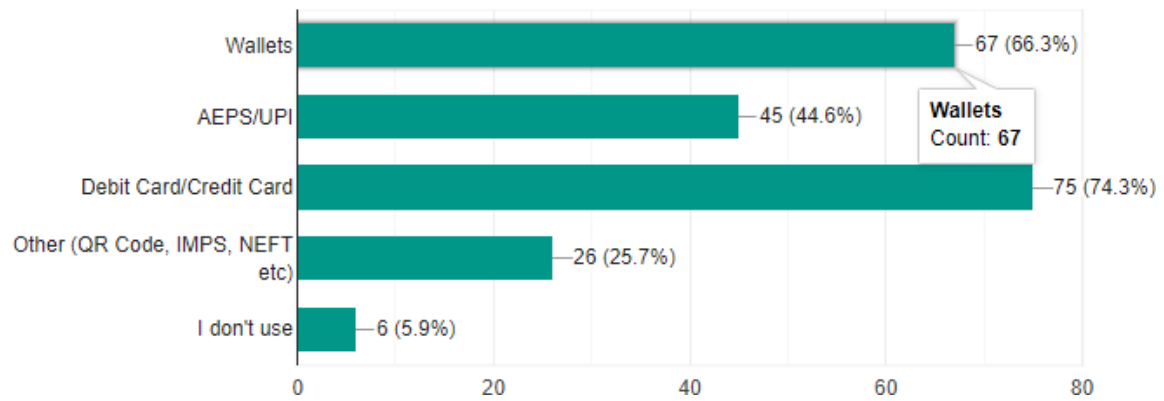
What is your Age?

101 responses



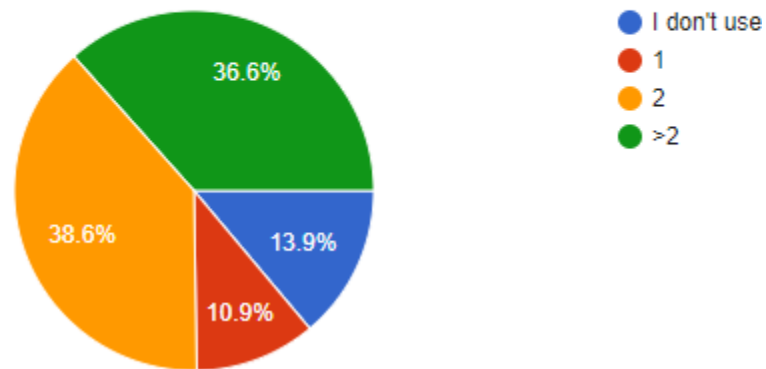
What platform you use for digital transactions?

101 responses



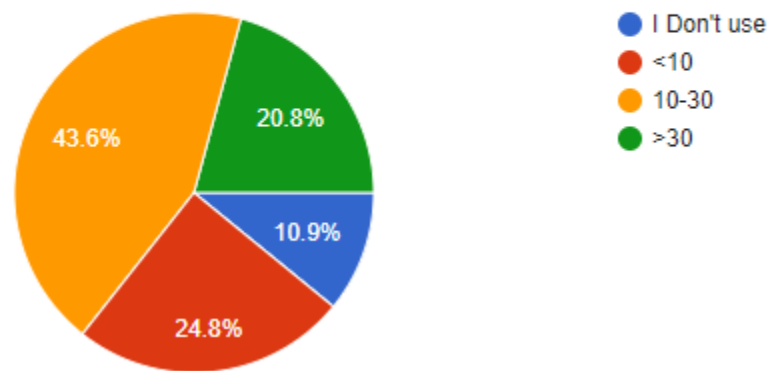
How many digital payment apps do you use?

101 responses



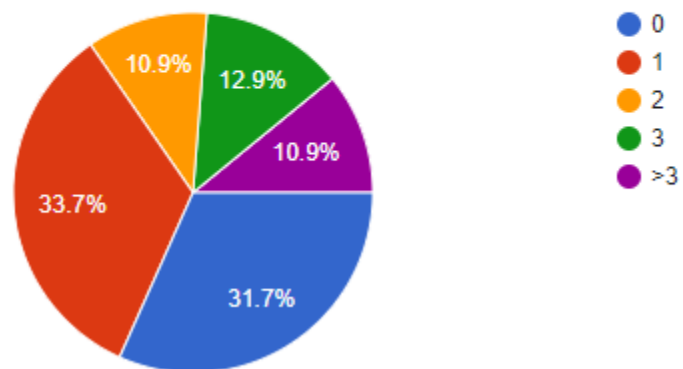
How many times do you use digital transactions in a month?

101 responses



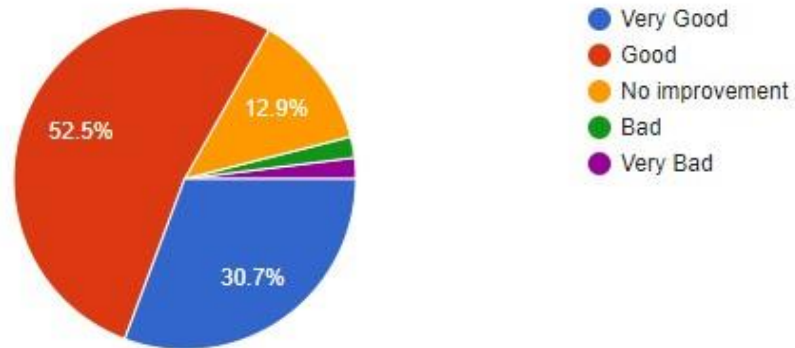
How many government apps have you installed in your phone?

101 responses



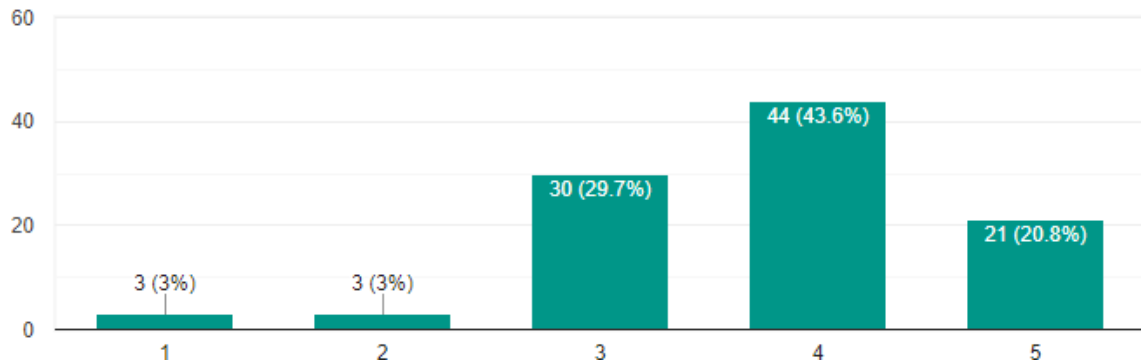
What do you think about digitisation of banking and other government services in last 5 years?

101 responses



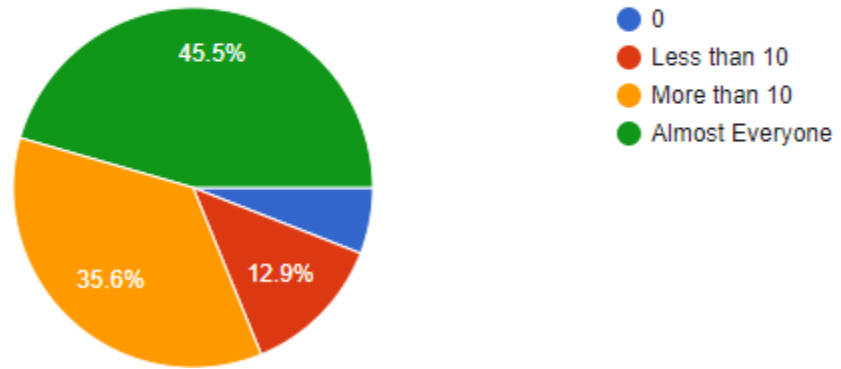
How much do you rate overall initiatives taken by the government to boost the digital infrastructure in the country?

101 responses



How many of your friends use digital payment apps?

101 responses



Frequency Analysis of Respondents satisfaction

Variable	Characteristic	Frequency	Percentage
Age	Less than 20	11	10.9
	20-50 yrs	81	80.2
	50-60 yrs	4	4
	60 yrs and above	5	5
Perception towards Government Initiatives	Very Good	31	30.7
	Good	21	52.7
	No improvement	13	12.9
	Bad	2	2
	Very Bad	2	2
Payment Mode	Wallets	67	66.3
	AEPS/UPI	45	44.6
	Plastic Cards	75	74.3
	Others	26	25.7
	Don't Use	6	5.9
Use of technology	Easy	75	74.3
	Tough	8	7.9
	Easy after Demo	15	14.9
	I don't Use	3	3

Characteristic/ Attribute	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Government has been able to improve the Digital Infrastructure in the country.	21	44	30	3	3

HYPOTHESIS TESTING

Let A: No. of govt. apps installed

B: Thoughts about the digitization in the last 5 years

C: Rating of the overall initiatives by the govt. to boost the digital infrastructure

Then,

H₀-C is independent of A and B

H₁-Otherwise

Finding correlation using SPSS comes out to be,

Correlations

	B	C
B		
Pearson		
Correlation	1	.468**
Sig. (2-tailed)		.000
N	87	87
C		
Pearson		
Correlation	.468**	1
Sig. (2-tailed)	.000	
N	87	87

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation between B and C is a positive correlation which shows 46% fluctuation in C a positive direction when B is changed by 1 Unit.

Correlations

		C	A
C	Pearson Correlation	1	.296**
	Sig. (2-tailed)		.005
	N	87	87
A	Pearson Correlation	.296**	1
	Sig. (2-tailed)	.005	
	N	87	87

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation between B and C is a positive correlation which shows ~30% fluctuation in C a positive direction when A is changed by 1 Unit. The above tests show that there is a significant correlation between the govt apps installations, thoughts about digitalization and the overall initiatives by the govt.

Regression Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.575	.578	.777

a. Predictors: (Constant), A, B

Value of R square comes out to be .525 which shows that it's a good model representation

ANOVA Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.575	.578	.777

a. Predictors: (Constant), A, B

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.793	.350		5.119	.000
	B	.434	.093	.436	4.659	.000
	A	.191	.075	.240	2.560	.012

a. Dependent Variable: C

Problems and Risks

With digitization and the development of a cloud based system where companies do not have control over servers and outsourcing the cloud services, it will make all players more vulnerable to data loss and theft. The increase in the use of virtual networks and intranets, and “aggregation” of cyber risk due to concentration of virtual supply chains will make cyber risk and security important enterprise-level risks that will need to be addressed.

Due to interconnected digital data chains, business processes could face interruption in digital functioning.

Cyber security is also a major concern. With digitization and the development of a cloud based system where companies do not have control over servers and outsourcing the cloud services, it will make all players more vulnerable to data loss and theft. The increase in the use of virtual networks and intranets, and “aggregation” of cyber risk due to concentration of virtual supply chains will make cyber risk and security important enterprise-level risks that will need to be addressed.

Due to interconnected digital data chains, business processes could face interruption in digital functioning. There is also the risk of interconnectivity problems that might arise due multiple networks operating within same digital field. The mobile wallet companies’ and payment banks’ are totally dependent on technology, online connectivity, and requirement for high volume of digital transactions to offset the low margin per transaction will make them more prone to the cyber-attack. From our observations, these companies are becoming increasingly concerned about such cyber frauds and started adopting measures to control them.

The sophisticated data, operational risk inherent in interconnected supply chains, and cross border partnerships will likely to drive red ocean insurance coverage requirements for participating companies. In 2016, the loopholes of different organization were exposed by a number of cyber-attacks and hacking incidents in India. These enterprise-wide risks are important, given that the 154-crore Indian e-wallet market is likely to grow to Rs. 30,000 crore by the end of 2022, according to a report by ASSOCHAM.

There is also the risk of interconnectivity problems that might arise due multiple networks operating within same digital field. The mobile wallet companies’ and payment banks’ are totally dependent on technology, online connectivity, and requirement for high volume of digital

transactions to offset the low margin per transaction will make them more prone to the cyber-attack.

From our observations, these companies are becoming increasingly concerned about such cyber frauds and started adopting measures to control them.

- Universal Financial Inclusion: 23% of PMJDY accounts lie empty and have been labelled as zero balance accounts.
- Consumer Behavior & Financial Literacy: Large scale literacy is required as common man finds this process of using digital payments to be a complex process.
- Poor Internet Connectivity: India still has a long way to go in efficiently linking bank accounts with mobile numbers

CONCLUSIONS AND RECOMMENDATIONS

Digitization and Formalization—What can be done to boost it

In spite of the fact that there has been a huge increase in digitization and formalization of the economy, government and public can clearly follow and adopt a couple of things to escalate the procedure of formalization further and to become a totally cashless economy later on. One such alterations has been made by the GST council which included increase in basic exemption limit for suppliers of goods from Rs 20 Lakhs to Rs 40 lakhs.

1. Incentives

Although the Government of India started some incentive scheme on BHIM app based transactions, transaction costs involved in online payment channels be it e-wallets, card payments or POS terminal based payments. It is acting as a major resistance to some of the small scale vendors and retailers.

Also there should be upper limit on cash transactions. It was fixed at Rs 2 lakh initially, which is Rs 40,000 at present in some cases. The Finance Act 2017, added a new section 269ST in the Income Tax Act. Section 269ST limited cash transactions to Rs.2 Lakhs per day.

2. BHIM App and Bharat QR

BHIM app and Bharat QR have great potential to forward the agenda of a cashless economy. This is achievable given that 99% of India's rural households now have at least one member with a bank account and with 90% having a feature smart phone and 40% having a smartphone. These being products of NPCI (National Payment Corporation of India) make use of UPI (Unified Payment Interface) to directly link the user's bank account and make the necessary digital payments quicker, simpler, and secure.

3. Network effect

Network effect, a phenomena which underscores that *“higher the utilization of an item the more valuable it progresses towards becoming”* plays an immense role in the adoption and success of technology based products. Right now, the market has too many service providers for wallets and for enabling payments through cell phones. Yet at the same time, users of 1 company wallets

cannot make transfer to other company wallets and similarly, cannot pay certain retailers/vendors. For a genuine network impact to happen, user should be able to make transactions across wallets of different companies. It should be the way forward and the network effect would lead to rapid adoption of digital payments.

4. Dispelling Fears through Insurance

With digitization, the stakeholders involved be it e-wallet companies, payment banks, technology and service organizations are more vulnerable to cyber-attacks bringing data and financial misfortune. So, a digital identity insurance system may incentivize users to have confidence in the digital payments services. Since demonetization and after endeavors efforts by RBI to re monetize the paper currency, cash has indeed made a comeback.

Right now, as mentioned before in this paper, cash still stays striking and sensitive to the economy. Both cash and online payments will continue to co-exist. For online payments to really take off we need to move from early adopters to a mass market segment consisting of majority users. It will lead to fast adoption of digitization by the masses and will result in complete formalization of the economy, profiting the country. But, it remains to be seen whether such a social change will indeed take place at such a large level.

“The accounting standards in the country are established by the chartered accountants and auditors. As is the practice in medical profession, those CAs/auditors and lawyers found in certifying accounts which camouflage correct picture and lead to generation of unaccounted money should be delicensed.”

Regarding ways to curb unaccounted money and encourage digital transaction following suggestions can also be considered:

- “Replacing higher denomination notes of Rs. 2000 and Rs.500 with Rs.100 and Rs. 50 in a phased manner. This would make storage and carrying of cash uncomfortable, thereby nudging people to adopt digital modes.”
- “To prevent people from withdrawing cash and encouraging them to prefer a digital transaction, government could consider levying a service charge on cash withdrawal.”
- “Making digital transactions through banking free for all”.

Similarly, one alternative is to have smart wallet which holds cash, and can be used for transactions without disclosing the name or account details of the buyer. It is an electronic version of gift coupons or vouchers that can be used electronically in the market place.