Alternate revenue models for Payments Banks in India
Executive Summary

Background

India has traditionally been a cash-based economy with limited penetration of formal banking and financial services. Access to formal banking services such as domestic remittance, micro credit and micro insurance has been extremely limited, especially for the low-income groups in India, mainly because the banking sector considers these groups low priority considering the high costs of acquisition associated with them and small deposit and transaction amounts. As a result, either they are forced to approach unorganized service providers and avail these services at steep rates, or they are completely deprived of access to such services. Apart from individuals, micro businesses also face similar challenges in accessing credit through formal banking and financial services channels.

The Government and the Reserve Bank of India (RBI) have taken various measures to address the needs of financial inclusion and financial access in India – an important one being the conceptualization of Payments Banks. Payments Banks will be restricted in the types of services they are allowed to offer: they can accept deposits, facilitate remittances and bill payments, and provide basic banking services to individuals and small businesses, but cannot offer credit or lend. The RBI has recently given in-principle approval to multiple entities to set up Payments Banks in India.

Payments Banks are currently in an operationalization phase, where they are developing their operating models. Therefore, they need to address the challenges of the Indian payments landscape and adopt key learnings from global players. Payments Banks also need to look beyond just remittance-led services because there are already quite a few payments and remittance-led businesses catering largely to the migrant population, assisting them with domestic money transfer services. However, most of these remittances-led businesses have catered only to the very basic elements of the financial services maturity curve and as a result not benefited the financial system significantly. Payments Banks need to look beyond and offer services that help people graduate from financial access to financial usage.

Building the Payments Bank operating model

As new entrants in the banking space, Payments Banks need to incorporate important design principles that can help them achieve a low-cost structure and a lean operating model. These include:

- Ensuring instant documentation and onboarding process using Aadhaar
- Leveraging technology to achieve near zero marginal cost of transactions
- Adopting a digital/mobile-first approach
- Aiming for complete interoperability across all systems participating in a transaction
- Developing propositions, products, processes and solutions applicable across customer segments
- Automating decision-making based on pre-defined business rules and data analytics

The success of Payments Banks hinges on redefining the approach of traditional banks across all key components of the banking lifecycle – acquiring customers, simplifying onboarding, keeping customers actively transacting, assessing their financial needs and providing the appropriate solutions to integrate them with the mainstream economy.

Building a viable business case for Payments Banks

Considering the restriction on Payments Banks to lend, it is imperative for them to focus on adjacent revenue opportunities in the build-out phase itself. Payments Banks built on traditional banking and remittance-led models alone may not be able to create the long-term value envisaged by the regulator. Instead, Payments Banks can take a long-term view of building an ecosystem of customers and merchants where transactions within the ecosystem are effected at a near zero cost and cashing out is chargeable. This can create enough of an incentive for customers and merchants to transact on a cashless basis within the ecosystem.

A case in point for adjacent revenue opportunities for Payments Banks would be to explore expanding this ecosystem by partnering with e-commerce players and offering assisted services to the customers through their business correspondent network.

In this paper, multiple successful models have been evaluated across mobile financial services and within the Fintech space to identify the opportunities for India. As most Payments Banks are in the build-out phase at the moment, this is the time to think beyond the existing remittance-led and traditional banking models, and build an innovative strategy.
Identifying the revenue adjacencies

We have identified six paradigms around which Payments Banks can look at building alternate revenue streams:

1. **Micro savings:** While savings is core to banking, very few banks have taken an approach toward encouraging micro-savings, i.e., making acceptable savings amount to near zero. Low-value investment and goal-based savings products, which also provide a savings target, can inculcate a savings habit, which in turn is beneficial for Payments Banks and the financial system. Customers that save and invest regularly are more likely to remain active with banks.

2. **Creating large-scale access to credit:** Although Payments Banks are not allowed to lend, they can act as a platform for an alternate mode of credit assessment. Payments Banks could analyze and profile customers on the basis of the stability of transactions and outflows to arrive at an assessment of risk. Thus, they could enable lending agencies to identify financially excluded but qualified leads in a targeted manner with significantly lower costs of acquisition.

3. **Merchant acceptance:** A ubiquitous merchant acceptance infrastructure is essential for achieving the long-term objective of a cashless society in India. Thus, a merchant-acceptance model that would incentivize customers and merchants to accept cashless payments and enable Payments Banks to increase bank balances would be an effective achievement strategy.

4. **Marketplace for financial services:** Payments Banks could, with minimal effort, cross-sell financial services to their existing user base—through their business correspondent network and digital channels—to generate additional revenue streams.

5. **Data:** Upon reaching critical scale, Payments Banks will generate huge volumes of transaction data, which can be monetized to build an alternate stream of revenue.

6. **Payments as a platform:** A platform approach could be adopted by Payments Banks as an innovative means to provide API access to the developer community and other players to build apps and use-cases using the payments platform.

The way forward

As the ecosystem around Payments Banks develops, there are a few considerations on the way forward for both the regulator and the industry.

An important consideration for the RBI would be to frame simplified yet suitable regulations for the new generation of differentiated banks, at least in their initial years, so that they can operate on a lean cost structure while concentrating on their core banking activities. Payments Banks should be given sufficient freedom to experiment with innovative solutions to achieve the objectives for which they are being set up. They will have the benefit of being legacy-free and will be building new-generation technology platforms for banking and payments. They should have the freedom to manage basic accounts in innovative ways.

There are multiple stakeholders in the Payments Banks ecosystem—the Government, banks, regulators and supporting institutions such as payment bodies. There is a need for more discussion among the various stakeholders to create an enabling ecosystem for alternative and innovative models for Payments Banks. By viewing Payments Banks as a source of digital innovation in Indian banking and considering new ideas on products, services and processes, much progress could be made in accelerating financial access and usage for the previously unbanked population.
A background to Payments Banks in India

India has traditionally been a cash-based economy with limited penetration of formal banking and financial services. The financial sector in India is witnessing a transformation: new banks are coming up in the country and the dream of a fully banked society is now nearing reality. Currently the world’s 12th largest consumer market, India is set to experience tremendous growth in private consumption in the coming years.

The need for financial services among low-income groups in India is high, consisting of a variety of services such as domestic remittances, access to credit, receiving government welfare payments and utility payments. The willingness to pay for such services is also clear from the high dependency on money-lenders, whose charges far exceed those of banks. Additionally, other routes of payments services - transfer through informal networks of friends and relatives or couriers - are slow, expensive and risky. There is a clear need among low-income groups for the ability to transfer money securely and instantaneously at a low cost.

However, despite this need, the access to financial services for low-income groups remains limited. With high costs of acquisition and small deposit and transaction amounts, low-income groups have been low priority for the banking sector. Therefore, the limited presence of organized banking has led to fragmented financial service offerings to these groups, dominated by localized moneylenders or informal networks. Apart from individuals, micro-businesses in these groups also face similar challenges in accessing credit through formal banking and financial services.

**Cash to GDP ratio** 12%

Consumer Spending
2015 - INR83 trillion to grow to INR456 trillion by 2030

15% CAGR Private Consumption projection till 2019

India world’s 12th largest consumer market
MSMEs contribute nearly 8% of GDP, 45% of the manufacturing output and 40% of exports and yet largely rely upon high cost unorganized credit market due to limited access to the organized financial markets.
The target groups for Payments Banks are mainly India’s migrant laborers, low-income households and small businesses to whom savings accounts and remittance services can be offered at lower transaction costs. It is envisaged that Payments Banks will accelerate the penetration of financial services among the low-income customer segments by leveraging technology and building a large geographical footprint.

1.1 An inflection point for financial services in India

At present, the environment in India is very conducive to further financial inclusion in the country. The Government, regulators, banks and supporting institutions have come to a consensus on innovation that could significantly accelerate the drive toward achieving complete financial inclusion in the country.

Against this backdrop, the RBI has provided in-principle approval to multiple players to set up Payments Banks in India. These banks have been conceptualized to address the basic banking (bank accounts), remittance and payments requirements in the country and are expected to use technological innovations to reduce operational costs. At present, Payments Banks are at different stages of build-out. Strategy formulation and innovation brought into the financial services industry and the growth of the newly licensed Payments Banks will be important parameters to track. These two concepts, if realized could potentially introduce large sections of underbanked and under focused population to formal banking and payments services.

The success of the Payments Banks hinges on redefining the way traditional banks approach the key components of the banking lifecycle, including customer acquisition, on-boarding, keeping customers actively transacting, assessing their financial needs and providing the appropriate solutions and thereby assisting them to become a part of the mainstream economy.

Acquiring a critical mass of customers will be a key factor for the success of Payments Banks. These banks could save time and effort by leveraging established government initiatives, programs, and platforms to achieve the required economies of scale.

1.2 Enabler for broadening reach of financial services in India

Payments and remittances have traditionally been a part of the service offering of banks and post offices. Over the last five to seven years, non-bank players such as telecom companies (through mobile money services), business correspondents (BCs,) – entities that assist banks in providing basic banking services in rural areas – and prepaid payment instrument issuers (PPIs) have made significant contributions toward making domestic remittances widespread in India. In a country where significant migration of workforce occurs from rural areas to industrial centers and large cities, domestic remittance corridors have emerged between these employment hubs to the hinterland. While the emergence of non-bank players has helped in making domestic remittance accessible for many within the country’s migrant workforce, the impact on the extended financial system has been limited.

Since most remittance-led businesses have been built to cater to the entry step on the financial evolution ladder, the larger benefit to the system has not been realized yet. Remittance services are provided to individuals at a high cost and the relationship with the customer is very transactional. Although these models have scaled up substantially in terms of reach and transaction volumes, the customer relationship has been limited to only remittance transactions.
Indians have traditionally had a preference for using cash to transact. The digitization of banking in its true sense is yet to happen in India. With a cash (in circulation) to GDP ratio of over 12% vis-a-vis 4% for Brazil, 5% for Mexico and 4% for South Africa, India's preference for cash stands out in comparison to other emerging economies.

Payments Banks have the opportunity to build their systems and processes in a digitally-focused manner that will help in achieving scale of access rapidly and easily through physical touch points located across the country.

As opposed to the traditional world of banking, where lending is a core revenue-generating service and helps banks keep the costs of basic banking services low, Payments Banks will need to develop multiple adjacent revenue streams to keep basic banking services at a low cost.

An aspirational target of achieving near zero cost of transaction will then enable Payments Banks to act as an integration layer that connects to an ecosystem, whether that of the parent telecom company or of a business group. In order to drive efficiency, technology and digitally enabled channels need to be at the core of the product and operations for Payments Banks, and the focus has to be on becoming a payments and information highway that allows anyone to transact anytime.

An example of an efficient technology-enabled integration layer would be of the peer-to-peer (P2P) lending models that have emerged and scaled up in the past few years. P2P lending platforms act as an online marketplace matching borrowers and lenders. They do not require physical branches and have no overheads costs associated with traditional banks. However, they exploit market inefficiency effectively and generate revenue by charging an origination fees to borrowers and an annual loan servicing fee to lenders. As a digital platform, P2P lenders are able to operate at a lower cost than traditional banks and pass on the savings to the borrowers in the form of lower rate of interest and to investors in the form of potentially better returns.

Although Payments Banks will necessarily have to build physical presence, which will drive up costs, they can adapt certain principles and processes from the likes of emerging players in the Fintech space for developing propositions for the urban and tech savvy customer base.

Large business groups with multiple businesses should look at the Payments Banks that they promote as a service layer more than a standalone profit center, and look at end-to-end benefits that can accrue to them as a business group. For instance, physical infrastructure could be leveraged as much as possible to keep costs low, distribution reach and customer touch points of multiple group companies could be leveraged to reduce the cost of customer acquisition, and bundled products and services could be explored. As Payments Banks are expected to have a longer path to profitability (three to five years to start generating operating profits), a long-term management commitment is required at the group level.
On the consumer side, while deciphering consumer needs is critical, in order to build viability it is important to keep in mind that conventional wisdom may not always hold true. For instance, having high interest rates on deposits as a means to acquire customers could create a significant cost burden while building a large deposit base. At times, consumers value convenience more than they value earning interest, and Payments Banks should focus more on building a highly convenient access channels for consumers, both digital and assisted, rather than paying a high interest rate. Similarly, providing lending as a service through a third-party partnerships (enabled via proxy credit assessment), if not executed properly, could also prove to be counterproductive in certain cases.

While building products and technology is a core activity for Payments Bank, the KYC process should be kept simple; scaling up and acquiring a large number of customers should be the focus at the initiation stage. Payments Banks along with the RBI could actively consider differentiated KYC and documentation process for getting people into the financial net, and small accounts could be one of the ways to do so.

Scaling up access and diversifying usage are two parameters along which Payments Banks would have to operate, in order to further financial inclusion in the country.

The evolution of Payments Banks depends on two factors: the scale of access they are able to create among low-income groups and the frequency and variety of usage they are able to attain through a host of financial services.

As new entrants to the financial system in India, Payments Banks’ first challenge is to achieve scale. To boost the process of customer acquisition, Payment Banks could consider partnerships with the likes of FMCG companies that have a pan-India distribution reach for creating banking access. Alternatively, Payments Banks could also partner with other entities that have significant distribution presence and geographical reach, such as state transport corporations, railways, and oil marketing companies.

There are learnings for Payments Banks from the acquisition strategies of other services in India that have scaled up rapidly in a short duration.

For this purpose, they focused on training and capacity building within various government departments and private sector entities - training them to use the Aadhaar platform and providing them hardware and other support to ensure that Aadhaar was well-integrated into their operations.

2.2 The rapid scale-up of digital wallets in India

Another example of a service that has scaled up rapidly in India is digital wallets. A digital wallet is a product that can be loaded with money from various payment options such as credit/debit cards, net banking and cash, and can be used at various offline and online merchants.

A large number of these wallets are issued as semi-closed (requiring minimal information from customers and having restrictions on monthly usage) that are digitally acquired. Although multiple usage restrictions on wallets exist in terms of transaction limits and spends, they have been able to acquire over 150 million customers over the last two years.

With initial growth and customer acquisition fuelled by a large existing market in India for mobile recharge, coupled with promotional offers, digital wallet players have now emerged as a platform for processing online and offline merchant payments.

Most upcoming urban logistics services such as food and grocery delivery and cab services in India have wallets as a payment option in addition to payment methods such as cards.

The second dimension of evolution is usage. Once scale is achieved in terms of customer base, diversification into other payments services and merchant acceptance becomes an important business proposition. Additionally, digital wallet players can also explore adjacent revenue models as they can potentially drive more customers to retailers through targeted campaigns.

2.1 The rapid scale-up of Aadhaar

The most prominent example of large-scale acquisition and adoption of customers is the Aadhaar program, which has reached over 1 billion of India’s 1.3 billion people in a span of five years.

Reaching a critical mass of Aadhaar enrolments was crucial for the sustenance and success of the program. A clear communication and advocacy plan was devised to educate and enthuse citizens using a variety of media across print, TV, radio and digital. More importantly, the focus was on creating a large network of partners who could assist in both enrolment and adoption of Aadhaar.
As Payments Banks scale up and diversify their customer base, the end state visualized for consumers will be one of a financial services provider becoming accessible to everyone and moving to self-serve channels. It is expected that once financial access, financial literacy and usage become widespread, customers will be proficient enough to create authenticated accounts, make investment decisions and apply for loans on their own through their Payments Banks. Hence, Payments Banks could take the financial-inclusion effort beyond merely owning and operating accounts, to creating financially literate society in India.

In order to achieve these dimensions, Payments Banks need to take a long-term view, identify non-traditional revenue models that are commercially viable for the provider and add meaningful value to the customers.

### 3.1 Instant documentation and onboarding process

One of the reasons for low levels of banking access in India is a lack of identity and address proof documents, especially for people migrating to cities. Collection and maintenance of multiple identification proofs make the customer on-boarding process difficult for both banks and customers.

Aadhaar based e-KYC promises a solution for simplification of the customer on-boarding process. Over 1 billion Aadhaar cards have been issued in India. Aadhaar could be used for instant KYC and customer on-boarding and banks can process quicker, paperless on-boarding through Aadhaar-based authentication in three simple ways.

Aadhaar- and OTP-based authentication for KYC could be the most simplified kind of authentication, that allows banks and other entities to authenticate customers through an OTP delivered to their registered mobile numbers or email address. The OTP would be generated when a customer initiates the on-boarding, and the KYC would be performed through easy-to-follow steps. These could be done online or in person at a branch or any other physical touch point and does not necessarily require any assistance. However, this can be used only by those Aadhaar users who have correctly registered their mobile numbers.

The second approach involves going a step further and building an Aadhaar consumer app through which customers could push their details to a Payments Bank or a financial service provider for completing the KYC.
The third approach involves a consumer using a bank’s mobile application and using it to scan the QR code of the Aadhaar card and taking a picture of the PAN card. The bank can then verify the information through backend integration with the information repositories for Aadhaar and PAN and take decision on on-boarding the customer.

Adopting the Aadhaar-based KYC model will benefit the Payments Banks during expansion as the involvement of biometrics will overcome documentation constraints for customers, especially in the rural hinterlands and semi-urban towns.

### 3.2 Near zero marginal cost of transactions

Building mass financial access and services that cater to all sections of the society involves high operating expenses with substantial initial setup costs. Most financial institutions face similar challenges as they go digital and, in turn, they pass on these costs to their end customers.

The newly introduced e-verification of IT returns for the assessment year 2015–16 has already resulted in linking of 3.8 million PAN cards to Aadhaar and e-verification of 4.6 million returns through bank accounts.

At present, cash transactions are free for customers and merchants, and that is the proposition that needs to be made for digital payments as well. Payments Banks will need to push the adoption of low-cost digital channels right from the start of their banking relationships to reduce their own and consequently their customers’ costs. A critical aspect of the relationship will be to incentivize customers to transact within the system, reducing the cash-out requirements and managing low-cost cash operations.

It will be critical for new Payments Banks to build a technologically advanced payments ecosystem that allows customers to access various options for payments, transfers and investments while ensuring that funds remain within the Payments Banks ecosystem. This would require tie-ups with multiple parties, such as banks, third-party aggregators and vendors, PPIs and merchants.

Payments Banks could facilitate this implementation by making transactions or transfers within the ecosystem almost free. In effect, a very large closed user group could be created by Payments Banks with suitable disincentives for a cash-out such as withdrawal charges.

Merchants will play a major role in ensuring that cash is retained within the system, thus reducing the values and volume of cash-out transactions. Payments Banks will have to simplify the acquiring process and move ahead of the traditional cost structure of merchant acquiring, where a merchant is charged a transaction fee, which is a percentage of the transaction (the transaction fee varies based on the card type – debit or credit – and is higher for credit cards).

#### Aadhaar and OTP based authentication for KYC – illustrative process flow

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| 1 | Customer enters Aadhaar ID during on-boarding  
   | The customer downloads the Payments Bank’s mobile application to register for an account  
   | To register, the customer is given an option to provide his or her Aadhaar number along with mobile number |
| 2 | OTP is sent to the registered mobile number  
   | The Payments Bank routes the Aadhaar and mobile numbers for validation, and if they match the details in the Aadhaar database, an OTP is sent to the customer  
   | The customer enters the OTP in the mobile application |
| 3 | OTP is verified  
   | The Payments Bank’s mobile application captures the Aadhaar number and the OTP, and routes this information for validation  
   | After successful Aadhaar + OTP validation, the bank receives the customer’s KYC details: name, address and photograph |
| 4 | Payments Bank confirms identity  
   | The details as received can be populated in the mobile app and can be reviewed by the customer  
   | A digital consent can be taken from the customer to open a bank account |
| 5 | Bank sets up account  
   | The account number is generated instantly and displayed to the customer  
   | The customer can see the key features of the account on the app itself  
   | Based on the geo-location, the branches/BCs in the vicinity can be displayed on the app |
3.3 Adopting a digital first approach

India has a high mobile density with total subscriptions touching 1 billion. More recently, there has been an increase in the penetration of smartphones and the level of data usage on mobile. In both urban and rural India, the mobile internet user base has grown significantly over the years. Further, an increasing proportion of active internet users use mobile phone as the primary channel for internet access.

As a result, the Indian consumer market will not only leapfrog many technology adoption trends (such as bypassing desktop and going mobile), but also adapt to new disruptive ideas (such as the evolution of India’s digital landscape into a hyper-local and on-demand market). Several major players such as on-demand cab aggregators, e-commerce giants and digital wallets have already flagged off the dawn of a new era of digital transactions.

Hence, it is imperative for Payments Banks to adopt a digital-first approach toward their consumer offerings and internal processes. There should be substantial focus on developing paperless processes, digitizing transactions and building a true digital experience. Smartphones can be one of the means to achieve this. However, there is a large base of unbanked and semi-literate customers who may not be conversant with smartphones, and hence enabling services through feature phones should also be explored.

Payments Banks can benefit significantly by becoming one of the first-movers and riding this mobile wave to reach out to a wider customer base across the country.

A leading bank in Kenya has launched thin-SIM-based mobile banking and telecom service. Thin SIM cards are placed along with the normal SIM cards in the phone and allow users to access financial services along with telephony.

This can potentially be done by non-telco-led Payments Banks in partnership with telecom operators.
3.4 Complete interoperability across all systems participating in a transaction

Fragmented financial infrastructure and low ticket size of transactions are compelling reasons for banks to serve the unbanked and the under-banked population through digital channels. However, most digital services are restricted in a certain way and there is no uniformity of banking services across the various platforms that banks employ. In order to overcome such challenges, enable scale and develop multiple touch points within the bank’s ecosystem, interoperability is a critical aspect that Payments Banks must factor in while developing their solutions.

3.5 Solutions designed for everyone, across customer segments

Across the overall consumer spectrum covering both individual and small business, there are segments that have received less focus from mainstream banks. Payments Banks have the opportunity to address these segments and need to develop products and solutions for all. Being legacy free, Payments Banks are better equipped than other banks to offer digital services to the under-banked rural segments and low-cost acceptance services to merchants. Hence, a multi-pronged approach needs to be adopted by Payments Bank for catering to the requirements of a wider customer base.

3.6 Data-led near real-time decision making

Traditionally, most decisions in a bank are made through manual analysis and operationally intensive processes. Incorporating real-time analytics into a bank’s structure could significantly improve the quality and the turnaround time for such decisions.

Analytics tools can help Payments Banks carve out a differentiated proposition for their customers and can influence their customers’ financial decisions by assessing multiple patterns relating to their expenses, upcoming obligations and due payments. These tools can even provide information on sellers providing the best price for their upcoming purchases - something that can be extended to goal-based savings, where a goal is linked to a product or a value target.

Additionally, focus on analytics and data-led decision making can help Payments Banks develop propositions around the management of household expenditures, investment and savings advice.

TigoPesa in Tanzania has developed mobile-agents model to provide cash-in and cash-out service by moving from one location to another. This increases the geographical areas under service and also provides doorstep banking services.

Similar model can be adopted in India by Payments Banks to address larger geographical footprint and provide assisted services in rural areas.
Most mobile financial services and wallet businesses have been built on the assisted transactions model, characterized by high charges levied upon customers for using services such as money transfers, cash-in and cash-out. While these services have been in place for a long time, they have not yielded the desired results.

Mobile money systems across geographies face similar challenges: high operational costs, significant time frame to scale-up, substantial efforts to popularize the services in local markets, engagement of agents to keep them active, commission costs and so on. However, attaining a sizeable mass of customers is critical to the success of the mobile money business, as the cost to customer ratio decreases with scale. And with scale come other potential benefits such as the opportunity to generate adjacent revenues through the distribution of financial services, reduction in customer attrition in the hyper-competitive market and increase in customer lifetime value.

Payments Banks should focus on providing products and services that enhance long-term customer value by facilitating their participation in a larger transacting ecosystem. Additionally, these banks should also explore building alternate modes of revenue through services adjacent to the core banking offerings.

A close parallel can be drawn with examples from technology and online businesses where revenue is not generated from the core products or core businesses but instead from alternate streams: for example, technology platforms such as mobile operating systems focus on generating revenue from applications and services. Similarly, the core offerings for services such as search engines, social media, and travel forums are free for customers, with very strong adjacent revenue models developed through advertisements and data-led services.

In other consumer-centric businesses as well, players are constantly expanding the revenue opportunities in adjacent space — for instance, social messaging platforms are looking at payments to become an integrated offering. Apple Inc., through Apple Pay, now participates in the transactions value chain and makes revenue from services through fee sharing. Payments Banks should focus on identifying revenue opportunities from adjacent financial and non-financial services by leveraging digital banking channels as consumer-facing assets and utilizing the physical-distribution footprint for services outside of banking and payments. For example, Payments Banks can use its BC network to offer assisted e-commerce (facilitating purchase and delivery of products through online marketplaces) in partnership with leading marketplaces in the country or act as a collections centers for NBFCs or MFIs for loan repayments.
Based on these principles and an assessment of the various global models across the mobile financial services and the Fintech space, Payments Banks can explore alternate sources of revenue through approaches illustrated below.

**Create large scale access to credit**
- Build alternate methodologies for credit assessment, and a platform to connect customers with lenders
- Potential to build a new revenue line from loan sourcing fees

**Micro savings**
- Bring savings from outside banking system into Payments Banks
- Develop micro savings such as goal based savings plans and reduce the minimum denomination for saving

**Merchant acceptance**
- Bundle merchant acquiring services with CA and offer 0% MDR for within network transactions
- Incentivize customers and merchants to accept cashless payments

**Marketplace for financial services & local commerce**
- Cross-sell financial services to relevant customer segments
- Use the BC network for additional services such as helping local businesses move online through assisted ecommerce

**Payments platform**
- Provide public and private APIs, create an ecosystem for other players and developers
- Monetize opportunities through third-party apps

**Data**
- Monetize the individual and merchant transaction data generated by the payments bank can be monetized across the banks’ ecosystem through detailed analysis

**4.1 Facilitate micro savings**

Most under-banked/unbanked households in India store their savings at home in the form of cash or non-revenue generating assets such as gold. This not only limits the total savings potential for such customers, but also keeps money out of the banking system.

A majority of individuals and households in low-income groups have a tendency to make small and infrequent savings due to low levels of financial literacy and lack of access to organized financial services.

While savings is core to banking, very few banks have taken an approach toward encouraging micro-savings, i.e., making acceptable savings amount to near zero. Payments Banks need to focus on developing products that significantly reduce the minimum denomination that needs to be accumulated to be put into a savings product.

Furthermore, offerings such as sweep in accounts, which align with the goal-based savings concept, can also be developed to further simplify investments for the large-scale adoption of micro savings.
Key takeaways

Many under-banked and unbanked customers have limited potential to save and hence the solutions required to serve them should allow even the lowest denomination for investment. Payments Banks can develop low-risk savings investment products and align it to the savings behavior of the various customer segments.

Most unbanked and under-banked customers save for goals as varied as child’s marriage, business expansion and purchase of farm equipment or motor vehicle. However, in most instances, these savings are not made through a formal system, and progress toward achieving these goals is difficult to track. Payments Banks can create better savings products that require low minimum investment value, are linked to customer-defined goals and provide savings target and guidance to achieve these savings goals.

To make these services more interactive, when a customer reaches the target value, the bank could provide deals and offers through partnerships with local businesses or online sellers.

A large number of low-value deposits from retail and small business customers can help Payments Banks build a substantial deposit base. Additionally, if aligned to goal-based savings, Payments Banks can ensure long-term stability of their deposit bases.

For the customers, this will inculcate a savings habit, which, in turn, is beneficial for banks and the financial system. For banks, even if these savings are routed to money market funds, this process creates a sticky and transacting base of long-term customers.

4.2 Create large-scale access to credit

Availability of credit, for both individuals and small businesses, is an important dimension of financial inclusion. The situation is significantly worse in rural areas, where despite numerous government and regulatory efforts to promote lending for the development of farmers and micro merchants, there is a lack of full access to formal financial services as basic as low-cost borrowing.

Although Payments Banks are not allowed to lend, they can analyze and profile customers on the basis of the stability of transactions and flows to arrive at an assessment of credit eligibility. On a case-to-case basis, the assessment report could be shared with partner banks and MFIs for risk assessment. The Payments Banks need to focus on creating as many transaction avenues as possible, creating datasets that can act as proxy parameters for credit-eligibility assessment of customers.

Payments Banks can establish themselves as service providers for an analytics-driven credit assessment platform for customers. The platform can then be extended to NBFCs, MFIs, banks (co-operative and scheduled commercial) and, if permitted, individuals for peer-to-peer lending.

Payments Banks can build a marketplace for loan origination through multiple partnerships, where customers can evaluate multiple options around repayment conditions, the rate of interest etc. and also decide whom to borrow from. Payments Banks can also assist partner lenders in managing the document-collection process, collateral management and repayments.

Customers will benefit through improved interest rates and Payments Banks can monetize this opportunity through loan origination fee. Eventually, it is expected that customers availing credit will become regular users of banking services and increase their lifetime value for the bank.

The following is a global example of an alternate platform for making credit accessible for the financially underserved population. These principles can be adapted by the upcoming Payments Banks in India.

M-Shwari

Launched in November 2012, through a strategic partnership between a commercial bank and a telecom operator, it acquired a large number of customers in the initial months of its operation.

- 1 in 5 Kenyan adults is an active M-Shwari user; half of these users do not have any other bank account
- Around 50,000 loans disbursed daily, with only 2% non-performing (over 90 days)
- 29 billion Kenyan Shillings (US$280 million) disbursed since inception

M-Shwari’s unbanked customer segment lacked a credit score from any formal financial institution. This called for an innovative approach to arrive at credit assessment and eligibility check for issuing a quick unsecured micro loan. The credit appraisal for M-Shwari loan accounts is based on multiple parameters such as balance in M-Shwari deposit account, M-PESA payment transactions, and voice and data usage on the telecom’s network. The credit appraisal is carried out instantaneously and the eligible amount is made available on the customer’s mobile phone within seconds.
Alternate revenue models for Payments Banks in India

Payments Banks can act as facilitators for dispensing loans. Customers can then exercise their choice and select the option that suits them. Payments Banks can act as facilitators for dispensing loans and assist in repayment collections.

The bids can vary based on factors such as the total value of the loan agreed, the rate of interest and the repayment period. Customers can then exercise their choice and select the option that suits them. Payments Banks can act as facilitators for dispensing loans and assist in repayment collections.

Key takeaways

India faces a credit-accessibility problem wherein millions lack access to formal credit because of the absence of transaction history and proof of stable income for assessment by banks, NBFCs and micro-finance lenders.

Alternate modes of credit assessment are critical for providing a solution to the problem of credit access for the financially excluded, and Payments Banks are well poised to address this gap. Most Payments Banks will offer remittance, bill payments and recharges as core products and services and therefore will have an insight into the stability and value of transaction flows. Payments Banks can develop decision models based on customers’ transaction and spend patterns and additional information that may be available to assess creditworthiness and thereby facilitate credit.

Use case

A customer can approach a Payments Bank’s access point or use its digital channels to place a request for credit with basic details such as the purpose of the loan and amount applied for. Payment Bank’s platform linked to various banks, NBFCs, MFIs or individual lenders (P2P lending, if permitted) can be accessed by lenders to bid or quote for the loan request.

- Payments Banks can provide a profile detail/profile score of the customer based on factors such as account vintage, total spends and average value of monthly inflow/outflow.
- Lenders can bid and the quotes can be then communicated to the customers through the BC or digital channels.
- The bids can vary based on factors such as the total value of the loan agreed, the rate of interest and the repayment period.
- Customers can then exercise their choice and select the option that suits them.
- Payments Banks can act as facilitators for dispensing loans and assist in repayment collections.

Credit is a matter of trust, and one of the reasons for lower accessibility of credit for the masses has been the moral hazards associated with the credit decision making. Although Payments Banks will have only a facilitator’s role in making credit accessible, they should ensure that the on-ground practices are monitored closely and lending related malpractices do not creep into the system.

4.3 Merchant acceptance: provide “acquiring” as a bundled service to merchants with a focus on low-cost acceptance

The Indian retail sector is highly fragmented, unorganized and dominated by a large number of small stores, which primarily transact in cash. The traditional payment infrastructure has been built around card payments and POS terminal-led acquiring models, with limited merchant acceptance – mostly in urban areas. The transaction economics of traditional acquiring, in most cases, does not prove cost effective for small retailers operating on low margins.

Hence, in order to address these challenges, Payments Banks can develop alternate merchant payments models with low transaction costs for merchants or customers. Payments Banks can define the transaction-charging mechanisms that incentivize transactions within the bank (i.e., having a near zero cost structure for transactions where the customer and the merchant are part of the Payments Bank) and focus on incremental revenue generated through fees for cash withdrawal at POS and for value-added services for merchants such as MIS and analytics.

In the Indian context, a cashless payments ecosystem can only be achieved when low-value merchant payments can be made in an electronic form. A ubiquitous solution for this can be developed that addresses the key concern of merchants: the high cost of the merchant acquiring set up. Telesom ZAAD in Somaliland has created an ecosystem of services and merchants where digital payments are accepted and all customer transactions are free.

Launched in 2009, Telesom ZAAD has significantly changed the way people in Somaliland access banking and payments. It laid an early emphasis on alliances with merchants, government bodies and other entities with a vision to have a ubiquitous payment and remittance solution. It has also partnered with WorldRemit to enable all its customers to receive instant credit for foreign inward remittance into their ZAAD accounts.

ZAAD also uses a wallet-based mobile money service with a focus to keep cash circulating within its system. To do this, it has focused on developing a strong mobile money ecosystem around services, along with an emphasis on salary credits to the account and merchant payments. The idea was to create a mobile money system that did not require users to repeatedly cash-in and cash-out. The following are some of the key highlights of the model.

Source:
Alternate revenue models for Payments Banks in India

Telesom ZAAD creating a cashless payment ecosystem in Somaliland

- Every dollar cashed in moved through the system 4.1 times prior to cash out.
- High level of activity: >30 transactions per month per active user.
- All customer transactions are FREE.
- Cash-outs have increased just 50% since May 2010.

Customers having positive balance in account: 59%
Growth in volumes within three years since inception: 250%
Merchants having positive balance in account: 83%

Registered users as of June 2014: 450,000

Source:

Key takeaways
India has one of the lowest POS densities compared to similar economies. The traditional four-party model of merchant acquiring is not the best-suited model for the fragmented retail market in India. Indian retailers typically operate at low margins with low sales volumes. As a result, the traditional merchant-acquiring cost structure is unviable for a large number of these small retailers.

Payments Banks can make customer transactions, including merchant acceptance, free as long as they are within the bank’s ecosystem. This will incentivize merchants to accept cashless payments, reduce the acquiring costs and positively impact the overall system. However, to prevent cash-outs, free withdrawals can be limited.

Payments Banks should focus on acquiring a large number of customers by providing them physical/virtual debit cards. Merchants can be provided bundled acquiring solutions. In order to maximize the number of customer and merchant transactions, within-bank acquiring transactions (on-us) can be priced at or near zero.

Additionally, as acquiring needs to be made cost-efficient, merchants can use mobile phones payments-acceptance devices (wallet-to-wallet acquiring can be potentially done without traditional POS devices, hence reducing the upfront cost of merchant setup).
4.4 Marketplace for financial services and local commerce

Traditional cross-selling by banks in India has hitherto focused on financial products such as insurance, mutual funds and pensions products. However, Payments Banks can also consider partnering with e-commerce companies for creating an additional revenue source.

4.4.1 Financial services

While Payments Banks will cross-sell financial products such as insurance, investment and origination of loans, it can also focus on analytics-led contextual (to the consumers) cross-selling. Additionally, the focus of Payments Banks should revolve around the following imperatives:

- Building strategic partnership with financial services companies, AMCs and insurance companies
- Customizing products to meet the requirements of its customer base – a one-size-fits-all approach cannot be adopted
- Profiling customers by analyzing demographic and transaction-related parameters to be able to offer targeted products that are relevant to the customers

Payments Banks will have an important role to play in leading their customers upward on the financial services maturity curve.

4.4.2 E-commerce

Many BCs lose focus on providing banking and payments services because of the low commission income they earn. As a result, they find it difficult to manage the business, leading to inactivity and eventual closure of business. While Payments Banks should attempt to reduce the transaction fee, they must also focus on providing additional revenue opportunities to their agent networks. Assisted e-commerce is an opportunity that can be explored in partnership with leading e-commerce players. Such alliances could be potential revenue sources for BCs and at the same time enable Payments Banks to cross-subsidize transaction costs.

BC networks can be utilized for making e-commerce transactions and orders (in an assisted mode) and BCs can also act as delivery or pick-up points. BCs can also be trained to on-board sellers onto the e-commerce platforms for which they can be compensated in addition to the commission earned from banking services.

In China, large eCommerce and payments players together have created an ecosystem for commerce and payments, thereby bringing merchants, small and large businesses and customers on the digital platform. A similar model can also be extended by Payments Banks in India in partnership with e-commerce platforms and coupled with payments services.

Bought By Many

Bought By Many, a UK-based insurance start-up brings together customers with specific insurance needs (e.g., age, illness, residence location and profession) to represent to insurers and promote the creation and distribution of specialized insurance products. It matches customers who do not fit commoditized insurance policies to insurers who are willing to customize their offerings for such customer segments.

Payments Banks can adopt a similar model by partnering with insurance companies for developing tailor-made and add-on insurance products specific to the requirements of various customer groups.


Key takeaways

Payments Banks are restricted in offering a comprehensive suite of banking products and services. Hence, it is critical for them to offer services in partnership with other providers, financial as well as non-financial. This can potentially be an alternate revenue opportunity and can improve overall consumer experience. However, Payments Banks should ensure that the processes developed around these adjacent services should be seamless for the consumers, merchants (wherever applicable) and service providers.

4.5 Data

Once operationalized and on reaching a critical mass of customers, Payments Banks will have access to a considerable amount of transactions data of customers and merchants. Analyzing this data along with additional customer profile parameters can lead to valuable insights about spend patterns and preferences. These insights can enable Payments Banks to explore new revenue opportunities.

Payments Banks can build better value propositions for businesses by using analytics and consumer insights to connect service providers with consumers. For instance, Meniga has developed a proprietary analytics technology powered by consumer spend patterns that helps advertisers and banks to target and engage with their customers better.

Similarly, data-led credit risk assessment can be done based on models similar to those used by Cignifi and Lenddo. Cignifi is an alternative-lending assessment platform to evaluate parameters and metrics beyond the credit scores used by traditional lenders (e.g., social data and telecom usage) and also refine their risk engine more frequently. It has developed algorithms that recognize trends in the usage of mobile phones (including calls, SMS, recharge frequency and data usage) to profile an individual.
Lenddo16 has enabled the population at the bottom of the pyramid to claim their creditworthiness and access loans from the formal financial system. It uses more than 12,000 data points to manage risks and make better decisions.

Payments Banks can also generate data-led insights and explore other adjacent revenue streams such as targeted marketing to its customer base.

#### Meniga

Meniga’s personal financial management solution is currently being used in 16 countries and by multiple banks, some being digital banks. Its analytics platform tracks consumer spends to build new propositions for customers and businesses.

Meniga offers a digital banking solution that aggregates, enriches and analyses transaction data from multiple sources to provide a truly personalized digital banking experience. For example, it has a social media style platform that categorizes customers’ financial transactions and accordingly provides customized insights and recommendations on how to manage their finances. It also identifies merchant-funded offers and matches them to the relevant customer set to help them connect. It also has a segmentation platform that profiles customers on the basis of spending patterns and communicates targeted product offerings from its ecosystem of merchants.

All these are prime examples of how a Payments Bank can leverage technology to create a digital ecosystem of merchants, financial services providers and customers to engage and potentially develop revenue streams from these services.


#### Key takeaways

Payments Banks will generate a high volume of consumer transactions—led data, which will include transactions such as mobile recharges, bill payments, e-commerce spends and offline merchant transactions. A significant value can be unlocked if this data is analyzed and consumer insights are be monetized.

Payments Banks can potentially do very precise targeted marketing through these insights without compromising on data privacy.

Payments Banks can also conduct analytics-enabled profiling of customers belonging to the low- and mid-income groups, similar to a credit bureau, for lending institutions such as MFIs, NBFCs, and even co-operative and commercial banks. This can potentially improve the efficacy of priority sector lending for the banks as well.

#### Open Bank Project

Open Bank Project runs an app store for its partner banks’ customers to download a wide range of additional functionalities to its core online and mobile platform by exposing its API to external developers.

Open API architecture has led to a significant level of innovation in banking and payments. For instance, developers have made apps to help visually impaired bank. Interesting personal finance management apps have been developed that provide 3D visualizations of transactions, allow customers to use their mobiles for card-less ATM withdrawals, and help SMEs manage cash flows.

An open architecture with flexibility for developers to build applications and solutions on the platform is an important driver of future innovations in banking and payments.


#### Key takeaways

Payments Banks being legacy-free with a higher focus on new age digital channels and technology platforms are better poised to potentially create an ecosystem of open APIs and attract the developer community. Such an open API architecture can lead to development of innovative payment applications banking APIs and payment systems.

The apps or companies using these APIs can be charged on the basis of user licenses or on the basis of transaction volume similar to the platform-pricing approach taken for commercial use of services such as maps.

#### 4.6 Platform approach toward banking and payments

Until now, banks in India have never taken an open architecture approach that provides access to their systems to outside entities. Legacy systems, internal processes and other business priorities limit the speed at which traditional banks innovate. Payments Banks should develop the payment interface as a platform with capabilities to provide standardized API access and allow third party developers, with thorough due diligence, to easily build and integrate customer and merchant-centric services around it.

Providing public and private APIs can create an ecosystem where other non-bank players can develop payment apps and functionalities that would bring further innovation into the banking and payments space.
As the ecosystem around Payments Banks develops, it is critical for the regulatory and operational environment around them to evolve as well.

Payments Banks are expected to be catalysts for broadening access to the banking system by offering innovative products and solutions with efficient customer service. Payments Banks have the benefit of being legacy-free and unlike established banks, they are under no pressure to grow credit volumes or meet priority-sector lending requirements. Therefore, they can focus on managing basic accounts and should have the freedom to do so in innovative ways.

As part of the next wave of regulatory evolution, operational guidelines specific to Payments Banks on critical aspects such as branch licensing, outsourcing, customer onboarding and KYC would potentially provide players an operating environment that is conducive to facilitating large volumes of payments transactions. While initiatives such as Aadhaar-based KYC have simplified customer onboarding to a large extent, newer cost-efficient solutions such as video call–based alternatives (in place of in-person verifications) could further enhance the speed and ease of customer acquisition.

Further, regulatory impetus to Payments Banks to develop alternate revenue streams aside from core deposit taking and remittances (e.g., monetizing data and facilitating credit adjacencies) would go a long way in bolstering their financial performance.

In addition to the regulator providing an encouraging environment, the Government could also play a significant role in furthering the cause of Payments Banks through country-wide initiatives involving communication and consumer-education programs. Measures such as these could provide significant stimulus to broadening the customer base of Payments Banks and consequently furthering the cause of financial inclusion in the country, while enabling these banks to build sustainable businesses.
References:


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