India is a cash-based society and that comes at a cost: The government spends INR 21,000 crore per annum for currency operations and foregoes revenue through tax evasion, money laundering or counterfeiting of cash. Moreover, the cost of distributing cash means that rural government benefit recipients spend large parts of their days on reaching bank branches to collect their payments, and using the formal system for savings and payments becomes unviable. Specialized banks focusing on technology solutions to these distribution problems could be part of the answer to improve reach and efficiency in India's payment system.

- In India, 68% of transaction value is in cash as compared to 45% in South Africa, 11% in the UK1.
- In August 2015, 11 entities were given in-principle approval to become Payment Banks (PB), to be reviewed in 18 months.

The Opportunity

Enabling the JAM trilogy of Financial Inclusion: Jan Dhan for financial infrastructure, Aadhaar for information infrastructure, mobile technology for delivery infrastructure: this is the overarching frame that policy makers have fleshed out for financial inclusion in India. JAM needs an appropriate administrator and executor to work and PBs could provide the technical capability and know-how to play this role.

Making full inclusion commercially and personally viable: Compared to bank branches and BCs, mobile money agents (e.g. airtime vendors, shop owners) can have additional income streams other than classical banking operations, which are not commercially viable in low-income and remote settings. E-KYC, digital record keeping, and fully digital accounts further reduce costs. So could sharing KYC information and even sharing cash management arrangements, if consumer protection concerns can be accounted for. This could reduce marginal costs for additional customers enough to create a dense pay point network. In turn, cost for a formal transaction could then be low enough to incentivise use of e-transfers and formal savings accounts. The average cost of a formal transaction for a rural BPL person was nearly 90 rupees in 20142. PBs could radically alter this cost base using digital solutions.

Regulations on Payment Banks

- **Capital requirements:** INR 100 crore (INR 200-300 crore for full banks)
- **Shareholder structure:** Voting rights of shareholders maximum 10% in first five years, strong intervention from RBI
- **Deposits:** capped at INR 1 lakh per customer, 75% of customers' deposits need to be invested in government securities, rest kept with full banks
- No lending allowed, only bill payments and deposits and the issuing of debit cards.
- **Rural focus:** 25% of branches need to be in rural areas
- **Technology focus:** operations need to be “fully networked and technology driven from the start”

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1 http://www.pwc.in/assets/pdfs/publications/2015/disrupting-cash-accelerating-electronic-payments-in-india
2 Financial Inclusion Insights Survey 2014. Accounting for opportunity costs of time with the local minimum wage rate.
Eliminating leakages in government benefit transmission: Mobile extensions to Direct Benefit Transfer (DBT) could introduce further competition between cash-out points, reducing time effort of payments and mismanagement through agents. With an annual volume of ₹600,000 crore in government benefits payments (₹10,000 per family on average), even small efficiency improvements can lead to large costs savings. Based on the savings seen since 2015, when benefits from all centrally sponsored schemes were mandated to go directly into bank accounts, yearly savings of ₹20,000-₹25,000 cr could be realized if all benefits were paid as DBT.

**Consumer concerns about digital finance products (CGAP, 2015)**

1. Inability to transact due to network/service downtime
2. Insufficient agent liquidity or float, affecting ability to transact
3. User interfaces that many find complex and confusing
4. Poor customer recourse
5. Non-transparent fees and terms
6. Fraud that targets customers
7. Inadequate data protection

**What are the obstacles to reach these goals?**

**Lack of incentives to invest in networks might limit inclusion:**
India’s mobile rates are about half of Pakistan’s and other countries’ with established mobile payment system. The RBI-mandated interoperability of payment networks further reduces profits. From m-Pesa’s Kenya experience, even very dominant operators need to invest heavily in marketing and agent network to overcome network effects, mistrust of new technology and low connectivity in remote areas. While airtime agents are found in every village, they are not necessarily trained or able to handle large scale cash transfer in and out of villages.

**Literacy and numeracy in rural areas constrain usability of services:** There is almost one phone subscription for every Indian adult now (933m in Oct. 2015), yet literacy and numeracy to use phones for financial interaction is still a hurdle. Especially in rural areas, only 69% of overall population and 59% of women can read, who are also the least likely to own a phone and have a bank account in their name. Even with infrastructure in place to reach, these customers, they might therefore not demand financial services.

**What are the potential risks to be addressed?**

**Customer and data protection:** A fully digital customer management system makes data sharing easier, but can also proliferate abuse of data easier if not properly secured. Customer protection from malpractices takes a particularly important place in an operationally decentralized system that is meant to deal with clients with low literacy and financial awareness.

**Protecting the most vulnerable from lockout:** Recently, there has been backlash against DBT in case of some schemes, e.g. in Puducherry where, instead of receiving ration rice, cash into accounts is given. However, there is only one bank for every 28,000 people compared to a ration shop for every 4,500. Schemes involving elderly or disabled people are particularly prone to locking out a share of beneficiaries. M-Pesa’s experience also clearly shows that mobile money services are taken up by the middle class first.
<table>
<thead>
<tr>
<th>Payment Bank licensee</th>
<th>Type</th>
<th>Notes/Partners</th>
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<tbody>
<tr>
<td>Airtel M Commerce</td>
<td>Mobile Provider</td>
<td>19.9% stake by Kotak Mahindra</td>
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<tr>
<td>Vodafone m-pesa</td>
<td>Mobile Provider</td>
<td>Possibly partnering with YES bank</td>
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<tr>
<td>Aditya Birla Nuvo</td>
<td>Mobile Provider</td>
<td>49% share held by Idea Cellular</td>
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<tr>
<td>Dilip Shantilal Shanghvi (Sun Pharma)</td>
<td>Industry/Mobile Provider</td>
<td>Partner with Telenor and IDFC, 19% stake</td>
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<tr>
<td>Vijay Shekhar Sharma</td>
<td>Payment technology provider</td>
<td>Founder of Paytm</td>
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<td>Fino PayTech</td>
<td>Payment technology provider</td>
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<td>Cholamandalam Distribution</td>
<td>IT service provider</td>
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<tr>
<td>Tech Mahindra</td>
<td>IT service provider</td>
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<tr>
<td>Reliance Industries</td>
<td>Industry conglomerate</td>
<td>30% share held by SBI</td>
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<tr>
<td>National Securities Depository Ltd</td>
<td>Public entity</td>
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<tr>
<td>Department of Posts</td>
<td>Public entity</td>
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