Jan Dhan 2.0

Introduction

The Hon'ble Prime Minister, Narendra Modi, announced the Pradhan Mantri Jan Dhan Yojana (PMJDY) on August 15, 2014. The scheme has been successful in bringing a large number of people to the banking system. Beyond the bank account, the scheme also expands access to credit and insurance services. The Prime Minister also introduced the JAM Trinity (Jan Dhan, Aadhaar, and Mobile) to integrate these three powerful pieces of Indian infrastructure in service of digital financial inclusion especially for transfer of benefits in a leakage-proof, well-targeted and cashless manner. The Direct Benefit Transfer scheme, which transfers money to individual bank accounts, has also started to show success. Aadhaar is now available with a large number of people, and they are beginning to see a direct transfer of benefits from the government to their bank accounts.

The Finance Minister, in his Budget Speech, spoke about the need to reduce the amount of cash that is flowing in the system. This cash comes with tremendous costs, and it is to the country's advantage to see that these flows are digitized. The benefits come in the form of reduced costs, increased documentation of transactions, and as a result, a better way to provide for financial inclusion.

In this document, we build on success of PMJDY and propose a way to leverage JAM to convert India into a cash-lite economy and extend PMJDY's gains in financial inclusion. Building a cash-lite economy will require a massive expansion in the number of merchants which accept digital payments.

We argue that the promise of real-time, low-cost credit is the optimal "hook" to incentivize merchants to adopt digital payments and we outline a pathway for achieving this objective.

Jan Dhan 1.0: Expanding Digital Financial Inclusion in India

Hon'ble Prime Minister, in his Independence Day address on 15 August, 2014, announced the 'Pradhan Mantri Jan-Dhan Yojana'. In its first phase, PMJDY sought to achieve several objectives:

- Universal access to basic banking facilities
- Basic Savings Bank Deposit Account (BSBDA) for savings and remittances
- Access to accident insurance coverage of Rs. 1 lakh
- Ability to digitize transactions through issuance of a RuPay debit card

PMJDY has been successful in achieving these objectives. As of May 27, 2015, PMJDY had achieved the following results:

- Accounts opened - 15.86 crore
- Rupay Card issued - 14.24 crore
- Balance in Accounts - Rs. 17,520.34 crore
- 46.40% of accounts with balances

With Pradhan Mantri Suraksha Bima Yojana (Accidental Death Insurance), Pradhan Mantri Jeevan Jyoti Bima Yojana (Life Insurance) and Atal Pension Yojana, access to insurance and pension services are now being delivered through PMJDY accounts, promising to expand the range of financial tools available to previously excluded Indian households. PMJDY has also created a digital payment connection between the Indian government and its citizens, creating a channel for the delivery of direct benefit transfers.

In sum, PMJDY 1.0 has successfully established a digital financial “pipe” connecting excluded households with India’s formal financial system. The task now is to build on the success of PMJDY 1.0 and convert India into a cash-lite economy.

Jan Dhan 2.0: Converting India into a Cash-Lite Economy

While PMJDY 1.0 has given millions of people a basic account and the ability to transact electronically, they still cannot exercise that ability to undertake electronic transactions, especially to make everyday purchases at corner stores. PMJDY has been a powerful tool to digitize government payments but it can also be the stepping stone to spur widespread electronic transactions in the country.

The importance and feasibility of migrating to cashless

There is strong link between cash-based transactions and the prevalence of "black" or "shadow" economy as a share of GDP. Physical paper currency is integral to the black economy. Towards this, we must embark on a strategy to get rid of all physical cash. There is precedent in India for dramatically reducing paper-based transactions. In 1996, NSDL launched an ambitious effort to dematerialise India's equity shares. Within 5 years, 100% of equity share trading was taking place in dematerialised form. In similar fashion, it is possible to rapidly shift to a cashless economy. There are tremendous moves towards cashless taking place internationally. E.g. Denmark is considering legislation to change the legal tender laws, allowing merchants the option of going completely cashless.

According to a recent World Bank study, India has the lowest use of account for payments among all BRIC countries. Just 15% of Indian adults report using an account to make or receive payments, compared to 40% for Brazil and China and over 50% for Russia and South Africa[1].

How then can India build on the success of PMJDY 1.0 to convert India into a cash-lite economy? Above all, this will require a dramatic expansion of shopkeepers, traders and small merchants which accept digital payments. Fortunately, the Indian government has several options to encourage merchants to accept electronic transactions.

- **Tax breaks and rebates:** Brazil, South Korea, and several other governments have provided tax breaks based on how much customers are making payments electronically and how much merchants are accepting payments electronically on an annual basis. While these measures are helpful, their impact in India may be limited for the simple fact that most Indian merchants and customers do not pay tax, and so may not be influenced by promises of tax breaks and rebates.

[1] The Global Findex Database 2014: Measuring Financial Inclusion around the World, World Bank

- **Digital transaction lotteries:** Brazil, Portugal, Slovakia, and Malta have tried to incent digital transactions by automatically enrolling people in a national lottery each time they conduct an electronic transaction above a minimum threshold. Lottery winners then received cash and other prizes including cars in nationally televised events. A recent European Union study assessed the impact of these lotteries and found that they marginally increased digital transaction activity and value added tax (VAT) revenues, but none triggered a widespread expansion in merchant acceptance points.[2]

- **Transaction limits and other disincentives**: France, Italy, Spain and other European countries have set limits on transactions that be done in cash and introduced fines if those limits are not honored[3]. In recent years, these countries have become more aggressive with limits with fines imposed on violators. Limits seem to work best in environments where there is a more widespread digital acceptance network and it easier for people to comply with the rules. That said, the impact of limits in India will grow over time as the number of digital acceptance points expands.

- **Credit for merchants and other links to the formal finance**: While incentives and disincentives interventions could be useful at the margin, they won't lead to a massive expansion in digital acceptance points. Instead, the key "hook" for merchants will be the promise of accessing real-time, low-cost credit lines ideally through their mobile phones.

[2] European Commission (2015): Improving VAT Compliance: Random Awards for VAT Compliance

[3] European Central Bank; European Consumer Centre France; "The Shadow Economy in Europe," AT Kearney 2013

Why credit is the optimal 'hook' for merchants to adopt digital payments

Today, shopkeepers in India borrow from informal moneylenders at extremely high rates in order to keep their inventories stocked and maintain liquidity. This is because banks know precious little about a cash-based shopkeeper's financial life. Banks don't know the shopkeeper's annual revenues or that he has diligently repaid his loans to the local moneylender, on time and in full.

There are three reasons why real-time and competitive formal credit offerings will be a key "hook" for merchants to accept digital payments:

(1) Merchants adopt digital payments more readily if offered credit

Experience in multiple countries in Latin America, Africa and South East Asia shows that merchants prefer additional benefits than the direct benefits of digital payments alone. Other benefits include better analytics on customers, inventory and supply chain management, reporting tools, and credit services. Credit stands out as having the biggest impact. China's Alibaba, for example, used small loans as a key incentive to sign-up merchants in its initial years. Chinese merchants were particularly interested in the credit incentive because (as in India) they were largely reliant on high-cost informal lenders to maintain liquidity[4].

CGAP has launched a global research effort to quantify the degree to which merchants adopt digital payments based on availability of credit. In Kenya, CGAP recently assessed a program which offered shopkeepers mobile-enabled loans. The loan amount was determined by a credit score based on digital transaction volume in the shop. CGAP found that shopkeepers who were offered loans increased their digital transaction volume by 30% in the three months before they could apply for their loan. In other words, the shopkeepers increased their digital transaction volumes in anticipation of receiving a larger loan[5]. No other indirect benefit appears to work as well as credit to increase adoption of digital payments.

[4] "Microfinance, E-commerce, Big Data and China; the Alibaba Story," CGAP 2013. http://www.cgap.org/blog/microfinance-e-commerce-big-data-and-china-alibaba-story

[5] Forthcoming CGAP study of Kopo Kopo's merchant payment solution in Kenya.

(2) There is a huge formal credit and formal finance gap in India.

Credit is more than a hook for digital payments. There is huge demand for formal credit and formal financial services in their own right. Lack of easy access to formal credit means merchants fall prey to illegal ponzi schemes, chit funds and exploitative money lenders. According to the World Bank Global Findex Survey, only 6% of Indian adults borrowed from a formal institution in 2014. While micro-small and medium enterprises (MSMEs) generate significant employment, only 4% of their funding needs are being met by formal credit and the vast majority remain unregistered, operating in the informal economy[6].

(3) Access to finance, especially credit, has positive impact on GDP

Closing the credit gap will bring people into the formal financial sector, but it will also have an impact on the broader economy. Several World Bank cross-country regression analyses show a positive correlation between broad measure of financial depth, including credit, and growth. At the firm level, there is strong evidence that access to credit spurs job creation and innovation.

[Team: The volunteer team has pulled together **this video** about the thela-wala use-case. Suggestions for improvement welcome.]

We expect that the small merchant, who received credit in digital form, is dependant on the digital transaction trail for credit, and is expected to pay back digitally will be a key player in convincing his customers (and hence the entire population) to start using digital payments.

[6] Economic Census 2014

What needs to happen.

We would like to emphasize that while we have some evidence of what has worked in other countries, the government must enable the private sector to figure out the right mix of user convenience and downstream benefits. This will give us user interfaces like writing an SMS or using WhatsApp, and business model innovation. This will require clear signaling from the government, and the removal of various frictions. In this context, we recall the governor of the RBI's remarks[7]:

> *"One of the difficulties the poor and small businesses have in accessing credit is the lack of information about them, both up front as they are being evaluated for credit, and after lending where the lender has to monitor them. If savings and payments products are sold widely, and information, including payments to mobile companies, utility companies, as well as the government, collected, then the excluded can build information records that will help them access credit. If, in addition, negative information on defaults is shared in a fair and responsible way through the financial network, every individual borrower will have something at stake -- their credit history – which can serve to encourage timely repayment. This, in turn, can improve the willingness of banks to lend."*

Achieving this vision will require several steps:

1. **Prime Objective:** The government must initiate a project to achieve one tangible objective: create a payments history for all merchants who accept digital payments and ensure merchants can leverage their credit history to access instant, low-cost micro-credit through their mobile phones. This will require continuously talking to practitioners, understanding points of pain, and modifying relevant policies and regulations.

   To catalyze this merchant credit solution, the government must create a pilot project, with clear objectives and metrics, which will allow various market participants to build this system. In the process, ground rules will be established to allow the resident to access credit at competitive rates from any formal credit provider across the country.

[7] https://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=874

2. **Backbone:** NPCI already provides the switching for ATM transactions, and Aadhaar based DBT. With the Unified Payment Interface, they are building the next generation infrastructure for digital payments in India. This system will go live in the next few months. Since the majority of digital transactions will go through the NPCI, it is recommended that NPCI maintain a repository which can be used as the basis for establishing credit. Suitable guidelines need to be framed for this to be done in a manner which preserves privacy, while still providing for the necessary analysis.

3. **Enabling Small Value Transactions:** The largest deterrent to going cashless is the cost of conducting small value transactions. It is important that the government provide a 5 year window to cover the switching costs for all small value transactions (individual transactions below Rs 3,000, and an appropriate monthly limit per person).

4. **Significantly reduce the Merchant Discount Fee (MDR) / Interchange fees:** A key reason merchants don't accept digital payments is the high MDR (Merchant Discount Rates) they must pay their bank and payment processor. In order to offset this MDR fee, merchants often demand extra fees from customers who wish to pay digitally. Currently card issuing entities charge MDR in the range of 1% - 2.5% depending on merchant category. It will be quite difficult for small merchants to absorb this MDR. This will need to come down significantly so that, from a merchant's perspective, the cost of a digital payment is almost as cheap as a cash payment, ideally it should be lower. Since current physical cards already have a defined MDR/Interchange, the Government and RBI may want to create MDR guidelines specifically for mobile payments, and later use the mobile payments MDR to also push the card-based MDR to lower levels.

5. **Enabling merchant self-acquisition:** The current process of acquiring merchants for digital payment activities takes 4-6 weeks. It also adds to the MDR because merchants must pay both their acquiring bank and payment processor (e.g. VISA) for the "benefit" of being acquired and trained. To accelerate this process, Merchant Acquisition guidelines will need to be amended to include Aadhaar-based eKYC for merchants and create a simple process for "self-acquisition" rather than requiring that every merchant be recruited and trained by a bank or other acquirer. Merchant self-acquisition would require the merchant to complete four steps: i) Enroll through an eKYC module for Merchants; ii) Link his bank account so that the settlements are done into his chosen bank account. iii) Link his mobile phone / email IDs so that his reconciliation/settlements are sent to him for daily transactions; and iv) Digitally provide an undertaking that he will honor digital transactions.

6. **Creating merchant standards / Interoperability**: The best acceptance network will be that in which the merchant accepts transactions seamlessly from all customers, irrespective of who is the issuer. This can only be possible if there are merchant payment standards and interoperability between various issuers and acceptance networks. NPCI can play a big role here by ensuring that merchant payments are interoperable, making life easy for the customer.

7. **Digitizing all government payments:** Despite the government's efforts to reduce cash in circulation across Indian society, many government departments still send and receive payment in cash or check. The government must mandate the use of digital payment infrastructure for all transactions between individuals, the government, and its various arms - both incoming and outgoing. This includes salary payments to employees, payments to contractors and vendors, tax receipts, and fee payments. This will provide a tremendous boost to the digital payments system. We propose three "low hanging fruit" government interventions to boost government payment digitization:

    - All salary payments to government employees must be through Aadhaar linked bank accounts. For transferable employees, this helps them with bank account portability, and provides convenience during any move.
    - Incentivize digital payments: Currently, Oil Marketing Companies and IRCTC charge extra for the convenience of digital payments. These fees should be eliminated immediately.
    - For all other transactions, digitization can be done in a phased manner. In the first year, all transactions over Rs 10,000 must be digital. In the second year, this limit changes to Rs 5,000 and in the 3rd year, it goes down to Rs 1,000.

    100% government payment digitization won't just improve transparency and efficiency. It will also ensure that any entity which wants to deal with the government must get ready to participate in the digital economy.

8. **Expanded Access Points for Banking:** Banks are the holders of digital money, and they have already deployed a network of Business Correspondents to ensure that banking reaches the masses. These agents (Bank Mitr), along with the network of ATMs, provide the backbone for converting money between digital form, and cash. While the aim is to go cashless, it is important that in the short to medium term, these systems be strengthened to bring in the confidence in the digital ecosystem. The introduction of

Payment Banks, and Small Banks will only help in this process, and it is important that new blood be introduced in the banking system.

9. **BC Agent Compensation Revisited:** A key revenue stream for BC agents will be Direct Benefit Transfer (DBT) commissions. However, few Business Correspondents receive adequate commission from banks. Moreover, the current DBT commission rate of 1% in rural areas is far too low to cover costs.[8] We recommend that the government increase the DBT commission rate to 3% in rural areas and that the money to be paid to the BC agent be added to the subsidy amount itself. The resident can pay the agent if he needs to convert the digital money to cash. However, the extra money also serves as an incentive to continue to use the money in digital form.

10. **Increasing Authentication Strength:** These transactions will need to be based on strong authentication factors, including Aadhaar. We recommend that the government bring in an incentive, payable to the consumer, on the use of biometric Aadhaar authentication on personal devices for payment transactions. This subsidy will encourage device manufacturers to build Aadhaar authentication into personal devices.

11. **Aadhaar:** The system is based on Aadhaar. It is important the government provide the legal infrastructure, by passing the National Identification Authority of India bill, which is currently pending before the parliament.

[8] MicroSave (2015) "How a 1% DBT Commission Could Undermine PMJDY."

Conclusion

Jan Dhan 2.0 will support the government's efforts to combat corruption, strengthen public service delivery, and accelerate growth. It will also underscore the government's commitment to continuous improvement and innovation. In addition to the benefits to the economy, it will bring the following benefits to the government and financial institutions:

- The credit expansion among small merchants will trigger job growth and innovation among an important stakeholder in the economy.
- The rapid expansion of digital acceptance points will enable India to leapfrog to a cash-less economy, positioning India as a global model for how to rapidly reduce cash circulation.
- The expansion of digital payments will reduce the cost of on managing cash.
- Digital payments will reduce the losses due to counterfeit currency.
- The reduction in physical cash will result in a larger float for the banks.
- Over time, the Ministry of Finance will be better equipped to collect taxes and fines more cost effectively directly via electronic channels, which would improve revenue collection, and, with people on a digital platform, it will be lost easier to identify tax evaders. In fact, revenue collection could be directly integrated into the disbursals and broader functioning of the government, bringing overall efficiency
- The launch of Jan Dhan 2.0 will signal the government's commitment to building on the success of existing programs (e.g. PMJDY) rather than resting on its laurels.

The scheme is well aligned with the stated positions of the government and the RBI and well coordinated action will be required to accomplish this.

It is possible for us to dematerialize cash, and meet the clarion call of the Hon'ble Prime Minister to bring in financial inclusion through JAM (Jan Dhan, Aadhaar and Mobile), if we use credit as the hook to bring in the small trader community, and involve the private sector in the process.