

# Remonetization and India's Journey to a Cashless Economy through Payments Banks

<sup>1</sup>Chabi Gupta, <sup>2</sup>Prof (Dr.) Kshama Agarwal

Department of Economic Administration and Financial Management  
University of Rajasthan

**Abstract:** Indian financial market is changing rapidly and emerging on the global platform. Converting 85 per cent of all cash transactions in India into digitally traceable ones was one of the Narendra Modi-led demonetization drive's goal. It is therefore hardly surprising that almost immediately after the demonetization drive, the number of e-wallet users and transactions done on the platform jumped three times. Although the number of digital transactions has fallen after Remonetization, the change in consumer behavior is discernible. The global digital push has been enabled by the development of recent technological innovations in finance such as UPI, e-signatures, e-KYC, and Aadhaar, which will become the bedrock of digital finance over the next two years. The objective of this research is to trace the move of demonetization towards Remonetization, introduction of GST and then the advent of cryptocurrency in relation to remonetization. The importance of payments banks and digital payment systems throughout all these economic moves is being highlighted in this research.

## 1. INTRODUCTION

Demonetization and GST, when introduced in November, 2016 and July, 2017 respectively, caused much disruption and inflicted great pain. Yet, as time unfolds, and the economy moves towards a digital payments system, we will be seeing more and more benefits emanating from these economic reforms. The boost provided by demonetization needs to be backed by other concrete measures to realize the full potential of the payments opportunity. Lending – which is how banks make money – needs to go digital. Unless the digital thrust leads to more lending, the opportunity will not be fully realized. Unconventional revenue streams include data monetisation, cross-selling of financial products, forming credit access platforms and creating alternate merchant payment models.

Demonetization has been a game changer and was a part of a bigger plan of the Government. The Indian economy has been resilient to the change as anticipated earlier and needs to move forward from demonetization which was used to oust black money. Majority of the people continue to support this endeavour of the Government. There is a deep conviction that India will emerge as a much stronger force after demonetization.

With this move of remonetisation, the government will be able to get the majority of unaccounted money in the system. The government can replenish the currency in the circulation and then can keep a better track of it. Unless and until the government takes extreme precautions, it will be very difficult to stop the generation of black money in the future. The best way to fight with black money is to move from a cash economy towards a cashless economy which will enable and empower the government to keep a track of all the transactions that take place in the economy.

## 2. RE-MONETIZATION MOVE AFTER DEMONETIZATION

Remonetization did not have a singular objective or target. The main objective was elimination of black money. Furthermore, being a wicked problem, there was no single or only way of achieving the objective of eliminating black money. In fact, the way to eliminate black money depends on one's idea of solving it and every policy-maker has an idea of eliminating black money and would have prescribed a way in consonance with the idea of addressing the problem of black money. Importantly, knowing beforehand all possible ways of implementing re-monetization was also not possible because re-monetization required a certain degree of confidentiality to be maintained.

The Government did not have the luxury of first designing a re-monetization policy and then implementing it. Policy-making and implementation had to work hand-in-hand. Moreover, all the information was not available beforehand to anticipate all the issues and effects likely to arise as a consequence of the steps taken for re-monetization. Additionally, the Government could not do smaller pilot experiments before firing the missile, as is possible in guided missiles. Trial and error had to be done at the time of implementation, that is, during the actual flight of the missile!

When solving mathematical equation, one knows when the problem is solved. In wicked problems, such as re-monetization there are no criteria to ensure that the or a solution has been found. One will have to say that some component of re-monetization is done – and this is a matter of political judgment – and another one has to be started. Re-monetization as conceived by government is part of a larger reform project having several interlinked aims and objectives, which are unfolding over a considerable period of time.

Most important, in wicked problems such as re-monetization, achievements cannot be judged as correct-incorrect or true-or-false as in the determination of a formula of a chemical compound. They cannot be verified by independent agencies based on some

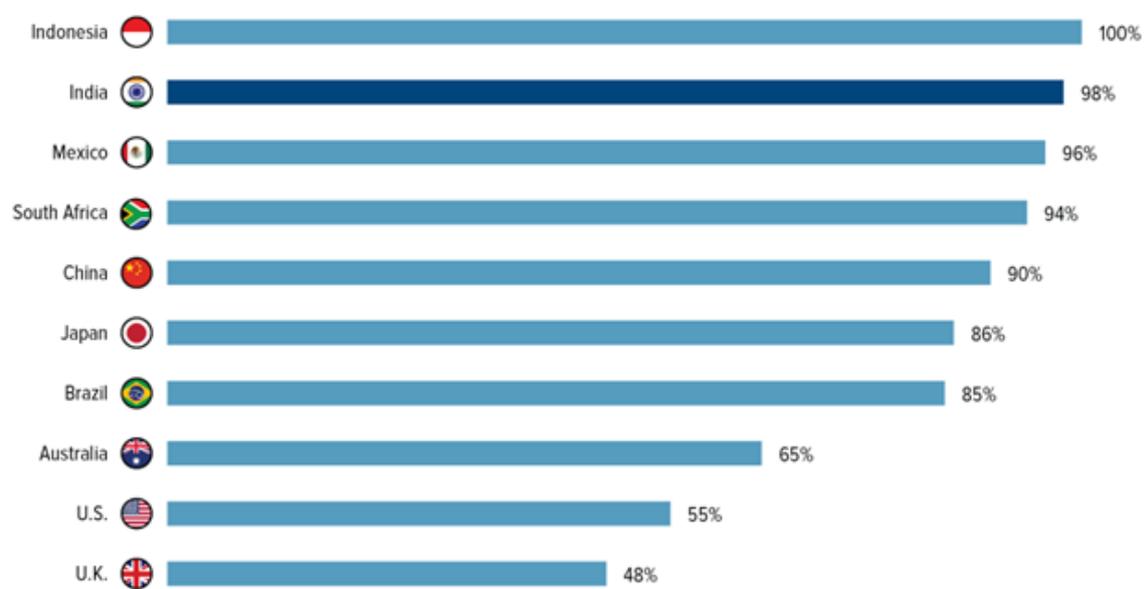
previously established criteria. All persons, groups and political parties are equally equipped, interested, and/or entitled to judge the achievements. Their judgments are likely to differ widely and be in accordance with their personal or group interests, their beliefs and their ideological orientations or experiences.

As a definitive step towards remonetisation the Reserve Bank of India has removed the limits on withdrawal of cash from savings bank account.

Launch of the unguided missile of re-monetization is generating waves of after-effects, some will continue over extended periods of time. Let us look at some of these effects. In two days Airtel payment bank had opened 10,000 accounts. Urban local bodies have reaped a bonanza in unpaid or advance tax and fees collections. Poor farmers in many Indian states have been paid their pending dues in cash by rice millers and other purchasers of agriculture produce. Private, unwritten contracts are often not honoured and there is hardly any speedy recourse for implementation. In informal conversations several people who had to receive contractual payments were paid old dues. Hawala has nearly disappeared from the Indian scene.

Re-monetization is so widely discussed because it took upon itself a string of legacy problems that were closely connected to each other and existing at multiple levels in the country. In the ultimate analysis, re-monetization is an anti-corruption instrument. The unearned money was largely kept in higher denominations of Rs. 500 and 1000. These have now entered into the formal settlement and payments system and this has increased policy options for the Government to pursue the development or the social welfare motive to increase incomes and generate employment.

Share of Cash in Volume of Consumer Transactions



Standard and Poor (S&P) had announced in December 2016 that as per its base case scenario, the disruption from demonetisation should be short-lived with demand revival in the next one to two quarters, limiting the impact on Indian banks and corporates.

This economic revival in the short term has happened. GDP in quarter ended June, 2017 had further declined to 5.7 per cent showing persistent declining trend over the last 5 successive quarters. Although, disruptive reforms usually take quite some time to reflect in GDP growth, it has turned around and risen to 6.3 per cent in the July-September quarter of 2017.

With the advent of unified payments interface (UPI) and apps like BHIM in recent months, it is unclear if the government wants to be a platform or a key player in the cashless ecosystem. As India moves towards a less-cash economy after the remonetising of high-value currency notes in November 2016, digital payments are estimated to grow 10 times. With demonetisation, digitisation got a much-needed fillip. There has been a surge in digital payments with an 80 per cent increase in value of transactions in 2017-18. The total of this is expected to touch Rs 1800 crore. This is as per TOI report dated 1/1/2018. The BHIM and UPI payment gateways are already averaging a daily transactional value of more than Rs 140 crore per day. Irrespective of the diversified business models, all will depend on payments banks using digital technology and agent networks to reduce overall costs, and offering diversified services to serve the wholesale and mass market. MicroSave has already calculated the type of savings that a full-fledged bank (even with legacy technology) might make at the aggregated level.

In order to optimise agent networks, payments banks will need to rethink the current, often unstable, models currently being used

in India. To date, as the 2015 agent network accelerator survey of The Helix Institute of Digital Finance highlighted, too many agents are both dedicated (financial services agency is their only business) and exclusive (they offer services on behalf of only one provider). Both of these considerably impede agent profitability. Payment banks seem set and determined to replicate and extend this working model, and establish agents trying to survive by offering financial services for one single provider alone. This risk adds to the fragmentation and duplication across pan India and further reduces the ability of agents to make enough money to continue in the business in the long run.

To create some long term real value for their customers, payments banks will need to move beyond traditional financial services. In addition to better understanding the needs, perceptions, aspirations and behavioural biases of their target clientele, payments banks will need to package and present their services in ways that well align with the mental expectations of the mass Indian market.

### **3. ESTABLISHED PUBLIC SECTOR PLAYER-LED PAYMENTS BANKS**

These include the Department of Post (DoP) and National Securities Depository Limited (NSDL).

Some of their strengths include their physical presence as in DoP has the largest physical network of access points—over 150,000 post offices across the country, on average one for every 8,000 people. Using this already established infrastructure creatively could result in significant increase in yields while avoiding unnecessary infrastructure duplication and costs. Another of their strength is the trust in government. Consumer surveys in banking repeatedly reveal a tendency of Indian nationals to trust government over private institutions even now after so many years of independence. Then another factor that cannot be ignored is the technology infrastructure. NSDL already has an established technology infrastructure and works through a network of close distribution partners. There is a complete supply chain operating in this area. DoP is accelerating its technology upgrade persistently to already existing post offices and has the full backing of the government in this venture.

There have been however few challenges for these established public-sector player-led payment banks, majorly being the perception of the investors and consumers to look at the post office as a service provider. DoP has struggled to establish itself as a service provider that is customer friendly and technologically savvy. Like many public-sector banks, the post offices will need to make major and long-term improvements in customer service to compete effectively. It also has a limited experience with actual customers. NSDL has so far been a back-end service provider with no direct customer operations. It will need to devise entirely new, effective and modern strategies for branding, outreach and providing basic financial services to establish a successful payments bank. DoP has always had a monopoly in many rural areas of the country for its services that have been provided consistently over a number of years in the past. Banking will be a much more competitive space for it to function in. Also, another big challenge it faces is the poor people's need for appropriate products, which means that they need a range of products just like anyone else to reflect their life needs. They also need disciplined systems that break down their accumulation of lump sums into small manageable amounts of savings. The products used to accumulate lump sums should ideally be differentiated and ear-marked for specific needs, in the same way that poor people often earmark specific income streams for specific uses to help with their mental accounting. For example: savings for a shop, to buy some land and for old age are very different in terms of the time horizons and instalment amounts.

### **4. DEMONETIZATION AND GST**

Keeping track of new normal, it is believed that the process of re-monetization is almost complete. The currency in circulation is stabilizing at a much lower level than before demonetization. But, lower currency in circulation is unlikely to disrupt existing economic activity. Digital payments are picking up steadily though it still remains at a nascent stage. With an eye on the expected formalization of the economy, there is a need to outline a few metrics to gauge the structural impact of demonetization and GST in the next few years. The introduction of the GST is significant in terms of growth effects, price effects, current account effects and the effect on the economic budget balance. Further, in a highly developed open economy with a high and growing service sector, a change in the tax mix from income to consumption-based taxes is likely to provide a fruitful and a long-term source of revenue. Moreover, some reduction has already occurred in the administrative component of the compliance cost of the GST as well as some increase in tax revenue from the informal sector of the economy.

Remonetization broadly complete with the currency in circulation is likely to stabilize at 10-10.5% of FY2018E GDP

**Table 1: Currency in Circulation: Extent of Remonetisation and Demonetisation, November 2016– April 2017**

Date	Small Denomination Old Notes	New Currency Issued	Coins	Total Valid Currency as per Our Calculations (A+B+C)	Currency in Circulation as per RBI (D)	Old High Denomination Notes Still in Circulation (E-D)	Amount Deposited in Banks as per RBI Reports (G)	Amount Returned to RBI as per Our Calculations (H)
	(A)	(B)	(C)	(A+B+C)	(D)	(E-D)	(G)	(H)
8 November 2016	2,301.50		235.10	17,977.00	17,977.00			
9 November 2016	2,301.50	0.00	235.10	2,536.60	17,977.00	15,440.50		0.00
18 November 2016	2,301.50	1,363.22	235.10	3,899.82	14,272.26	10,372.44	5,115.65	5,068.06
27 November 2016	2,301.50	2,505.65	241.80	5,048.95	11,502.88	6,453.93	8,110.33	8,986.57
7 December 2016	2,301.50	4,276.84	241.80	6,820.14	10,027.44	3,207.30	11,550.00	12,233.20
10 December 2016	2,301.50	4,610.00	241.80	7,153.30	9,786.10	2,632.80	12,440.00	12,807.70
19 December 2016	2,301.50	5,926.13	246.10	8,473.73	9,523.10	1,049.37		14,391.13
13 January 2017	2,301.50	6,780.00	246.10	9,327.60	9,508.03	180.43		15,260.07
20 January 2017					9,874.84			
27 January 2017					10,167.20			
3 February 2017					10,491.25			
10 February 2017					10,972.65			
17 February 2017					11,314.06			
24 February 2017					11,644.80			
3 March 2017					11,984.12			
10 March 2017					12,461.50			
17 March 2017					12,806.00			
24 March 2017					13,130.72			
31 March 2017					13,352.66			
7 April 2017					13,616.56			
14 April 2017					13,897.03			
21 April 2017					14,174.79			
28 April 2017					14,320.37			

Source: (1) RBI Database on Indian Economy. (2) RBI Press Releases (21 November, 28 November, 8 December, 21 December). (3) Rajya Sabha Question and Answers (for New Currency figure for 13 January and amount deposited for 10 December) (Unstarred Question-547, 7 February 2017). (4) Statement by Deputy Governor R Gandhi post-policy media interaction (for amount deposited till 7 December).

Currency in circulation on July 28 was Rs15.4 tn and is showing signs of stabilizing at this level. From here, it is believed that incremental currency in circulation will be a function of the country's seasonal demand. Also it is noted that currency in circulation or the GDP has fallen to 9.2% from 11.9% before demonetization and expect it to hover around 10 to 10.5% by March 2018. It is therefore to expect much disruption in economic activity from lower currency in circulation given that a part of it would have been "idle" cash before the note ban. However, challenges of demonetization and GST will persist for a few more quarters for traditional cash-intensive businesses including jewellery, textiles and leather products in the informal segment, and real estate.

##### 5. GST AND DEMONETIZATION: STEADY FORMALIZATION OF THE INDIAN ECONOMY

One of the most important fallouts of the GST move and demonetization will be the formalization of the economy. The larger impact where it is required to focus are (1) changes to business models with firms increasingly becoming tax compliant and their focus on greater efficiency, and (2) unorganized sectors becoming organized. It is also required to measure any negative fallout on employment as the economy formalizes. It will therefore be necessary to gauge the impact of demonetization and GST over the next few years using the key metrics as tax filers and revenues, digital payments, financial savings and MSME credit.

As represented through collected hard data, the most direct impact of demonetization and GST should be seen through:

- (1) increase in tax revenues for central and state governments and the number of tax filers (due to higher compliance and formalization),
  - (2) greater use of digital payments i.e promotion of cashless transactions and financial inclusion,
  - (3) larger share of financial savings i.e curb on unaccounted cash and financial inclusion, and
  - (4) increase in bank credit, especially in the MSME sector i.e formalization and economies of scale.
- Tax revenue and tax filers: Income tax collections should increase substantially over the next two to three years from higher compliance and greater data availability to the government post-demonetization. As of March 2017, 53 mn registered users have e-filed income tax out of 62.1 mn total registered users. Around 81% of the filers were in Rs0-0.5 mn income bracket. As of June 2017, there are around 64 mn income tax registrations (individuals, HUFs, company, etc.) for e-filing of tax. We would watch for the (1) pace of increase in the number of filers, (2) shift in the number of tax payers in the income brackets to gauge the impact of demonetization.

Through the GST move, consolidated government's indirect tax revenues should definitely increase as compliance improves and unorganized segment shifts towards the organized. These should also imply that the number of tax filers, both of direct and indirect taxes, should increase substantially from existing levels. Based on anecdotal evidence, there has been an increase in transactions with invoices and levying of GST especially in retail trade. The government is expected to disclose the datasets in such a way that the benefits of the recent tax reforms are visible to the general public clearly without any ambiguity.

- **Digital payments.** With currency in circulation stabilizing at much lower levels than before the move of demonetization, digital payments should considerably increase over the next few years. India is still in the early stages of becoming a non-cash economy from a cash one. But the highlighted pace of adoption of digital payments recently is definitely very encouraging. As part of the enablers in terms of infrastructure, it has been highlighted in reports dated February 20, 2017 (Less-cash economy: Blip and a long haul) that mobile and internet penetration will be key requirements for it. As of March 31, 2017, there were 422.2 mn broadband users with internet penetration at 32.9%.
- **Financial savings.** Many economic reports have been highlighting higher financial savings as one of the dominant objectives for India over the next five to ten years. Post demonetization, there has been a reduction in idle cash amounts and unaccounted incomes. A large portion of the cash has moved to formal banking channels in the form of deposits from the informal channels. Further, it has been observed that since November 2016, flows (SIPs, etc.) to domestic mutual funds has been higher compared to previous months. It can be expected therefore that with a relatively young population of India, increasing financial inclusion and literacy, positive real interest rates, the stage is set for a steady and persistent uptrend in financial savings which will be long term.
- **MSME credit.** One of the greatest impacts of formalization will be greater use of banks for MSME credit. This has typically been self-funded or more or less dependent on informal lending channels. Based on the Sixth Economic Census of Jan 2013-Apr 2014, 78% of MSMEs were self-financed and only 4% by financial institutions / money lenders / self-help groups. Data pertaining to MSME sector financing is definitely vague beyond banking sector data and some sporadic reports. Given the present mode of financing, formalization of the economy can provide a vast, in fact more than 10-15X current levels opportunity for credit disbursements through formal financing institutions to the segment.

The splash of 2017 may turn into a fight for survival for bitcoin this year in India.

## 6. CRYPTOCURRENCY AND REMONETIZATION

While the government withholds the usage of cash by wielding its obvious authority, Indians are flocking toward bitcoin – the biggest digital currency of them all – in significant numbers. As an increasing trend, Google searches for ‘bitcoin’ and ‘buy bitcoin’ have never been higher. Neither has been peer-to-peer unregulated trading volumes of bitcoin, which has recently nearly doubled previous all-time highs. Within 10 days of the demonetization, demand for the cryptocurrency saw it being sold for a 20% premium.

Toward the end of November, the premium was soaring further, as the price to buy bitcoin reached \$985 while Indian bitcoin exchanges continue to push for economic adoption. As the country’s cryptocurrency exchanges deal with the manic rush, banks have become a stumbling block. Possibly taking cue from the uneasiness shared by the Reserve Bank of India and the Narendra Modi government, some of the lenders are no longer comfortable with virtual currencies. This has led to issues with deposits and withdrawals. The overall payment system has been affected.

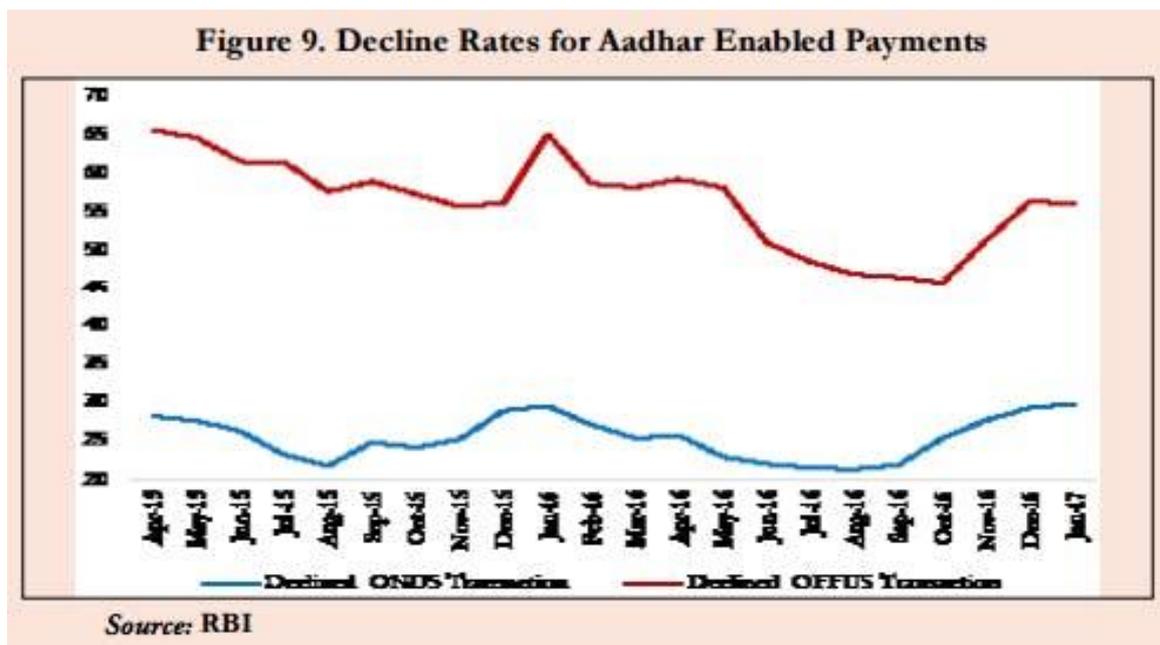
This is precisely the tussle that is playing out at Koinex, a cryptocurrency exchange, between its payment service provider and its bank where withdrawals have been delayed for over two weeks. The Indian government is following the same method used by China, where they haven’t explicitly banned bitcoin, but made the regulatory environment around it so difficult by limiting other factors that it is no longer a conducive environment for cryptocurrencies. Earlier, China accounted for 90% of bitcoin’s global trading volume; that has now slipped to 7%. Clearly, killing them softly with regulations has worked for good.

## 7. POSITIVE SPIN OFFS ARISING OUT OF DEMONETISATION

**A migration to Digital Payments:** This enabled transaction to go cashless leaving their footprints. Even small vendors are more and more adopting smart technology like Paytm, Jio Money, PayuMoney, etc and going cashless- and therefore cleaning up the economy from the bottom of the pyramid.

**Government participation in Digital space:** Government of India has launched the BHIM APP(Bharat Interface for Money) which gives the necessary fillip for digital payments (and also payment banks) and creating a level playing ground for all the players in the digital payments space by giving the necessary impetus for conversion to cash less economy. The aim has been long term development.

**Aadhar Enabled Payment System:** One of the major announcements in Budget 2017 announced by the Finance Minister is the Aadhar Enabled Payment System. This system will use biometrics for transactions. The Aadhaar Pay app lets consumers pay without any physical payment instrument. However recent figures show a decline in this system of payments.



**Make In India:** Government of India has removed all taxes on POS machines to push digital payments. Tax exemptions in basic customs duty, excise duty and special additional duty have been announced for the companies that manufacture POS machines with an intention to promote the concept of Make in India.

**Demonetization and Black Money:** In an unprecedented effort to clean up the parallel economy that has been created by black money- cash transactions above Rs 3 Lakhs have been banned from 1st of April 2017. The cash holdings for both individuals and companies is capped at Rs 15 Lakhs. This will ensure a paper trail for every high value transaction and prevent tax evasion long term.

**Increased debit and credit card transactions:** After the demonetization move there has been a multi fold increase observed in the usage of debit cards and credit cards. The banking system has also become proactive in installing subsequent POS machines.

**Digitization of documents -** There has been an increased transparency in property leasing and buying activities that has worked by creating an electronic trail and efficient storage of requisite documentation available for scrutiny anytime.

**E-Stamping:** A government funded computer application has been introduced for paying non-judicial stamp duty. The e-stamp certification is an alternate to the existing lengthy and tiring stamping procedure. E-stamp certificate, generated instantly from the application is tamper-proof, can be validated and also tracked.

After peaking in December 2016, digital transactions declined from January 2017 onwards, thus thwarting the objective of increasing digital payments through demonetization.

### Way Forward

In times to come digital payments will be the chosen and most preferred system of payments. Infrastructure needs to be geared up to meet such a huge influx of digital transactions in the country. The confidentiality and security of financial and related data is at stake. With careful planning, implementation and monitoring of digital transactions, Indian economy has the potential to become the largest digital economy, spearheading digital initiatives not just nationally but globally.

Ultimately, payments banks will want to encourage and facilitate the cashless vision articulated by the government of India and visible through its recent economic moves. As Paytm has already clearly articulated: cash costs! A digital, cash-lite India leveraging payments banks' technological capabilities offers increased efficiency, reduced corruption and a viable business model as the marginal costs per cash-free transaction is negligible. The market opportunity that India presents globally is huge. The remaining licensed payments banks are committed to launch. While there are considerable challenges, there is sufficient reason to believe that the remaining players are fully capable of finding innovative means to surmount them.

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