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Since 1895



Financial Inclusion

From Obligation to Opportunity

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Financial Inclusion

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Contents

Executive Summary	4
Understanding the Customer	8
Extent of Exclusion and Customer Characteristics	8
Exclusion Across Products and Channels	12
Learnings from Other's Experiences	15
The Challenge of Financial Exclusion	16
Reasons for a Vast Financially Excluded Population	16
Burden of Obligation	18
Recent Changes not Sufficient	20
Recent Positive Changes	20
Transition from Obligation to Opportunity	22
Making the Transition	24
Viability Improvement Through Focused Cost Reduction	25
Viability Improvement Through Revenue Enhancements	29
Key Choices for Financial Service Providers	31
Returns from a Successful Financial Inclusion Program	34
'Enabling' Paradigm can Improve Outcome	36
'No Regret' Moves by Policy Makers	36
Other Potential Initiatives to Spur Market Growth	41
Impact of the 'Enabling' Paradigm on Economics and Penetration	43
The Way Forward: Imperatives for Stakeholders	45
Fifteen Point Agenda for Stakeholders	45
What will Define Success?	49
Appendix I: Financial Inclusion Survey	51
Appendix II: Select Customer Profiles	53
Appendix III: Detailed Economics of the Proposed Model	57



Executive Summary

The Indian economy has been growing at nearly 8 percent per annum over the last decade and the country is poised to emerge as a formidable economic force on the world map. It is important that all segments of society get to participate in this growth process. For sustainable growth, India needs to take basic utilities like financial services to the excluded population. In fact, access to financial services is more than just a basic utility. It acts as the edifice to an enabling economic environment for the entire populace.

Several attempts have been made in the past to increase the penetration of financial services. However, these have had limited impact. A BCG team conducted a nation-wide survey (October–December 2010) covering 12,000 customers to understand the real needs and challenges that customers face. The survey revealed that the overall level of financial inclusion in India is about 47 percent.

The ‘financially excluded’ or marginal customers are broadly segmented into four categories — Daily wage earners, monthly wage earners, seasonal earners and the self-employed. Each of these segments exhibits unique traits, but they also have some commonalities. Their low income levels restrict their saving ability, whereas the variability in their income increases their need for short-term-consumption loans to tide over periods of limited or no income.

The survey found that these excluded customers appreciate the ease of access and flexibility offered by the informal sector. Contrary to the popular belief that the informal sector is evil, these customers often look at it favorably. Although the informal sector charges

significantly higher rates of interests, these customers do not mind paying more, as long as their needs are fulfilled. Actually, most of these customers do not even understand the concept of interest rate.

Historically, banks have struggled to build an efficient and low-cost distribution network to serve the marginal customers. The high distribution costs translate into a cost-income¹ ratio of 10–12 (compared to the desired ratio of 0.5) in a traditional branch-based banking model. Constraints in the regulatory environment and limitations in the use of technology solutions only add to the problem.

In fact, if the traditional banking model is used to include all the currently excluded households, it will result in an annual obligation to the tune of ₹20,000 crores. Not surprisingly, financial inclusion has for long been seen as an obligation by financial service providers. Since this obligation is unviable to fulfill, formal banking continues to overlook the needs of the marginal customer. As a result, these customers continue to rely on informal sources like money lenders, friends and family for most of their needs.

A number of recent positive changes have begun to improve the scenario. There has been widespread technological adoption in telecom as well as within the financial service providers. Changes like the introduction of Business Correspondents (BCs) and disbursement of Government payments through the banking system have begun to improve the economics of the financial inclusion

1. The cost of serving the marginal customers divided by the income from serving these customers. For every ₹1 of income from the marginal customers, banks incur a cost of about ₹10–12.

ecosystem. This has led to improvement in the cost-income ratio though it is still in the range of 3 to 4 times. Hence, despite all these positive measures, financial inclusion continues to remain an obligation for the formal sector. The key issue now is what can change this obligation into an opportunity.

Recent developments such as for-profit BC guidelines and creation of a national unique identity infrastructure — through Aadhaar, the multipurpose national identity number program of the Unique Identification Authority of India (UIDAI) — provide further impetus to this journey.

India is at a tipping point where a few positive steps on the part of the Government and financial service providers can lead to a breakthrough by converting financial inclusion (from being a mere obligation) into a real opportunity. This requires challenging the existing paradigms; mere incremental tweaking of existing business models will not work. It will need a deep understanding of customer needs and innovative collaborative cross industry business initiatives to reduce the cost of service delivery.

There are two possible routes forward. The first one this report terms the ‘Opportunity’ paradigm. This paradigm will happen if financial service providers take a set of actions around reducing cost (manpower, distribution, technology, etc.) and increasing revenue potential of their initiatives (targeted products, new business models, etc.). To achieve this paradigm, the financial service providers will need to levy adequate charges on the customer and focus on delivery of products and services that are profitable. This will increase the penetration of formal financial services **from around 47 percent to nearly 65 percent** with an additional profit potential of ₹1,500 crores for the financial services providers by the fifth year.

Though the charges paid by the newly included customers in this model will be higher than what is charged of the richer existing customers by banks today in their traditional banking models, they will be significantly lower than the cost they are incurring in availing the services from the informal sector, if they can access the services at all. Illustratively, remittances could be made at a fee of 3 percent of the amount or loans could sustainably be provided at 22 to 28 percent which are much lower than what they pay today to the informal sector who charge 5 to 10 percent for remittances and between 35 to

100 percent for loans. However, these amounts are typically higher than the rates banks charge to their existing customers who transact in higher ticket sizes.

In the ‘Opportunity’ paradigm, the marginal customers would need to pay for service delivery. This payment, (though significantly lower than what they are currently paying to get the service) may not be palatable in a democratic polity like India. Additionally, even though the penetration levels would increase in the ‘Opportunity’ paradigm, there would still be scope for improvement as financial service providers would be selective in targeting customers in this paradigm.

This approach can be supplemented by a second possible route, which in this report has been labelled as the ‘Enabling’ paradigm. The ‘Opportunity’ paradigm can be further improved where policy makers create an enabling ecosystem through a set of regulatory and policy changes wherein the profitability of the ‘Opportunity’ paradigm is improved through policy measures and the benefits are passed on to the end customers. For example, interest rates on loans can be brought down to 18 to 20 percent per annum, while remittances costs could come down to 2 percent if the ‘Enabling’ paradigm is adopted. This paradigm requires a combination of some initiatives that this report terms ‘no regret’ moves, together with some targeted subventions by the Government and the Regulator.

This scenario will result in an increase in the penetration of formal financial services from the **current level of around 47 percent to approximately 80 percent**. This paradigm should create an additional profit potential of ₹3,500 crores for the financial services providers by the fifth year.

Both these paradigms are possible but their implementation depends largely on the support extended by the policy makers as well as the willingness of the service providers to experiment and innovate. It is important that all stakeholders realize the extent of this challenge and work together in order to address it in the right manner. For, if left unaddressed, the challenges of financial exclusion have the potential to disrupt India’s growth trajectory.

This report lays out a path to tap this opportunity. It provides a detailed view of challenges, issues, debates, economics around financial inclusion and establishes an action agenda for the various stakeholders:

- ◇ Chapter 1 focuses on understanding the customer and describes the extent of exclusion across products and channels and key customer characteristics.
- ◇ Chapter 2 describes the challenges posed by financial exclusion and the reasons why the past initiatives were unsuccessful in addressing these challenges.
- ◇ Chapter 3 discusses the recent changes in the marketplace and how they are facilitating financial inclusion.
- ◇ Chapter 4 builds on the recent market changes and describes the focused set of activities required by the market participants (including financial service providers and their partners and affiliates) to make financial inclusion viable and sustainable.
- ◇ Chapter 5 discusses the implications on business viability and customer affordability if the policy makers further help reduce hurdles to market growth.
- ◇ Chapter 6 concludes the report by highlighting the action agenda for each stakeholder.

The report outlines a fifteen point agenda for the stakeholders, including the market participants, the Regulator and the Government. The agenda includes:

For market participants:

- 1. Bring down human resource costs significantly**
This can be achieved through a combination of efforts, including but not limited to the use of more cost-effective technology that reduces human intervention, recruiting locally by utilizing different talent pools and by proper training of manpower.
- 2. Build a low-cost distribution network**
This can be achieved if financial service providers enter into partnerships with players from other industries, such as telecom, Fast Moving Consumer Goods (FMCG), and agriculture, for sharing and leveraging their existing distribution network and infrastructure.
- 3. Deploy efficient and cost-effective technology**
It is critical to reduce cost as well as maintain desired service quality. Adopting an interoperable network,

online platforms (wherever possible) and relatively cheaper IT platforms for financial inclusion accounts are important enablers for achieving this.

4. Use Aadhaar platform for rapid growth and lower cost

Partnering with the UIDAI will not only bring scale to financial inclusion initiatives but also significantly reduce upfront customer acquisition costs required to reach marginal customers. In addition, the financial service providers will also be able to leverage the online Aadhaar authentication for transaction processing.

5. Create targeted product and service offering

Offering the right bouquet of products to the customer is important to create the pull effect. Service providers should consider products from all key categories — savings, credit, remittance and other products like insurance, investment and bill payments.

6. Shift from conventional float-based economics to pay-per-use economics

Economics for financial inclusion should shift to a pay-per-use model where financial service providers can recover part of their cost at the transaction level. Similarly, there is a need to experiment with other aspects as well, like repayment terms and frequency of loans.

7. Conduct aggressive customer awareness programs

There is need to develop customer comfort in dealing with the formal sector, as also a need to make marginal customers aware of various financial instruments and how they need to handle them. Aggressive customer awareness programs that are targeted at the marginal customers can serve the purpose.

For the Government and the Regulator:

8. Dedicate funds for literacy drives and vocational training

There is need to set up funds that can be used in partnership with private players that have expertise in conducting customer awareness and skill development programs. These funds can be managed locally by the District Level Coordination Committees (DLCCs) of banks.

9. Disburse Government payments through Aadhaar-linked bank accounts

This is a win-win for both customers and the Government. Electronic payments (as opposed to paper or cash-based payment mechanism) will reduce inefficiencies in the system. Targeted biometric-based disbursements will also reduce leakages that are rampant in the system today.

10. Promote interoperable customer servicing networks

This will provide multiple benefits including more flexibility to the end customer, reduction in service delivery cost and increase in competition among service providers.

11. Facilitate tracking of transaction history across products and financial service providers

This will enable financial service providers to better assess the credit worthiness of the customers. This way, they can offer more targeted credit products to the customers.

12. Create a Financial Inclusion Index (FII) for monitoring service delivery

This will provide a significant boost to the financial inclusion ecosystem. The index should indicate the quality of service as well as the extent of financial inclusion for a financial service provider as well as a geographical entity such as a district or a state.

13. Targeted incentives to promote financial inclusion viability

Support is required in the early stages of financial

inclusion initiatives, when the viability of these programs is yet to be proven. This will ensure that more service providers are willing to experiment. These incentives can be in the form of tax breaks or tax exemptions.

14. Enable rural infrastructure development

There is need to significantly step up investments in rural infrastructure and reinvigorate institutions focused on rural development in order to create an environment for integrated development.

15. Facilitate further regulatory changes

Existing norms need to be further relaxed to spur competition and growth. Allowing electronic transfer of KYR=KYC² information to open bank accounts, allowing Non-Banking Financial Companies (NBFC) to participate as BCs and resolving how the functionality of mobile device can be best used by better collaboration across industry boundaries are some of the key regulatory changes that are required.

We truly believe that if all stakeholders work together towards the goal of financial inclusion in a spirit of collaboration and implement the aforesaid recommendations, a large section of the currently excluded population will get a chance to play an active role in the mainstream economy within the next five years. Financial inclusion is poised to happen, not because it is politically correct, but because it will soon be economically correct as well. It is no longer a question of whether the marginal customers are bankable, it is a question of how all the stakeholders can come together and make this happen sooner rather than later.

2. KYC refers to the Know Your Customer requirement for banks to open an account. KYR is Know Your Resident information that the UIDAI plans to collect for issuing Aadhaar numbers.



Understanding the Customer

The challenges of financial exclusion are not new to India. They have occupied the mind of policy makers and financial services providers for many years now. Progress towards the goal of inclusion has been slow despite a strong Government push. We believe, to address this challenge, we need to begin with a deep understanding of the excluded customer, their lives and their needs and why traditional market players have struggled to serve them in an economically sustainable manner.

Extent of Exclusion and Customer Characteristics

A BCG team conducted a nation-wide survey (October–December 2010) aimed at understanding the real needs and challenges of the customers. The survey was conducted across 15 states of the country (covering more than 70 percent of India's population). Here are some key characteristics of the survey:

- ◇ The survey was quantitative in nature — with a sample size of 12,000 customers — and was aimed at understanding their financial usage, needs and challenges.
- ◇ More than 3,000 in-depth interviews across banked and unbanked customers in urban and rural areas were conducted to uncover the underlying issues that they face.
- ◇ A separate quantitative survey was undertaken across frontline delivery agents asking them about their experiences and challenges.

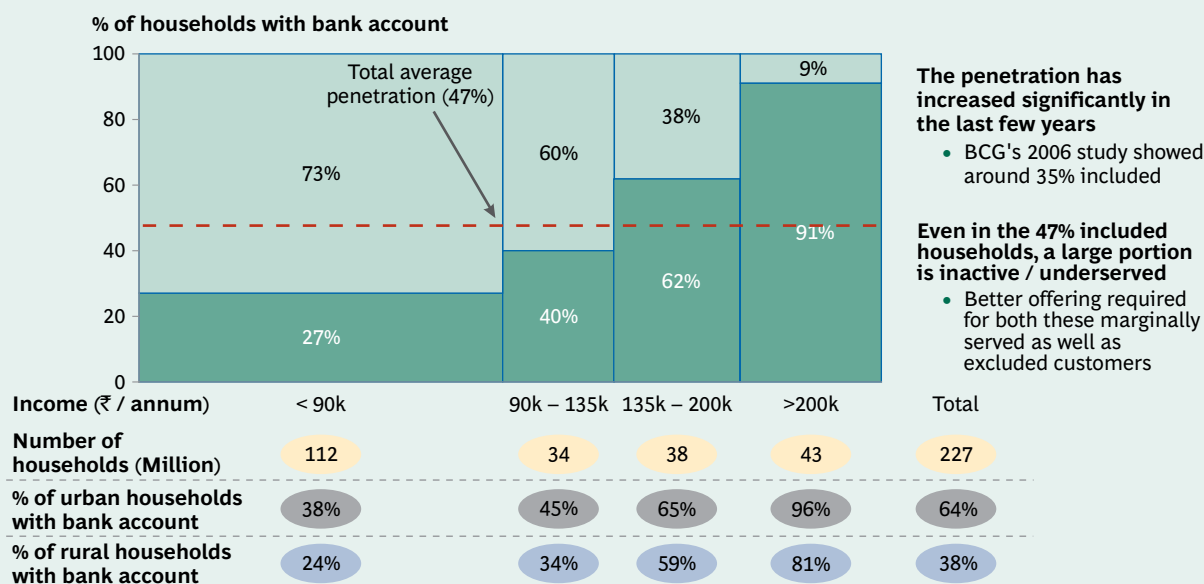
The survey shows that the overall level of inclusion has gone up to 47 percent (as shown in Exhibit 1) as compared to the 35 percent level estimated by both the 2001 census as well as the 2006 BCG study of the Next Billion Customers. Hence, it does seem that the recent initiatives have had a positive impact on increasing the number of included customers. However, the gap that continues to exist is still enormous. Further, if one segments the households on the basis of income, then the level of inclusion drops sharply at low-income categories, with less than 30 percent of the households having access to basic banking services at an income of less than ₹90,000 per annum.

As seen from Exhibit 1, a large portion of the population with income below ₹200,000 per annum does not currently have bank accounts. In addition, many of those (with income below ₹200,000 per annum) who do have a bank account do not get proper services. As a result, their accounts largely lie inactive. Overall, the marginal customer segment comprises those who currently do not have proper access to formal financial services and includes both, the customers who do not have bank accounts and those who have an account that is largely inactive (due to lack of adequate service). These marginal customers can be broadly segmented into four categories:

◇ Daily wage earners

This segment has no regular job and is forced to find jobs on a daily or weekly basis. But they usually have a fixed daily wage rate for the days that they manage to find work. This category is found in both, urban and rural areas and is usually employed as construction workers, mechanics, etc. for example, in projects related to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

Exhibit 1. Only 47 percent of Indian households have a bank account



Sources: BCG's Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: Number of respondents = 12321; The household distribution by income is based on NCAER projections. The excluded households in the >200K income category have 7–8 members per household and this may account for low savings.

◆ Monthly wage earners

This segment is employed in both, the formal and the informal sector and gets a fixed monthly wage. This category has a larger presence in the urban areas. They are usually employed as personal drivers, domestic helps, waiters, peons, security guards, etc.

◆ Seasonal wage earners

This segment comprises mainly households that are focused on agriculture and get an income one to three times in a year, depending on location and the cropping pattern. This category is largely present in rural areas.

◆ Self-employed

This segment comprises of those who run self-owned businesses and usually have low and variable income. This segment has a presence in both urban and rural areas. It includes those who are running small shops, petty traders, those who pull rickshaws or drive taxis, etc.

These customers (as shown in Exhibit 2) not only have low average incomes, but almost 40 percent of them also have highly variable and seasonal incomes. The combination of these two factors has a very distinctive impact on their need for financial products. The overall low income levels restrict their saving ability, whereas the variability in their income increases their need for short-term-consumption loans to tide over periods of limited or no income.

It is critical to realize that consumption loans are a way of life for this segment. They find it extremely difficult to survive without them. Instances like weddings, crop failure, and sudden illness require instant consumption credit as they have very low savings to dip into. More than 65 percent of these customers' loans are for consumption (as shown in Exhibit 3). Further, most of them repay loans not just so that they can take a fresh loan, but also out of self-respect. The sense of indignity in not being able to repay a loan and becoming infamous in their social circles for a default is too much for them to bear. It is only when more than one emergency hits a household in succession that the household finds it difficult to repay the loans.

Illustration 1 provides details of their needs, whereas Exhibit 2 provides their income distribution.

Illustration 1: Marginal customer segments

Description of customer segments

Daily wage earner

- People who know the approximate amount they earn per day but are unsure of how many days in a year they will be gainfully employed. Thus, their income is highly variable and fluctuates across months.
- Examples: Skilled and unskilled labourers such as construction workers, mechanics, plumbers, MGNREGA workers, etc.
- This customer segment resides both in rural and urban areas.

Monthly wage earner

- People who receive a steady income on a monthly basis with little income variability.
- Examples: Household helps, drivers, clerks, peons, security personnel, etc.
- They reside largely in urban centres where regular employment is more easily available.

Seasonal wage earner

- People who earn only at certain times or seasons of the year. Examples: Farmers.
- Most farmers own their agricultural land and the house they reside in.
- This customer segment is primarily found in villages.

Self-employed

- People who have employment for most days in a year but their daily income fluctuates widely, depending on the season or the nature of the job.
- Examples: Shop owners, petty traders, vegetable vendors, etc.
- This customer segment resides both in urban and rural locations.

Examples of customer profile

Indu Bai Prasad

A 44-year-old agricultural labourer who works in the farms of Rajim, Chattisgarh. Her husband works along with her and their household income is approximately ₹5,000 per month. Her family lives in a mud house. She does not have a bank account. Her son was a part of a Joint Liability Group (JLG) and took a loan from a microfinance institution to buy cows for selling their milk. She needs access to credit so that her children can use it for productive purposes.



Rama Shankar Pandey

A 34-year-old security guard who lives with his wife and two children in New Delhi. His children go to a Government school. He earns ₹6,000 per month and saves ₹300 per month in a local chit fund. He tried opening a bank account once but failed as he did not have a local address proof. He has taken a loan twice from a friend to meet a medical emergency in the family. Rama aspires to take a housing loan from a bank and build a house for his parents in the village.



Devendra Kumar

A 31-year-old farmer who lives with his widowed mother, wife and kids. His kids go to a school in the nearby village. He grows crop on his 6 acre land and earns ₹38,000 annually in two chunks by selling the harvest. He saves ₹2,000–3,000 per annum in a co-operative bank. He has taken a loan once from a local money lender when his father fell ill. Devendra lives in his own small hut in the village and wants to build his own pucca house.



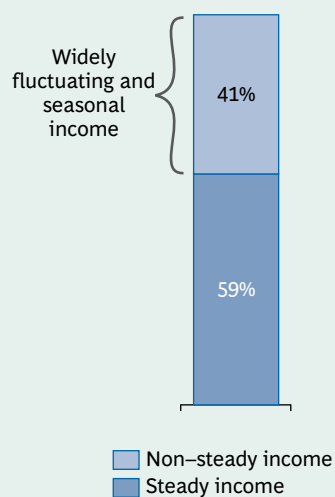
Rajendra Hote

A 48-year-old petty trader who sells bronze idols of deities. He earns ₹4,000 per month and his income peaks during religious festivals. He manages to save small amounts during peak seasons in a cooperative bank. He has taken two-three loans in the last three years to repair his shop and manage working capital. He lives in a 600 sq. ft. room on rent.

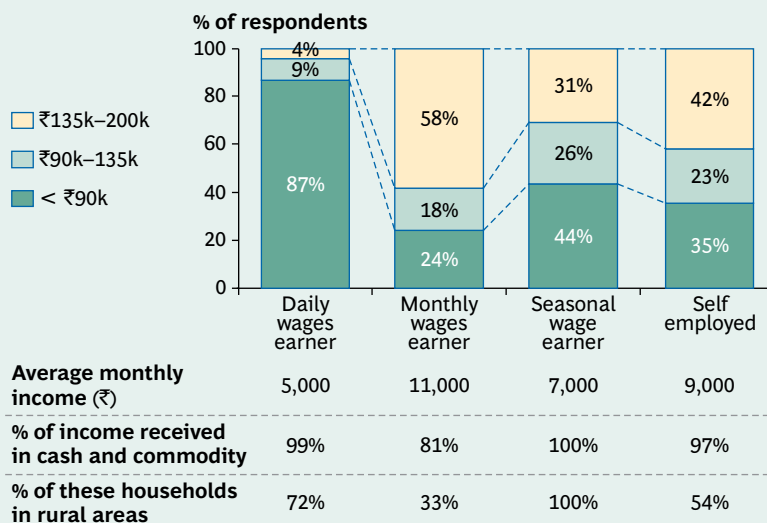


Exhibit 2. Low and extremely variable income across customer segment

High variability in income



Income distribution of various customer segments in BCG survey

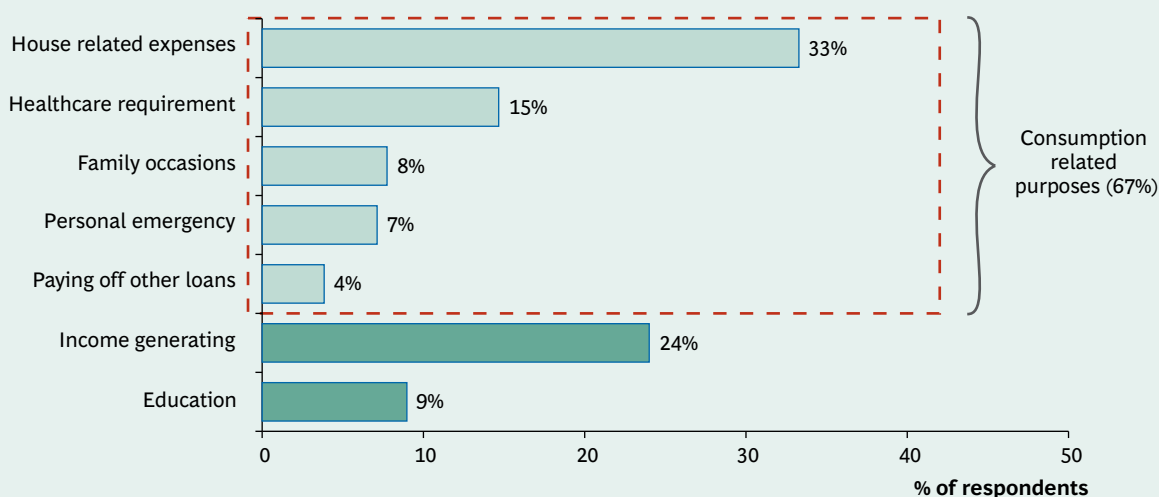


Sources: BCG's Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: Number of respondents = 11583; Respondents with annual household income < ₹200K; Average monthly income figures are approximations; For segments having annual income less than ₹200K per annum.

Exhibit 3. >65 percent of household loans are for consumption requirements

Reasons for taking the loan



Sources: BCG's Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: Number of respondents = 2220 (a subset of the 5328 respondents who took a loan); Respondents with annual household income < ₹200 k

Exclusion Across Products and Channels

Before taking cognizance of what services are available, it is important to define what constitutes financial inclusion. While the exact terminology may vary across sources, most agree that a person should have access to four types of basic financial services to be considered as financially included:

- ◇ Access to basic savings account
- ◇ Availability of affordable credit
- ◇ Access to remittance services
- ◇ Opportunity to buy insurance and investment products

In the absence of an adequate banking network in the rural areas, marginal customers have come to rely on various sources, both formal and informal, to meet their financial needs. The availability of these alternate sources varies a lot across different financial products as discussed below.

Deposit products

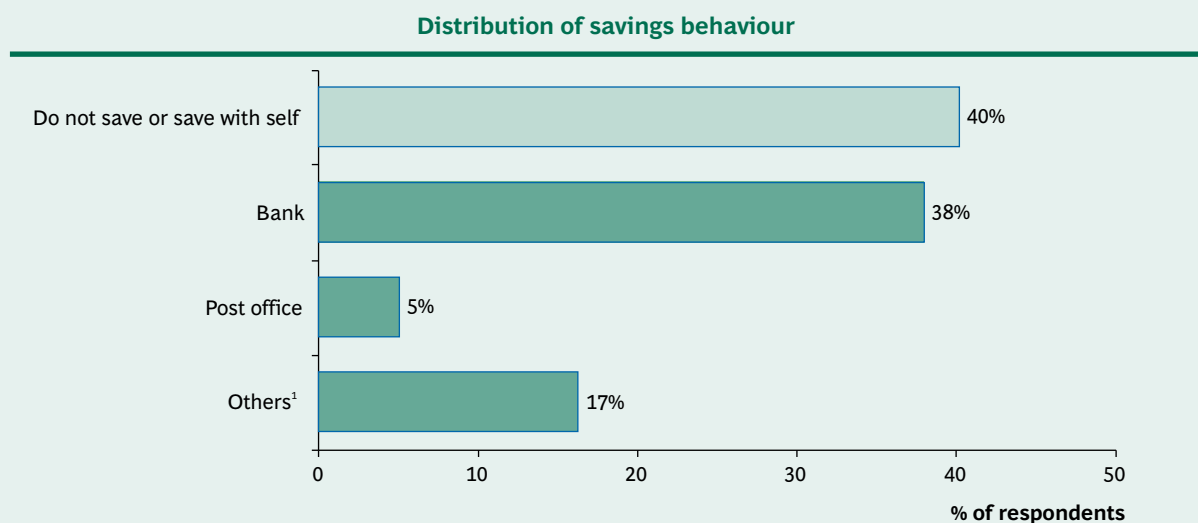
Banks and India Post are the key providers of deposit products in rural areas. There are few other sources like chit funds in specific locations across the country and they offer both, savings and credit products. In chit funds, a group of individuals come together to help each other in times of need (by giving credit) and thus also earn money for the participants in the process (through interest on savings).

About 40 percent of the people do not use any formal channels for savings (as shown in Exhibit 4). This is primarily due to the overall low income levels that restrict their saving ability and hence they find limited usage of deposit products from both formal and informal channels. The little savings that they do manage to do is often kept with themselves in cash.

Credit products

The availability of credit is relatively better. It is available not only through banks but also through both informal sources, such as money lenders, and other formal sources, such as NBFCs and Micro-Finance Institutions (MFIs).

Exhibit 4. About 40 percent of respondents did not use external saving channels



Sources: BCG's Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: Number of respondents = 11583; Respondents with annual household income < ₹200 k

¹Others includes non-bank companies and chit funds.

The informal channel is the most utilized source of loans (as shown in Exhibit 5). This is despite the fact that the informal sector charges much higher interest rates (ranging from 35 to 100 percent) as compared to both, banks and the MFIs. While there are many reasons that can be ascribed to the deeper penetration of the informal sector, some of the key reasons are:

♦ **High financial illiteracy among customers**

Most customers do not understand the concept of interest rates. As a result, they are not able to compare the cost of availing loans from different sources. They only understand the absolute payment that they need to pay per day or per week or per month and the total money they have taken as loan. For instance, during one of the discussions, a customer mentioned that he got cheaper loans from his money lender. On further interrogation, we realized that he was comparing the monthly interest rate (3–5 percent per month) charged by the money lender with the annual interest rates charged by the banks (10–12 percent per annum).

♦ **Easy access to informal sector**

The informal sector participants are usually located

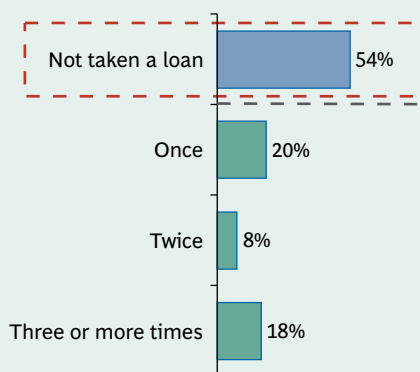
close to the customer and thus provide much easier access to credit. The customer is more familiar with these sources as they comprise local money lenders, friends or family members. Moreover, this source is available to them throughout the year and at any time of the day, as compared to banks.

♦ **High flexibility of the informal sector**

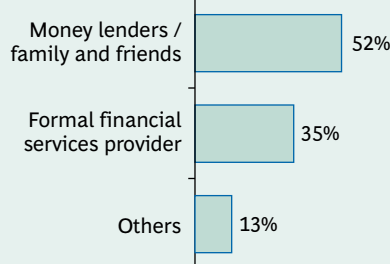
The informal sector product offering is more flexible. For instance, they are more open to changing payment amounts and payment frequency based on the customer's situation. This flexibility is extremely convenient and valuable to customers who have variable and seasonal pay. At times, the customer would like to adjust the payment to suit a contingency, like a sudden illness or crop failure. To illustrate this with a real example, a daily worker (a driver of a van earning ₹200 a day on the days he gets work) explained how in an emergency he had to take ₹10,000 loan from a friend for a family function. He said the friend gave him ₹8,700 and he was expected to repay ₹100 a day for 100 days. During the course of the loan on two occasions when he could not meet the repayments he was asked to repay ₹120 a day for six days instead to

Exhibit 5. Credit needs are largely met through the informal channel

Approximately 50% respondents have taken a loan in the last 3 years



>50% of the times respondents avail credit from the informal channel



Sources: BCG's Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: Number of respondents = 11583; Respondents with annual household income < ₹200K; For segments having annual income less than ₹200K per annum.

make up for the ₹100 he missed out. There was no paper work involved in this and it happened quite smoothly.

♦ **Limited documentation and instant disbursal of loans in the informal sector**

The informal sector usually requires limited or no documentation and the disbursal is almost instantaneous. This is in sharp contrast to taking loans from banks where a considerable amount of documentation is required and the disbursal of loans takes much longer (sometimes even two–three months). Complex documentation also means the customer has to come to the branch several times, either to understand the procedure or to furnish the documents.

These reasons are also corroborated with the findings of the survey (as shown in Exhibit 6). All of the above reasons make the informal sector very attractive for the marginal customer segment. Thus, contrary to the belief that the informal sector is bad, its customers often look at the sector favorably and depend on it for survival in times of need. In the current context, where the formal sector

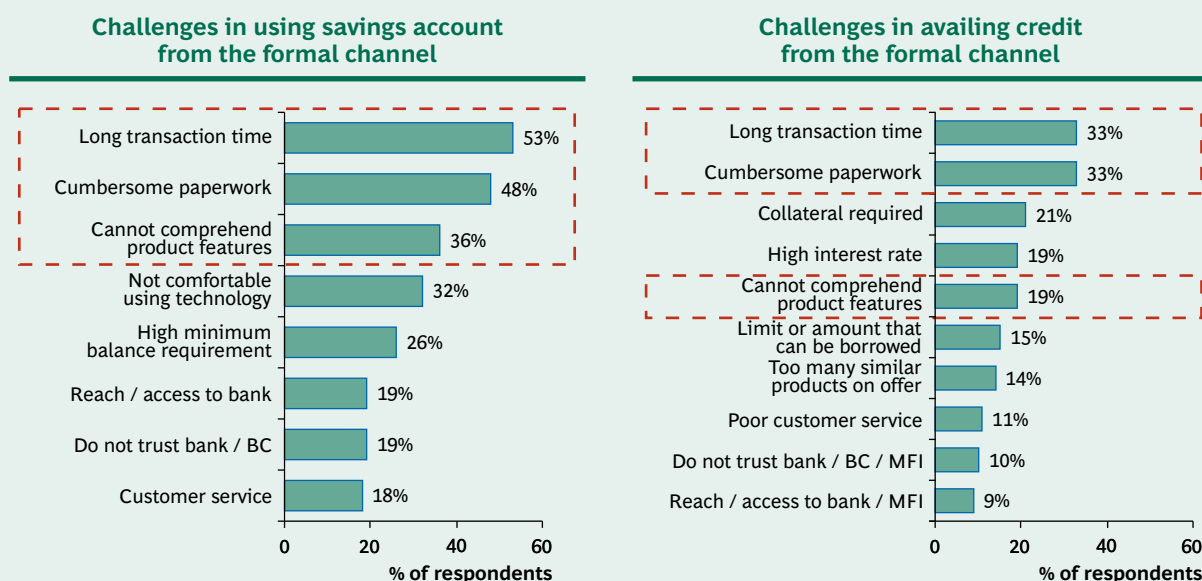
is characterized by limited reach, limited flexibility and high requirements of documentation, the informal sector is playing a very important role in fulfilling the requirements of the marginal customers.

However, there is no disputing the fact that the interest rates charged by the informal sector are high. But from the customer’s perspective they appreciate the fact that they get credit when they need it with a clear and flexible payment schedule.

Other products

Services like remittances also face similar challenges. Though there are formal and informal sources for remittance in rural areas, both are costly and time–consuming. For instance, the main remittance service available in the rural areas is India Post’s money orders for which customers end up paying close to 5 percent of the remittance value. Besides, there might be payoffs involved to intermediaries like the postman in order to get the money. The charges could be significantly higher for informal sources. In addition to the direct cost, using these remittance services — from both formal and informal sources — often requires a significant effort and

Exhibit 6. High transaction time, documentation and financial illiteracy are top challenges



Sources: BCG’s Financial Inclusion Survey, October–December 2010; BCG analysis.

Note: The formal channels for savings account are scheduled commercial banks and non–bank companies; The formal channels for credit are scheduled commercial banks, micro–finance institutions and non–bank companies.

time commitment, which results in an additional burden and cost.

In addition, products like insurance, which the informal sector does not provide are largely absent.

Learnings from Other's Experiences

Organized players in other sectors have been able to develop profitable businesses for serving the marginal customers. For example, the penetration of wireless telecom services has increased dramatically and reached 752 million connections by December 2010 (rural connections: 248 million). Similarly, the penetration of FMCGs have also increased substantially and products such as washing powder and bathing soaps are now used in more than 95 percent of the rural households.

Even in the financial services, there are examples of tapping into this opportunity. In the recent past, MFIs have also been able to increase their penetration in this segment by emulating the advantages of the informal sector. MFIs are providing small-ticket loans at the customer's doorstep that are flexible in nature and require very limited documentation. Hence, it is not surprising that they have seen rapid growth in the last few years.

There is a large opportunity waiting to be tapped. The informal sector is present in this segment and is seeing value. MFIs and select NBFCs have successfully experimented and established a positive business case. Hence, as soon as banks and other formal financial service providers realize that they need to adapt to the customer requirements (and not vice-versa), they too can tap this opportunity.



The Challenge of Financial Exclusion

Why Earlier Efforts Failed

Many initiatives in the past have sought to increase financial inclusion. The first push into cooperatives came from Mahatma Gandhi where by he wanted to create a cooperatives structure to encompass the agricultural and rural population. An elaborate structure of state, district and primary agricultural societies was set up to provide financial services to the excluded sector.

Despite all efforts, in 1969, when Indira Gandhi nationalized banking, the situation was dismal, marked by high levels of exclusion and poor reach of banking services to the marginal customers. The period after nationalization saw a rush to open bank branches in rural and semi-urban areas and by 1990 the thrust had led to a significant increase in the number of branches in the rural areas. In fact, till 1969, India only had 8,262 branches, and by 1990, this had increased more than five-folds — to 44,968 branches — with rural areas accounting for almost 50 percent of the branches.

Around the same time, India introduced priority-sector lending to target groups that were being neglected by banks, such as agriculture, micro-enterprises as well as lending to the unemployed to set up businesses. Banks were also expected to develop credit plans for districts with the introduction of the lead bank scheme in 1969, which was refined in 1989 with the service area approach. Together, these efforts resulted in an increase in both, the reach and service offerings of the banks in rural areas.

In 1975, the Central Government, in partnership with Nationalized Banks and the State Governments, created the Regional Rural Banks (RRBs). These were expected to operate in rural areas using a different approach to

manpower as opposed to banks. The RRBs recruited locally in order to serve the local population better. In 1982, the National Bank for Agriculture and Rural Development (NABARD) was set up, incorporating a few departments of the Reserve Bank of India (RBI) into a separate agency to foster rural development. The more recent activities in this space are the introduction of the Kisan Credit Card in 1998, no-frills accounts in 2005 and the introduction of the BC model in 2005.

Unfortunately, despite all these efforts, the extent of exclusion in India remains large. Our survey shows that about 53 percent of the households do not have access to formal financial services. This is not surprising in a country where only 5 percent of the Indian villages have bank branches. Nearly 60 percent of India's population resides in the remaining 95 percent villages that do not have a bank branch.

Reasons for a Vast Financially Excluded Population

Despite all efforts on the part of the Government and the RBI, the problem so far has been largely intractable. The traditional business models of banks have not been geared for low ticket sizes that poor people can afford. Their income levels have also been too low to foster any significant savings. In addition, the organized sector has found it too costly and difficult to set up distribution networks in rural areas. This, together with the large information gaps in awareness and understanding of financial products, lack of proper identification mechanisms, poorly defined property rights and weak contract enforcement structure have pushed up the cost of serving this group.

There exists a vicious circle of financial exclusion — the needs of these excluded customers can't be met because the cost of servicing them is very high. And high costs, in turn, make the service offerings unaffordable to these customers. The result — the excluded remain excluded. This cycle has been compounded by limitations in regulation and technology (as shown in Exhibit 7).

Having already discussed the demand-side challenges in the previous chapter, the next three sections discuss the challenges on the supply side, regulations and technology that contribute to this vicious cycle.

Supply-side challenges

The most critical challenge for financial inclusion initiatives is to maintain an efficient and low-cost distribution network across the vast geography of India. This gets even more complicated as the delivery of financial services in these areas involves much more cash management than the other sectors. Besides this, initiatives also struggle to attain scale due to low adoption rate.

Winning the customers' trust and explaining the benefits of financial products to them are some of the biggest

challenges faced by the frontline agents in the day-to-day delivery of financial services. One of the reasons behind this is the lack of basic literacy and apprehensiveness of marginal customers in dealing with the formal, organized financial firms.

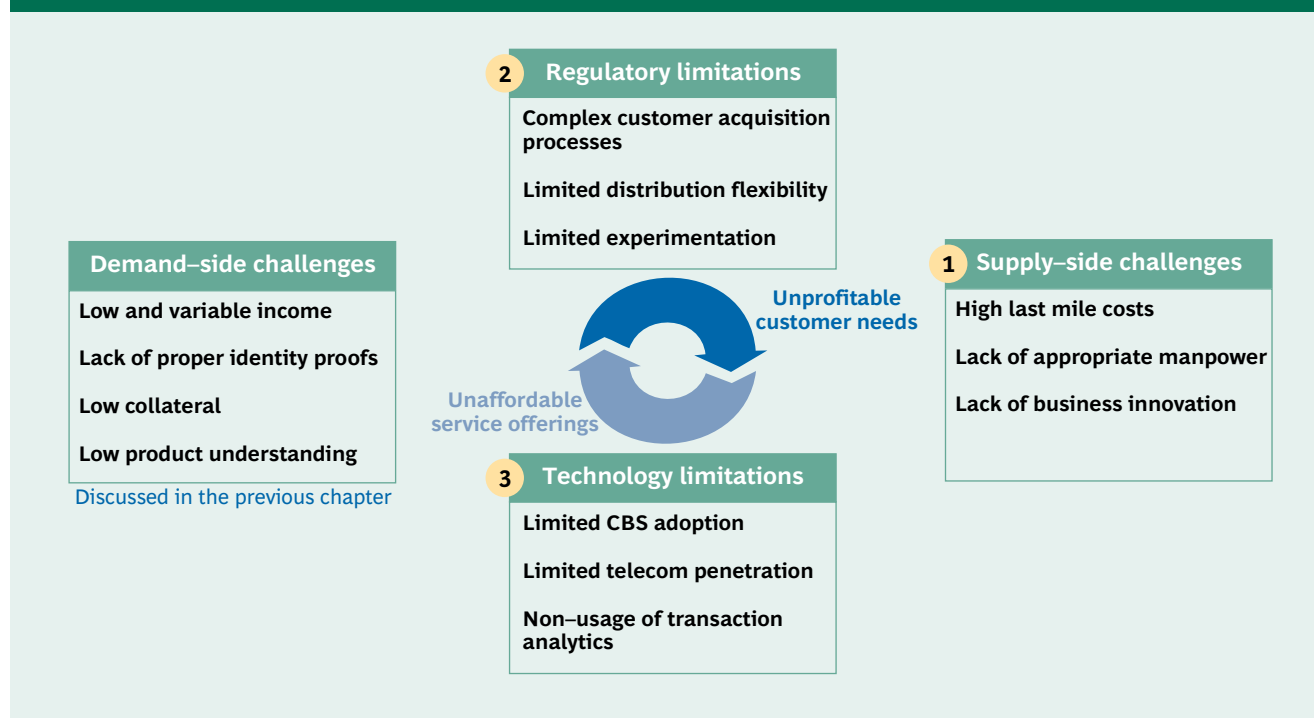
These challenges in turn lead to limited experimentation and innovation in trying to make the financial inclusion initiatives successful. Overall, financial inclusion initiatives have largely become an obligation, with banks doing or planning to do just enough to satisfy the Regulator and the policy makers.

Regulatory limitations

Traditionally in India, as elsewhere, the Regulator has focused on systemic stability and depositor protection. Additionally, during the last decade, the Regulator had to introduce safeguards like KYC norms, as part of the prevention of unlawful activities (for example, money laundering, terrorism, etc.).

The cost of KYC forms a substantial portion of the overall customer acquisition cost. The full KYC cost varies between ₹150 and ₹250 per new customer, acquired

Exhibit 7. Besides demand-side challenges, there are three key challenges contributing to financial exclusion



through the traditional banking network. This results in a heavy burden on the viability of the marginal customers. It is only in 2005 that no-frills accounts with relaxed KYC norms have been introduced. These no-frills accounts have reduced the KYC outgo but there is room for further reduction using the new authentication methods available. Similarly, even during traditional transaction processing at bank branches, the verification of a customer adds to the cost burden.

Historically, there have been limited options other than the traditional branch-based model for distribution. In the last five years, the Regulator has permitted the introduction of BCs. Even though the Regulator has introduced BCs as the 'last mile' customer touch point, the restrictions on who can become a BC had constrained the availability of credible, national-scale BCs. It is only in December 2010 that for-profit entities have been allowed to become BCs.

Also, there is limited experimentation by service providers due to concerns of attracting the Regulator's disapproval. For instance, given the low balances maintained by the marginal customers, the traditional float-income-based³ banking model is not appropriate. The usage of this traditional model has resulted in most financial inclusion initiatives being unviable. Even now, most service providers are wary of experimenting with a transaction-pricing-based⁴ business model, due to uncertainty over how the Regulator and more broadly the political economy may perceive these initiatives.

Technological limitations

Adoption of the Core Banking System (CBS) and Automated Teller Machine (ATM), technology for the delivery of financial services has been a fairly recent phenomenon. Use of technology in increasing the reach of financial services to the excluded sector has not been fully harnessed for increasing financial inclusion.

♦ Till recently, the adoption of CBS was limited

CBS adoption by public sector banks started only 10 years ago. It is only recently that all their branches have come onto this platform. Earlier, most work, like transaction processing and record keeping was done manually by the bank employees. This required substantial time commitments on their part. Moreover, it limited the customer handling capacity of a branch and increased the service delivery cost. As a result,

addressing the marginal customers became highly unprofitable for banks.

♦ Non-availability of transaction analytics data for credit assessment

India has had limited availability of transaction analytics data for customer credit assessment. The ability to identify 'good' customers can allow financial service providers to reduce their overall service delivery cost. The adoption of transaction analytics has been limited not only because of limited technology usage by financial service providers, but also because of the lack of a unique customer identifier, which prevented data from various accounts of a customer to be merged for analytics.

♦ Telecom penetration in rural areas was limited

While this decade has seen tremendous growth in telecom connectivity, till recently, most of the growth was coming only from the urban areas. The connectivity in rural locations was erratic and unreliable. Thus the adoption of modern IT systems, which depend on telecom connectivity for delivering financial services in rural areas, was not possible.

Burden of Obligation

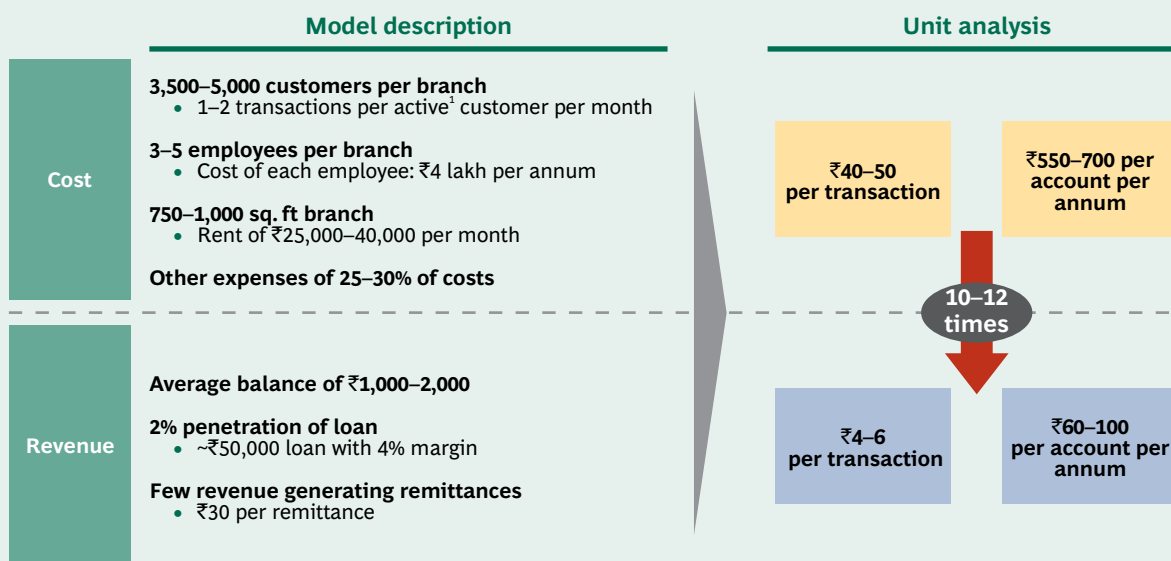
The cost of service delivery, till recently, was as high as 10–12 times the revenue potential of the marginal customer (as shown in Exhibit 8). As a result, financial inclusion through the traditional model was not a viable business proposition. A 100 percent inclusion mandate would have cost financial service providers, using their traditional business model, around ₹20,000⁵ crores per annum. Clearly financial inclusion was an obligation and was seen as such by financial service providers. Thus, they did only as much as was forced by the Regulator and the Government.

3. The traditional business model where banks primarily make money on savings accounts through net interest income on the deposit maintained by the customers.

4. Business model where banks primarily make money on each transaction (deposit / withdrawal, money transfer) that the customer makes on the deposit account.

5. Based on the assumption that the 53 percent excluded households get 1.25 accounts per household and there is a loss of ₹600 per annum per account. In addition to this loss, banks also incur KYC cost and give loans of ₹15,000 to 50 percent of these households at 6 percent loss per annum.

Exhibit 8. Traditional branch-based model leads to cost-income ratios of 10–12 times



¹80 percent of the customers are assumed to be active.

Recent Changes not Sufficient

It is only recently that some for-profit MFIs have started viewing this space as an economic opportunity and private equity funds have started to fund these agencies. It is the first time that some part of the formal sector has started to see financial services to the excluded, as a profit opportunity (the informal financial sector, which some could argue is the second oldest profession existing in India, has been making money here since time immemorial). This report argues that for a meaningful dent to be made in the extent of financial exclusion, this segment needs to be served and seen as a financial opportunity. The growth in the Indian economy over the past five years creates the platform on which new business models may be able to target this segment profitably.

Given the substantial cost-income gap that exists in the financial exclusion challenge, economics hold the key to any meaningful solution. It is noteworthy that many recent positive changes have been instrumental in improving the economics of the financial inclusion initiatives, yet challenges remain. Some of these positive changes are discussed below, followed by a sub-section that evaluates the economic impact of these changes.

Recent Positive Changes

♦ Strong economic growth

Over the past ten years India's GDP growth rate has been increasing and has averaged around 8 percent over last five years. The consequent increase in per capita income has made the financially excluded segment more attractive than before. This is reflected in the growing significance of FMCG products and mobile phone sales coming from this segment in rural areas.

♦ New technological developments

The last decade has seen dramatic technological advancements leading to the development of new solutions for the banking industry. This has helped service providers develop business models that weren't possible till recently. Some of the key technological developments are:

- **Ubiquitous telecom connectivity** allowing service delivery at a large number of banking outlets including traditional branches as well as ATMs and Point of Sale (PoS) outlets.
- **Almost 100 percent CBS technology adoption** leading to smooth service delivery at low cost.
- **Real-time transaction processing** at low cost through intermediaries like NPCI, Visa and Mastercard.
- **Creation of a fully-electronic value chain** drastically reducing costs and increasing reach (for example, mobile call rates have reduced to <40 paise per minute from ₹16 per minute in 1999).

♦ Positive regulatory changes

The Regulator has recognized the need for building an efficient low-cost distribution network and has made a step-change by introducing BC guidelines in 2005. With the recent revision in the BC guidelines, the avenues for reducing distribution costs have opened up significantly. Now BCs and sub-agents can also operate as a single-person delivery channel. They can travel to meet customer and act as low cost-effective channel with a human touch. Despite this, the current economics are not working for BCs. This problem

needs to be addressed expeditiously in order to realize the benefit that can accrue from this bold regulatory change. Banks are experimenting with different kinds of BC models and Illustration 2 provides details of some of the prevalent BC models.

♦ **Select disbursal of Government payments through banking channels**

So far, most Central and State Government welfare schemes were being promoted through cash, owing to the limited penetration of banking services among marginal customers, especially in the rural areas. The Government was also averse to paying commission to the banks for enabling these transactions. Recently, some Central and State Government bodies have

started disbursing payments to the rural population through the banking channels. For example, a significant portion of MGNREGA payments in Andhra Pradesh are being disbursed directly to the recipients' bank accounts instead of disbursal in cash (as shown in Illustration 3). For enabling these transactions, the banks receive 2 percent commission from the State Government. Similarly, with the recent launch of UIDAI's Aadhaar number, a growing number of State Governments have expressed the desire to gradually transition to a position where transfer of all social welfare payments takes place to Aadhaar-linked bank accounts.

Yet, so far, only the surface has been scratched. There is a large potential yet to be tapped with regards to

Illustration 2: Different BC models being experimented

Since the guidelines for BCs were released by the Reserve Bank of India (RBI) in 2005, banks and BC organizations have experimented with different models. A brief description of some of these is given below:

♦ **Offline point-of-service-based model**

This is currently the most-dominant form of service and is being used by BCs like FINO, Integra, Atom and A Little World. In this model, the agent carries a handheld device with an in-built biometric scanner and printer. Most devices carry out transactions in the offline model and upload it on the BC server at the end of the day. Transactions offered include deposits, withdrawals, and in some cases disbursements under welfare schemes (like MGNREGA, old age pension, etc.).



♦ **Online kiosk-based model**

This model has found favor amongst service providers like HCL and TCS. In this model, the agent sits at a predefined place and is connected through the PoS device and an Internet-enabled computer. This model has the advantage of providing a more comprehensive service offering (including instant enrollment for new account). Its biggest limitation is non-mobility.

♦ **Online mobile-based solution**

This solution has been adopted by a few players like Eko and TCS. It uses a PIN-based system for authentication. Being online, it ensures that the transactions are updated real-time on the main server.

Thus different models are being tried out by the BCs. Agent viability continues to be the biggest concern for both, banks and BC service providers. Different approaches are being tried out by service providers to augment BC income. These include enabling the BC agents to undertake alternate transactions like ticketing and mobile recharge or to engage them in other activities like milk collection centers. This is being done to ensure that the sub-agent has an additional source of income and is not dependent only on the financial inclusion initiative for livelihood.

Source: Field visits and discussions with BCs and banks

routing payments through the banking channel. It is estimated that about ₹300,000 crores worth of welfare subsidies and payments are disbursed by the Government. Ensuring this amount flows directly into the recipient's account using the banking system would be a big step forward in giving a fillip to this exercise.

Transition from Obligation to Opportunity

So far, banks are largely still following the traditional business model and making small changes to it using the technological developments and new BC model. However, currently the BC model itself is not sustainable and hence these initiatives have achieved limited success.

Overall, these recent changes have led to reduction in the cost-income ratio from the range of 10 to 12 in the traditional branch-based model to the range of 3 to 4 in the current BC-led model (as shown in Exhibit 9). Please refer to Appendix III for details. Yet, the gap remains and hence financial inclusion is still treated as an obligation.

Thus, not surprisingly, the banks are still wary of fully committing to financial inclusion.

Illustration 3: MGNREGA disbursal in Andhra Pradesh

The Government of Andhra Pradesh has made significant efforts in ensuring that payments under MGNREGA are received by the intended beneficiaries with minimal delay and leakages. Towards this, they have gone on an account opening drive and about 2 crore savings accounts have been opened in the last fiscal year itself.

For the year 2009–2010, out of the wage payment of approximately ₹3,500 crores, 97 percent was made through direct payment to beneficiary savings accounts. Of these, about 80 percent were done through post office savings accounts and about 20 percent through bank savings accounts. Also, care has been taken to ensure that the accounts are opened in individual names and not jointly to avoid exploitation / harassment by family members.

Source: www.nrega.nic.in, December 7, 2010.

Exhibit 9. Recent policy changes have bridged the cost-income gap to some extent, yet gaps remain

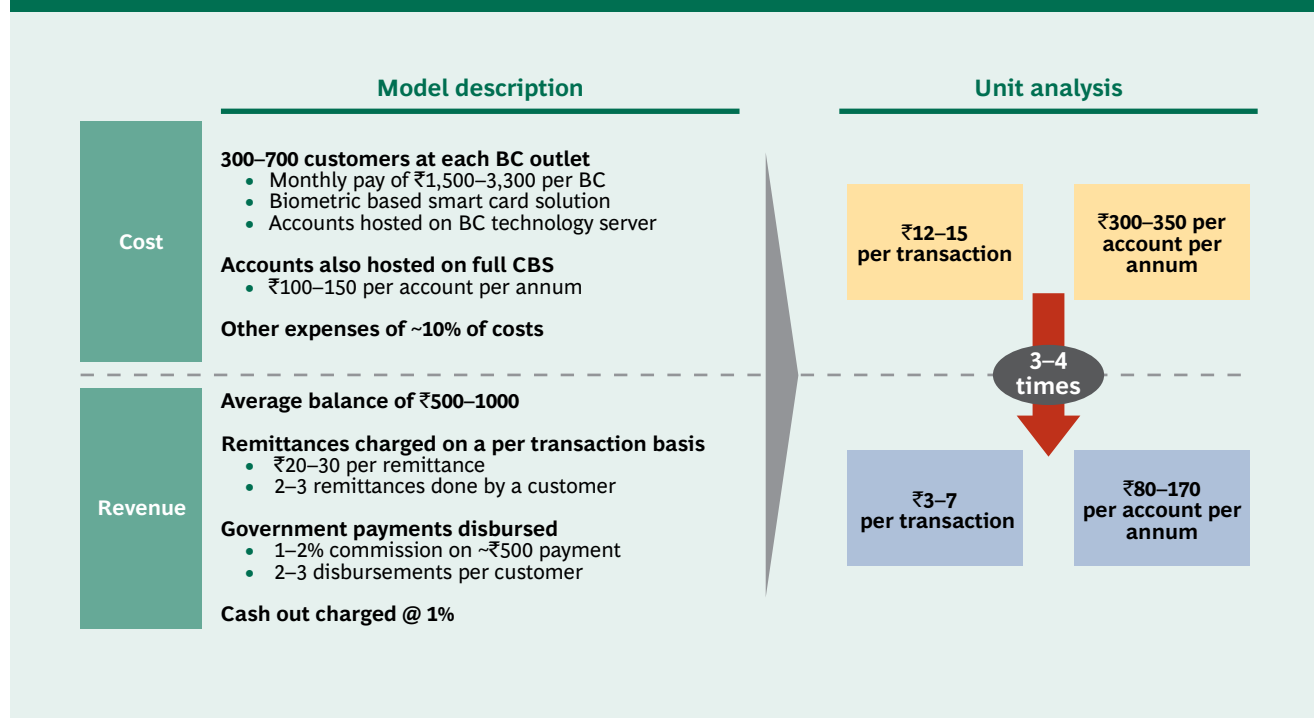
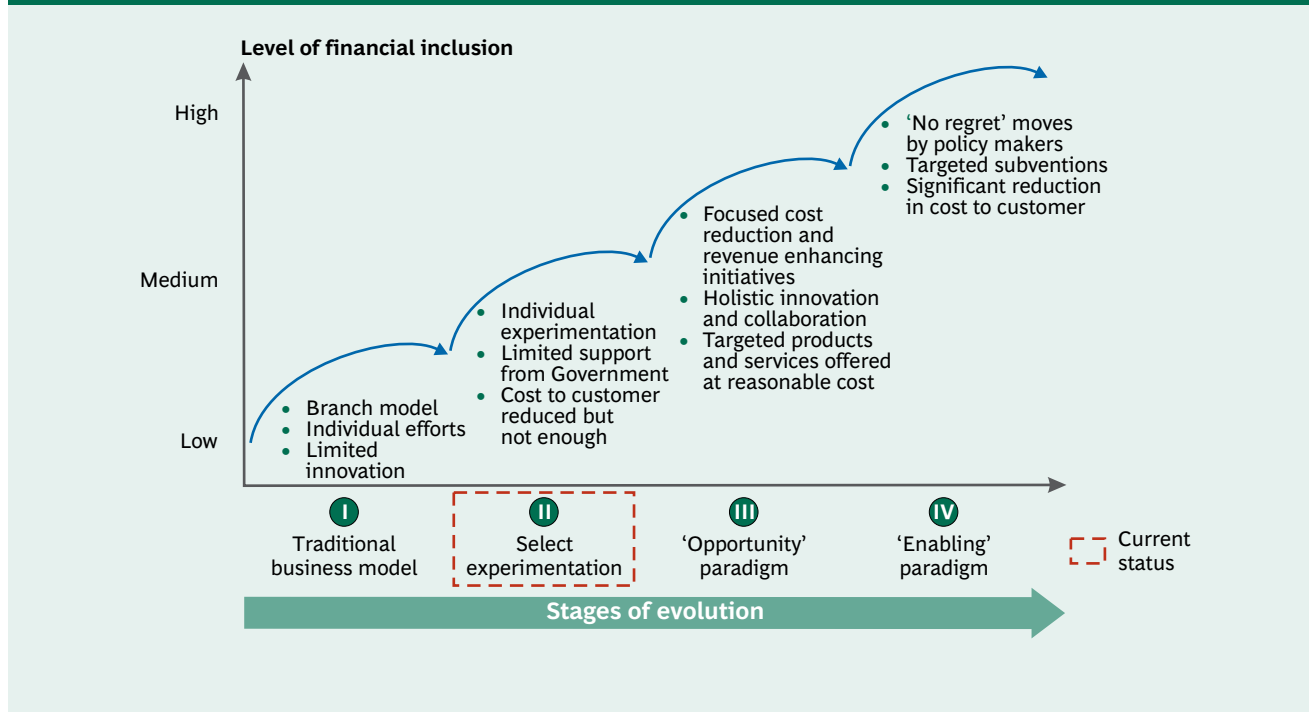


Exhibit 10. India is currently on step two of the four-step financial inclusion journey



To move out of the obligation mode into one of opportunity needs a big change. All stakeholders need to change their thinking and attitude to make any dent here and it is important that all stakeholders recognize:

- ◆ These customers do not consider the informal sector bad, but rather see them as an important service provider to tide over tough times created by their fluctuating incomes. Hence, it is important for formal financial service providers to benchmark themselves to the service levels on offer from the informal sector.
- ◆ Customers do not mind paying charges as long as they find value in service delivery. They are paying high charges today to the informal sector because they want the service.
- ◆ It is critical for the formal sector to reduce their documentation requirements and the time taken for service delivery (for instance, opening a bank account) since these alienate the marginal customers.

- ◆ And lastly, Regulators and policy makers need to allow the financial service providers to treat this segment as a profit opportunity. This requires them to encourage a pay for use model.

Only if this segment is treated as an opportunity will we see adequate innovation and experimentation from the formal sector, resulting in adoption by the marginal customers. This will help deepen financial inclusion in the country (as shown in Exhibit 10).

Recent developments such as Aadhaar and for-profit BC guidelines have transformative potential. In addition, the penetration can be further increased if the policy makers were to create an enabling environment.

The next chapter describes in detail how the service providers can transform this segment into an 'Opportunity' paradigm and the subsequent chapter describe how an 'Enabling' paradigm can help increase the penetration further.

Making the Transition

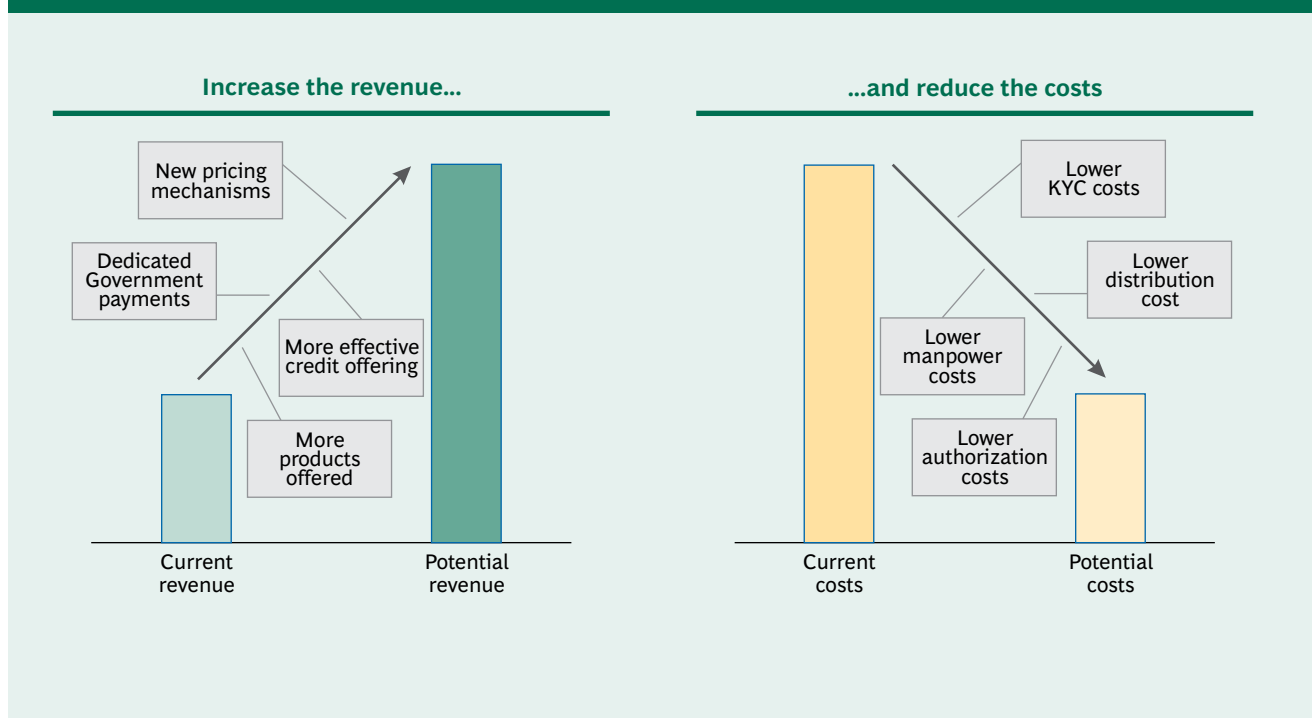
Role of Market Participants

Though the cost-income gap has reduced significantly in the recent past, it is still a substantial roadblock in achieving financial inclusion. In order to take advantage of the positive changes taking place in the ecosystem and to convert financial inclusion into an opportunity, the business models need to change fundamentally. This can create a significant and long-term opportunity for the financial service providers while benefiting the customers. As shown in Exhibit 11, the business models need to evolve in terms of both,

costs and revenues — the cost of service delivery needs to be reduced while creating additional revenue sources.

The sections below outline the various initiatives that can help the service providers bridge the cost-income gap by decreasing the cost and increasing the revenue potential of these initiatives. They also outline the key choices that the service providers would need to make and highlight the possible benefits accruing from such initiatives undertaken by service providers.

Exhibit 11. Focused effort required to enhance revenue and reduce cost



Viability Improvement Through Focused Cost Reduction

Many initiatives will need to be undertaken to reduce the cost of service delivery. These initiatives are discussed below:

Lowering manpower costs

As shown in Exhibit 12, manpower costs account for more than half of the service delivery cost in the traditional banking model. Given its magnitude, it's critical to bring down the manpower cost in order to make the economics work for servicing the excluded customers.

One way of doing that is by adopting cost-effective technology such that there is lesser need for human intervention / effort. For example, even within the traditional banking space, adoption of CBS has reduced human effort in generating transaction reports.

Technology adoption by itself is not sufficient. Financial service providers need to fundamentally rethink their approach to talent. Significant effort needs to be put into recruiting and training manpower locally, thus reducing

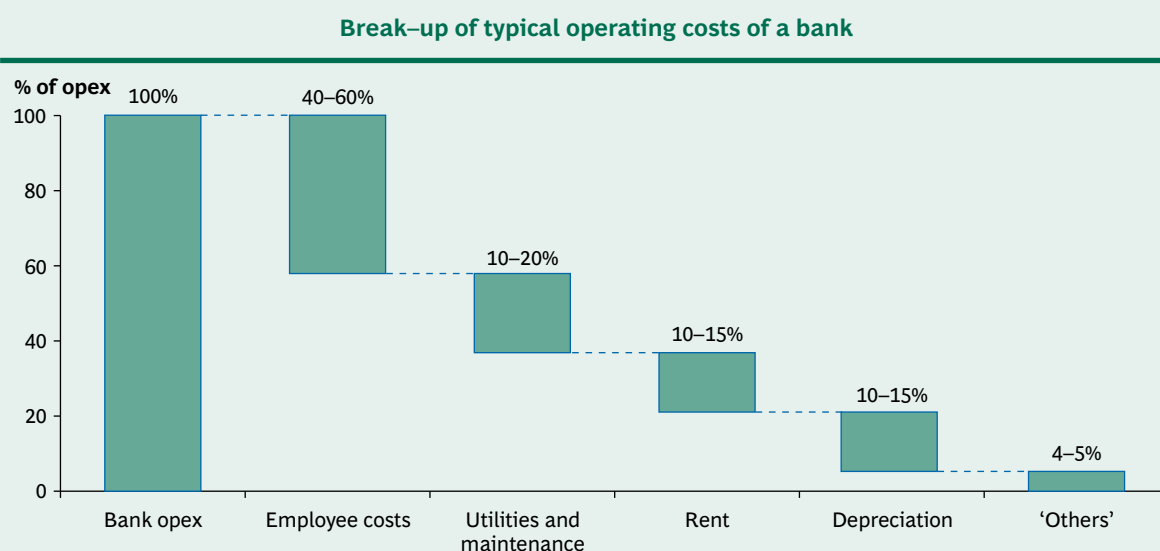
the manpower costs. Examples of this can be found within the financial services space itself where NBFCs, MFIs and more recently BCs have innovated on reducing the per employee cost. These can be emulated by other players for their financial inclusion initiatives. Exhibit 13 outlines the current distribution cost across various financial service providers.

Leveraging new guidelines to lower the cost of distribution network

While delivery through the BC network has seen substantial success in reducing the cost, the reach and number of available BCs has been a cause of concern. Till recently, there was a restriction on for-profit BCs from participating in the ecosystem. This restricted the entry of experienced players with established networks that could help with a rapid ramp-up of the distribution networks of banks. This roadblock has been eased with the recent notification that allows for-profit BCs to participate in the ecosystem.

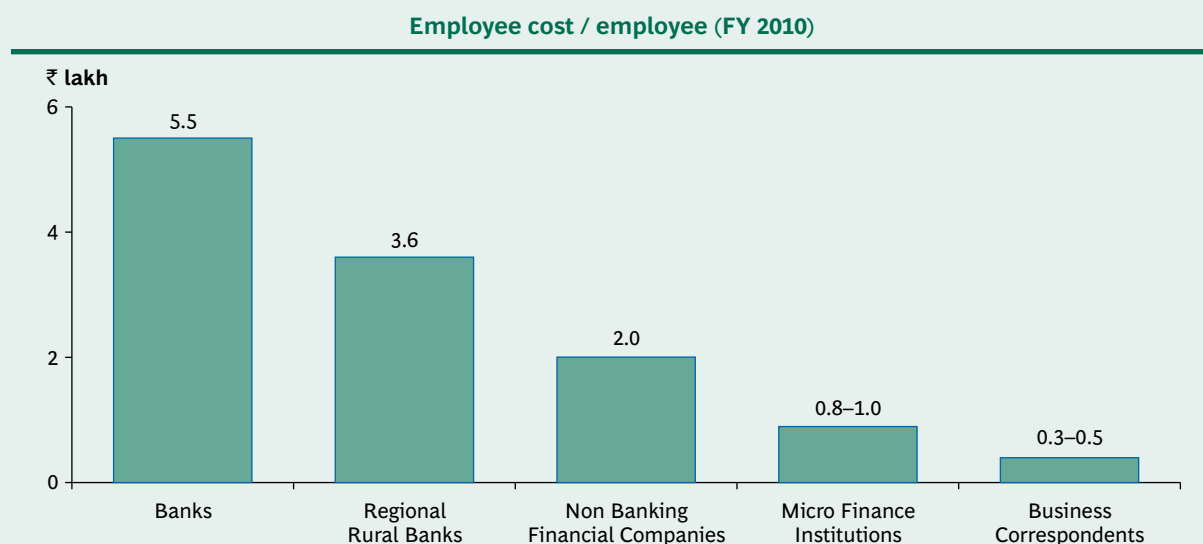
Post this relaxation, it is prudent for financial service providers to leverage the existing network of companies as compared to building new ones from scratch. The

Exhibit 12. Employee cost is a major 'opex' in the traditional banking model



Sources: Bank annual reports, Industry discussions.

Exhibit 13. Distribution cost varies significantly across financial service providers



Sources: IBA, Company annual reports, BCG analysis.

distribution networks of telecom, FMCG, agricultural and pharmaceutical companies are some examples in this regard. This would not only allow financial services firms to ramp up quickly, but also allow them to leverage the learning and competency acquired over time by the distribution company. There are different partnership options that service providers can explore in order to leverage the distribution network of corporates (as shown in Exhibit 14).

Recently, multiple tie-ups have been announced between banks and telcos to expand the former's distribution reach, viz. SBI-Airtel, ICICI-Vodafone, Axis-Idea, Union Bank-Nokia. This is a welcome development and it is important that these tie-ups succeed.

Further, NBFCs could also be potential contenders to increase the reach of banks, but currently they are not allowed to become for-profit BCs. Hopefully, RBI at its next review will reconsider this decision and not continue to debar their participation. The economic case for becoming a BC is most powerful for businesses which already have customer access and points of presence. The issue of conflict of interest between banks

and NBFCs should be left to individual banks to decide.

Adopting efficient and cost-effective technology

The rapid technology evolution is enabling efficient and cheaper delivery of financial services that were not possible till a few years ago. For instance, mobile phone is fast becoming a critical delivery channel for financial services due to its ever increasing penetration rate and improvements in connectivity. It is important that while choosing and investing in technological solutions, the service providers adequately plan for the future needs of the customers. There are three critical factors that any financial service provider should consider (as shown in Exhibit 15).

1. Create interoperability among sub-agents

Given India's size, it is extremely difficult for a single service provider to comprehensively cover the entire geography. Of the various banking channels, ATM and PoS have already moved to interoperable solutions that can be shared across banks. This has helped in increasing the efficiency of the distribution

Exhibit 14. Different partnership models can be explored between banks and corporates

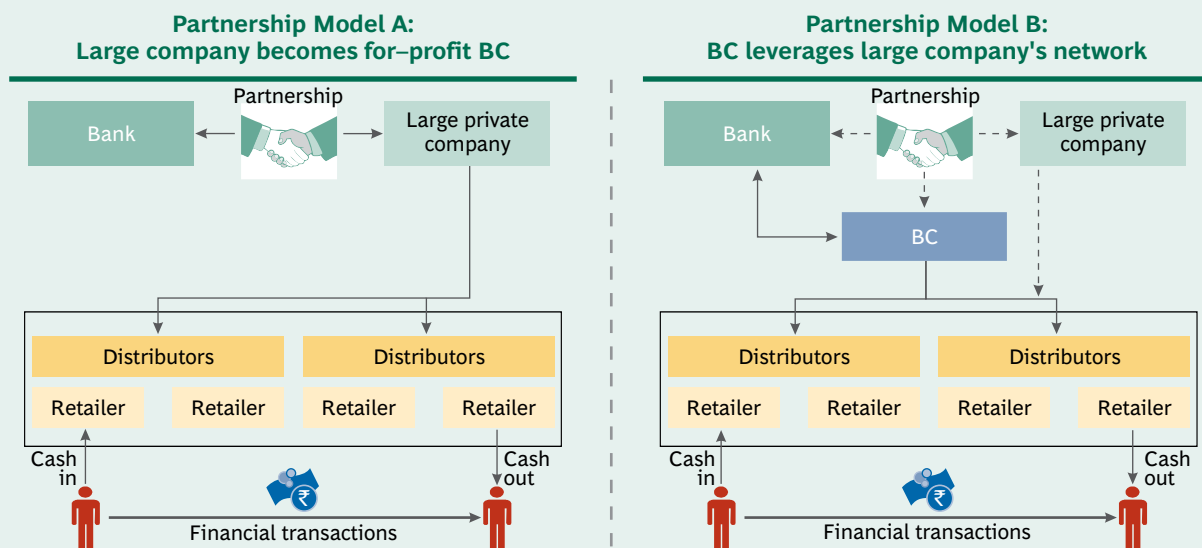
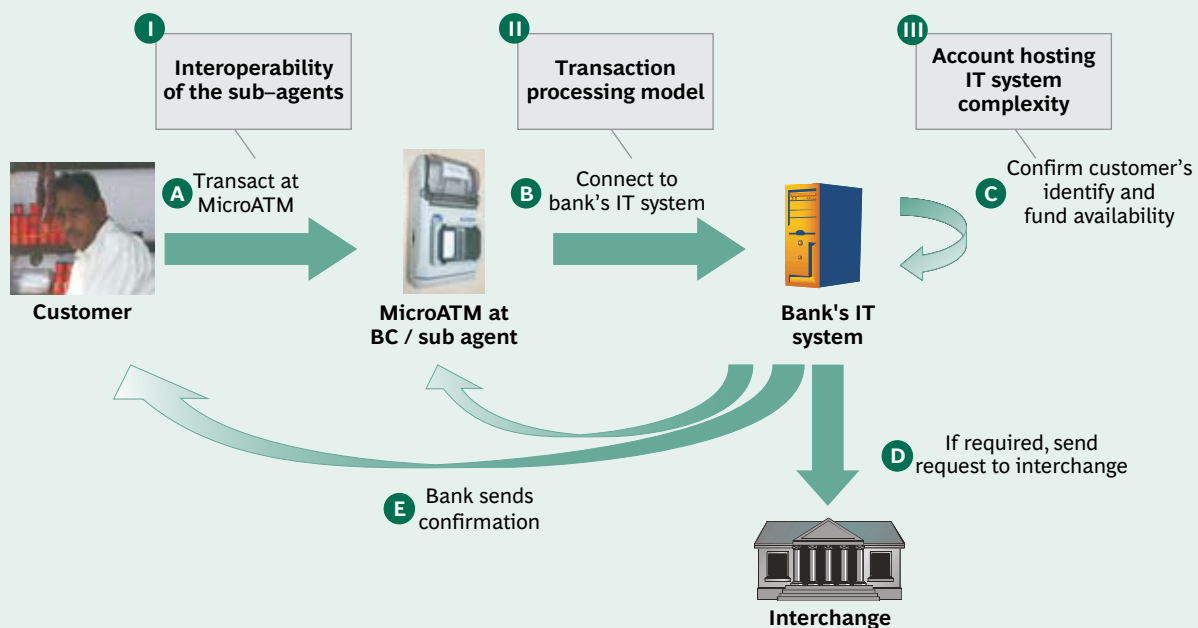


Exhibit 15. Three key factors need to be considered in technology



network and reducing the overall infrastructure requirement.

For financial inclusion, it is critical to build adequate infrastructure and to avoid duplication of investments. It is, therefore, important for financial service providers to evaluate a solution for interoperability before adopting it on mass scale. Currently, many solutions being adopted by BCs are not interoperable. The recent MicroATM standards finalized by a RBI constituted committee (comprising representatives from RBI, IBA, banks, NPCI and UIDAI) which provides details of technical specifications for an interoperable hand held device is a step in the right direction.

2. Leverage appropriate transaction processing mode

The comparison of offline versus online platform shows that there are substantial benefits offered by the online solutions over the offline ones. The benefits of the online solutions are multi-fold (as shown in Exhibit 16). Also, online approach holds the key to triggering the network effect, which in turn is integral to widespread adoption.

However, the adoption of online solution is dependent on the quality of telecom connectivity. Though telecom connectivity is not yet seamless across the country, large parts of the country do have adequate telecom coverage. Additionally, the areas that have telecom connectivity are increasing at a very rapid pace. Further, there are ambitious plans afoot to provide fiber optic connectivity at the Gram Panchayat level.

3. Use cost-effective account hosting solutions

There are various IT solutions available with financial service providers for hosting customer accounts. These solutions have varying degree of functionality and cost. For example, the usual CBS solutions offer several functions, like wealth management and multi-currency solutions, which are not needed for the poor and marginal customers and thus may turn out to be too costly if applied for this segment.

On the other hand, the typical prepaid solutions are very light in terms of functionality and usually do not have essential features, like interest calculation, loan management, etc., that are critical for offering service

Exhibit 16. Online platform has significant advantages, current adoption limited due to connectivity challenges

	Offline-transaction processing		Online-transaction processing	
Channel choice	Less – Can access the account only through designated BC clusters	✗	More – Can access account at any channel offered by the bank	✓
Service offering	Less – Certain services require online connectivity, like mobile recharge, ticketing	✓	More – Online connection allows offering of ticketing, mobile recharge and other services	✓
Flexibility to customer	Less – Balance with BC gets updated only on synchronization at end of day, thus account credit reflected next day	✓	More – Account balance is most updated; thus permitting withdrawal instantaneously	✓
Risk mitigation	Less – Account information is stored locally; thus no disaster recovery if both card and BC device get damaged	✗	More – Account information stored centrally with disaster recovery backup	✓
Technological ease	More – Doesn't require connectivity for transaction processing	✓	Less – Requires connectivity at all times for transaction processing	✓

Both offline and online models serve a purpose; BCs / banks should transition to online models where good connectivity exists

*Certain banks provide override facility to the BC.

to the marginal customers. Therefore, financial service providers need to adopt the right account hosting system, keeping in mind the needs of the customer segment.

Using the Aadhaar platform for rapid growth and lower cost

In 2009, the Government of India constituted the UIDAI to issue Unique Identification Number (UID), called Aadhaar, based on biometric de-duplication to every resident of the country. About 1.3 million Aadhaar numbers have been issued in a short period of time since its launch on September 29, 2010. It is expected that UIDAI will roll out 600 million Aadhaar numbers (in a phased manner) over the next four years (as shown in Exhibit 17).

This is an extremely ambitious target that will result in the UIDAI having the largest biometric database anywhere in the world (the current one being 120 million people in the United States). This is a one of its kind program that will not only uniquely identify all the residents of India but can also help in significantly reducing the delivery cost of financial services. The UIDAI

has set up an online authentication system that can be used to verify anyone through their Aadhaar number and demographic or biometric information.

This authentication system can be accessed by financial service providers to verify an individual's details anytime, and from anywhere. The use of this online authentication system for transaction processing could help financial service providers save the cost of setting up and maintaining authentication systems at their end.

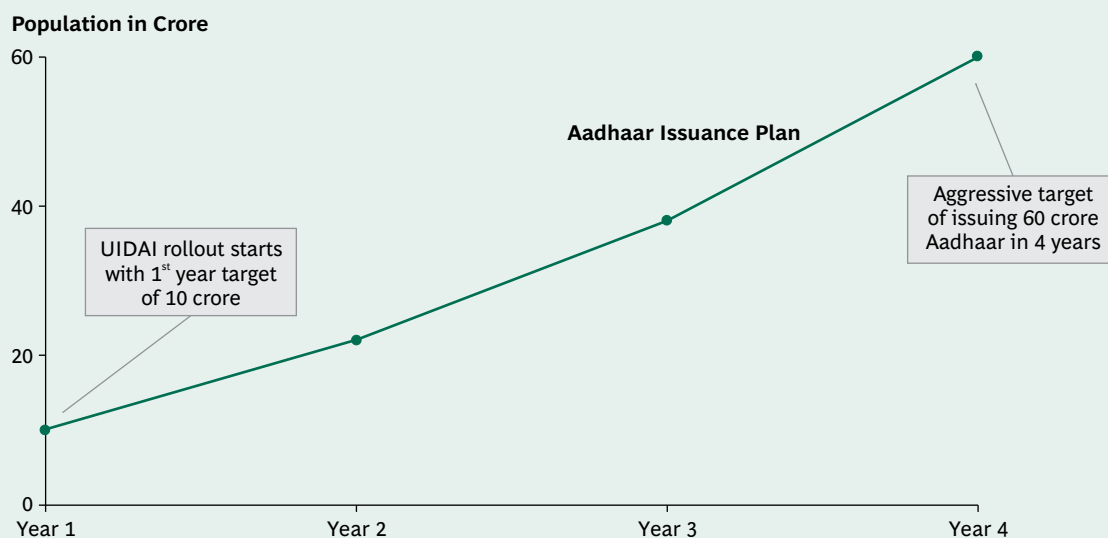
Viability Improvement Through Revenue Enhancements

The initiatives on the cost side will need to be complemented with push on the revenue side to make the overall economics work for serving the marginal excluded customers. We discuss some of the initiatives that the service providers need to focus on in order to enhance revenue realization.

Targeted product and service offering

One of the key challenges in serving the marginal customers is their limited ticket sizes and hence limited

Exhibit 17. Opportunity to leverage rapid growth in Aadhaar number issuance



Sources: UIDAI announcements.

revenue potential from any service offering. But even though their ticket sizes are low, the range of financial products and services needed by the marginal customers is not less. Illustration 4 below details of one such initiative — Kshetriya Gramin Financial Services (KGFS) — that offers a broad range of products to the marginal customers.

Financial service providers should not only consider all financial products like deposits, remittances and credit, but also look at capturing other financial needs of the customers, like insurance and investment. Additional services for consideration include bill payments for utilities, recharge services for mobile and ticketing services.

In addition to exploring a wider range of service offerings, there is need for an offering customized for meeting the needs of these marginal customers. For example, the repayment periods and frequency of loans should ideally be adjusted to meet the demands of customers that have highly variable or seasonal incomes. This will not only increase the viability of these initiatives, but also provide flexibility to the customers who are currently forced to

avail loans from informal sources due to this very reason.

Transition from float economics to pay-per-use economics

There is a need for the financial service providers to re-evaluate pricing and payment models while serving the marginal customers. For example, the traditional float or interest income-based savings account model were created to serve the rich and high account balances. Where lower balances are maintained this model does not work. Similarly, the traditional Equated Monthly Installment (EMI) based credit models do not suit farmers who have seasonal incomes. This mismatch results in low profitability from the marginal customers and hence the service is either stopped or never provided.

It is important to design products that suit the needs of the marginal customers, while ensuring viability for financial service providers. For instance, banks must switch from the float or interest-based-savings model to a pay-per-use model where customers pay a small transaction fee for every withdrawal they make. This is in line with the recommendations of the recent Inter Ministerial Group

Illustration 4: Product and service offering of KGFS

The Kshetriya Gramin Financial Services (KGFS) is an innovative financial service initiative started by IFMR Trust in 2008 and is currently running in Tamil Nadu, Orissa and Uttarakhand. KGFS operates through a branch model with local wealth managers offering a variety of products including loan, insurance, investment and remittance.

The products are offered as part of the ‘Plan, Protect, Grow, Diversify’ philosophy that they follow. In the Plan phase, they enroll the customers in the system, visit their homes and offer loans. In the Protect phase, they begin offering insurance. In the Grow phase they begin offering investment products like money market mutual funds (MMMFs) and finally in the Diversify phase they encourage customers to invest in gold coins, begin sending remittances, and so on.

They offer a wide range of products covering many of the customer’s critical needs :

- ◇ Loans: They provide loans to both Joint Liability Groups (JLGs) and individuals across product categories including jewellery, retailer, gold, salary and emergency
- ◇ Insurance: This includes both personal and livestock insurance
- ◇ Investment: Various avenues are provided including MMMFs and gold coins
- ◇ Remittances: Both international and domestic remittance services are provided

Source: Field visit.



(IMG) report. In this model the banks can recover some of their cost on a transaction basis and can better match revenue and cost (as shown in Exhibit 18).

Overall, it is critical that the Government and Regulator encourage business model innovations and create an environment where the service providers compete with each others to find new ways of serving the excluded customers. Currently, even though the Regulator has allowed reasonable charges to be levied on the customers, very few service providers are experimenting with the pay-per-use model due to the fear of attracting undue attention.

Key Choices for Financial Service Providers

The earlier sections outline the various initiatives that the service providers need to undertake in order to bridge the cost-income gap. Within these initiatives, there are various choices that the service providers would need to make. The profitability as well as the long-term success of their financial inclusion initiatives would be dependent on these choices. Below we outline some of these key

choices and the potential options that exist for each (as shown in Exhibit 19):

◆ Distribution partnerships

Building a low-cost distribution network holds the key to successfully serving the marginal customers. While it is largely clear that banks would need to leverage the BC structure to build this low-cost distribution, there can be many ways to structure a successful BC-based distribution network. The service providers should evaluate their distribution network along two major dimensions:

a) **Nature of the BC partner:** The bank's own distribution network of branches and ATMs can be complemented with the BC network in many ways:

- Many localized BC partnerships (example, self help groups and other local entities, service providers at the state level, etc.)
- Few local partnerships complimented with select deep nationwide partnerships
- Nationwide partnerships with one / few players

Exhibit 18. Transaction-based pricing makes low balance accounts profitable

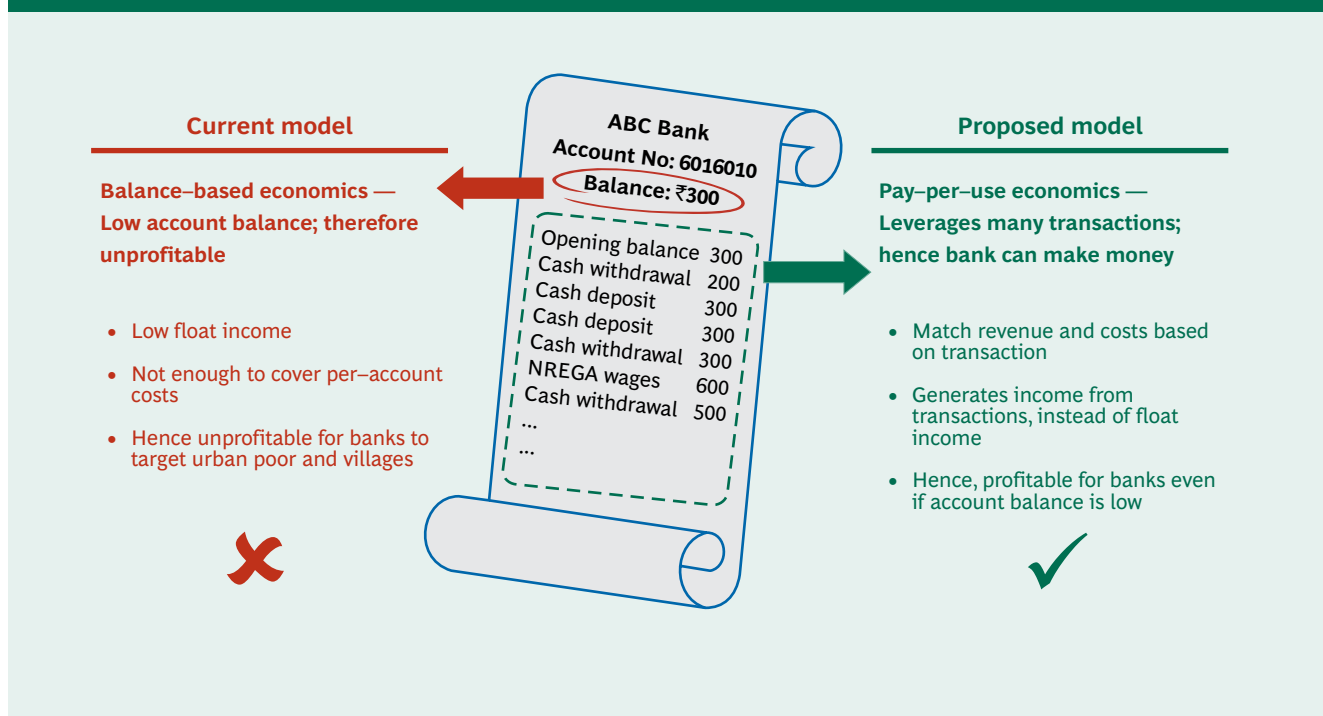
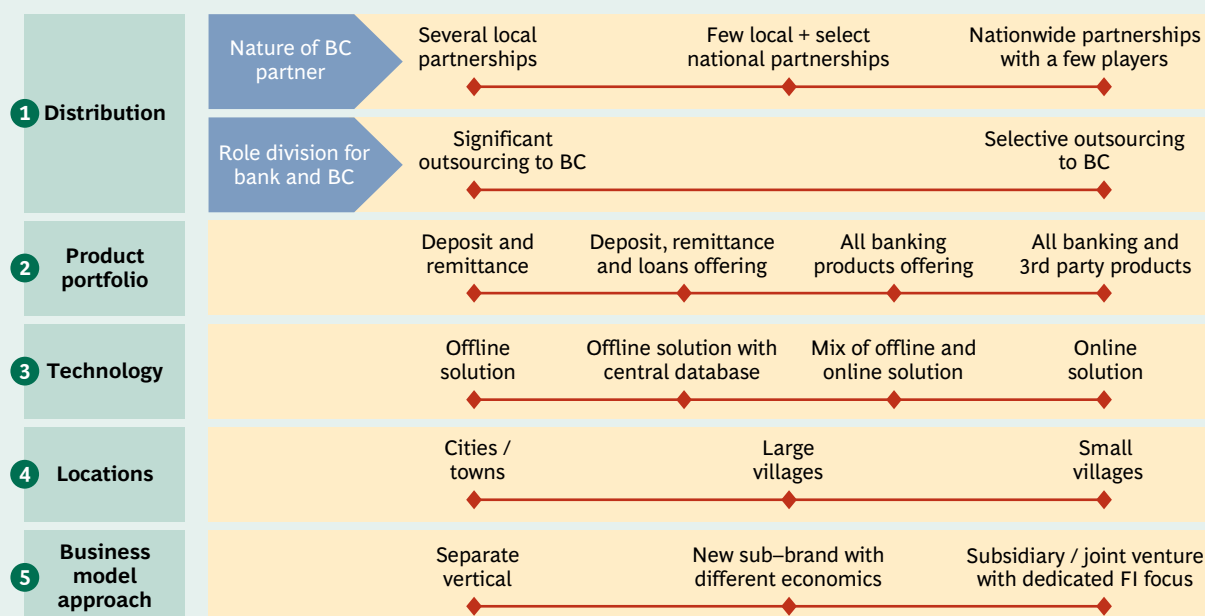


Exhibit 19. Service providers should choose carefully along all dimensions based on their capabilities and aspirations



b) **Division of role between the bank and the BC partner:** There is a need to strike a balance between the role of the bank and the BC and the commensurate implications on capability building for banks. There are multiple ways of structuring this partnership by focussing on the sub-activities across the value chain and splitting these activities between the two partners. Some illustrative models can be:

- Partnerships where complimentary capabilities are leveraged such that BC brings distribution and bulk of the manpower while the bank brings oversight, products, processes and IT systems.
- Partnerships where BC does bulk of the activities across the value chain and banks outsource substantively including the IT system, processes, etc.

◆ **Product portfolio**

As discussed, choosing the right set of products is critical. This choice impacts the revenue potential of the financial inclusion initiative. Commensurately, it also impacts the distribution network and its capabilities as some of the products like loans require

more sophisticated distribution capabilities than say remittances. Thus, the mix of product offering for a financial inclusion initiative also impacts the structure of the distribution network. These product offerings can be classified as follows:

- **Deposit and remittance offering:** Only deposits and remittances are offered to the customer. No loans or other third-party products are offered.
- **Deposit, remittance and loan offering:** In addition to the deposit and remittance services, service providers also offer certain types of low-risk loans against collateral.
- **All banking products offering:** Here the service provider offers the full range of banking products to the customers, including consumption loans.
- **All banking products and third-party products:** In addition to the banking products mentioned above, the service provider also offers other third-party products like ticketing, mobile recharge, etc.

While choosing the right product portfolio for the financial inclusion initiatives, the service providers would also need to evaluate the pricing mechanism and how they plan to leverage the unique customer

traits. The product portfolio that service providers offer has a direct bearing on capabilities like distribution and IT systems, which in turn have a direct impact on the profitability of the financial inclusion initiative.

◇ **Technology deployment**

With the rapid evolution of technology, there are various options available for the service providers to choose from. The right technology choice for any financial inclusion initiative would depend on the target segment, product offering and the geography. Options available to service providers are enumerated below:

- **Offline solution**

The customer identity and account details are stored on the smart card which is authenticated using the BC device. No mobility outside the directly tagged BC is offered to the customer.

- **Offline solution leveraging a central database**

BC devices are regularly synchronized with central databases. Therefore, it is possible to offer limited mobility to the customers.

- **Mix of offline and online solution**

This solution adapts to the geography such that the online version is used in locations with good telecom connectivity and the offline solution is used in other places. As a result, the customer experience too varies with the location.

- **Online solution**

This is largely an online solution that requires telecom connectivity. Limited offline ability can be built in with adequate risk management mechanisms to ensure that the customer gets some limited service even in the absence of telecom connectivity.

Since technology and connectivity are evolving at a rapid pace, service providers must choose their solution carefully, bearing in mind the direction in which the technology might evolve in the future. This way, the service providers can safeguard their solutions from becoming redundant soon after they are implemented.

◇ **Location footprint**

The locations where services are offered have a direct impact not only on the capability required for delivering the service, but also on the profitability and viability of the initiatives. Thus, it is important to

choose locations of operation thoughtfully. The country can be broadly divided into three kinds of locations:

- **Cities / towns**

These are densely populated with good revenue potential and telecom connectivity.

- **Large villages**

With the rapid evolution of telecom, these locations have good telecom connectivity in addition to good road networks to larger cities. This category comprises of the largest 1 lakh villages with an average population of 4,650 per village, with all villages having population greater than 2,000. These villages have already been allocated among banks for providing financial services under RBI's financial inclusion plan.

- **Small villages**

These are the villages with a population of up to 2,000. The average population of these villages is less than 1,000. Telecom connectivity in these villages is a lot lesser, though it is improving rapidly. Many of these villages will soon be getting common service centres with good telecom reach.

The choice of location will also impact other choices like technology deployment, product portfolio and distribution partnerships.

◇ **Business model approach**

Financial inclusion initiatives cannot be treated as regular business. These initiatives require special attention. There can be many ways in which the business can be structured in order to provide the right attention that financial inclusion businesses mandate. Some of these are:

- **Separate vertical**

Financial inclusion can be made a separate vertical with completely different resources and manpower than the traditional business.

- **New sub-brand with different economics**

Service providers can go a step further by launching a new sub-brand with dedicated resources and different economics required to provide special attention to the financial inclusion initiatives.

- **Subsidiary / joint venture with dedicated financial inclusion focus**

Create a separate company to focus on financial inclusion. This could also allow local recruitment in remote locations, thus providing cost advantage.

This could be explored to provide complementary capabilities.

As evident, there are many possible options along each of the dimensions and the ‘correct’ option along any dimension cannot be chosen in isolation. It is impacted not only by the choices made along other dimensions but also by the core capabilities of the service providers as well as their financial inclusion ambitions. Thus, there is no universal answer for all service providers, but each service provider needs to arrive at their own unique solution. The eventual choices that the service providers make will impact the efficiency, profitability and long-term sustainability of the initiatives.

Returns from a Successful Financial Inclusion Program

In the long-run, service providers can derive good returns from their financial inclusion initiatives, provided they make the ‘right’ choices along the dimensions discussed in the previous section. The charges and the adoption

rates across the various products will differ according to the product characteristics and customer usability. Exhibit 20 gives indicative charges and variation ranges for the same across products at an all-India level.

In the ‘Opportunity’ paradigm, the financial service providers will be able to break even in two to three years at a pan-India level and achieve the cost-income ratio of 0.6–0.7. The profitability is expected to vary across locations with cities and larger villages expected to break even much faster than the smaller villages which have lower customer density (thus higher cost) as well as lower revenue potential per customer. For viability analysis, locations can be split into three different types — cities and towns, large villages with population more than 2000 (in line with the RBI financial inclusion plan directive to banks) and small villages with a population of less than 2000 (as shown in Exhibit 21).

Exhibit 22 gives details on the expected cost-income ratios and the break-even periods across locations.

If financial service providers are permitted to pursue these initiatives as an opportunity, it is expected that they

Exhibit 20. Key charges levied in the ‘Opportunity’ paradigm

Revenue heads	Charges	Adoption rates	Why customer is willing to pay
Retail loan	22–28% effective annual interest rate	5–10% of customers	Significantly lower costs than informal sources
Customer to customer remittances	3% of transaction amount (₹40–50 per remittance)	25% of remittances	- Money order charge 5% and customer effort - Informal remittances charges even higher
Cash out charges	0.5% of transaction amount	Need based	Saves cost and time involved in traveling to bank branch
Customer to business (bill payments)	3.5% of transaction amount ₹10 per bill	5–20% of bill payments	- Customer pays about ₹10 / bill for payment through third parties - Saves travel time and waiting at collection centre
Access charges for villages	₹10 per quarter	Customer in a village	To compensate bank for providing access in distant areas

Sources: BCG analysis.

Note: Adoptions differ across the different locations.

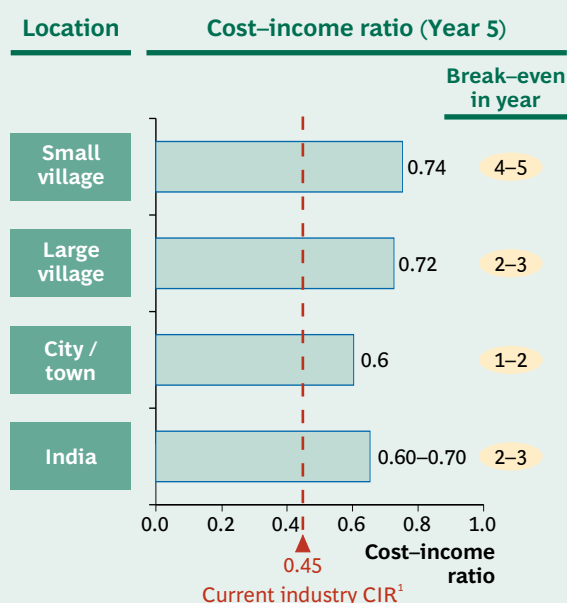
Exhibit 21. Characteristics of three types of locations

	Average size	All-India level
Small village with population <2,000	~800 people ~150 families	~4.9 lakh families ~31% of India's population
Large village with population >2,000	~4,650 people ~850 families	~1 lakh villages ~37% of India's population
Cities / towns	~73,000 people ~14,200 families	~5,600 cities / towns ~32% of India's population

Sources: Census 2001 Data, BCG analysis.

can realize about ₹1,500 crores profit per annum (in a five year period) that is left untapped today. The benefits to the country will be even larger. The marginal customers, who are today financially excluded, will save on the high cost they are paying in servicing their loans.

Exhibit 22. Variation in break-even time across locations



Sources: Industry data, BCG analysis.

¹Banking industry CIR for 2009.

They will be able to save more and park their savings in safer instruments. They will have access to cheaper loans to meet consumption and contingency needs. The banking system too, will improve its revenues and profits.



‘Enabling’ Paradigm can Improve Outcome

In the ‘Opportunity’ paradigm as described earlier the marginal customers would need to pay for service delivery. This payment (though significantly lower than what they are currently paying to get the service) may not be palatable in a democratic polity like India. Additionally, even though the penetration levels would increase in the ‘Opportunity’ paradigm, there would still be scope for improvement as service providers would be selective in targeting customers in this paradigm.

Alternatively, the policy makers could step in to create an enabling environment so that the economics of the service providers is not jeopardized and adequate support is provided to reduce the burden on the marginal customer. This, in turn, will lower the delivery cost for service providers. The penetration levels will be even higher, as compared to the ‘Opportunity’ paradigm. As a result, the total profit potential for the service providers in year five will increase from ₹1,500 crores profit per annum under the ‘Opportunity’ paradigm to ₹3,500 crores per annum under the ‘Enabling’ paradigm.

This can be achieved through a set of initiatives. Many of these are ‘no regret’ moves that would require no / minimal expenditure on part of the policy makers, while enabling faster and more inclusive growth of financial services. In addition to the ‘no regret’ moves, this section also describes other potential initiatives that can be considered by the policy makers. It has often been asserted that in Government welfare schemes the extent of leakage and inefficiencies is higher than 30 percent. Given that ₹300,000 crores is being channelled into these programs, even a 10 percent spending on infrastructure creation for payment disbursement can put an end to this leakage of 30

percent. Of the resulting 20 percent savings, even if the Government were to reduce the spending on welfare schemes by 10 percent, the end customer would still get 10 percent more payment as compared to what they are currently getting.

‘No Regret’ Moves by Policy Makers

These are moves that would require limited or almost no expenditure but are critical for this initiative as they create an enabling platform for faster and more inclusive growth:

Aggressive financial literacy drive and customer awareness programs

Financial products can be complex and difficult to understand even for the educated. The problem gets compounded when the customers are illiterate. Most marginal customers in India are not just illiterate but also feel alienated while dealing with formal service providers. Moreover, these service providers can appear distant and intimidating to the excluded customer. Therefore, financial illiteracy is a serious challenge faced in the financial inclusion initiatives.

There is a need for financial literacy and customer awareness programs to meaningfully address the challenge of exclusion. This would require a fresh and innovative approach that not only explains the products and services being offered, but goes a step further to help the customers understand where and how these products and services could be applicable to them. For example, marginal customers even with low savings potential and limited income can contribute regularly to a recurring savings accounts or to mutual fund-based Systematic Investment Plans (SIPs) and build savings.

As individual service providers will not have an economically robust logic to invest resources to launch such large-scale initiatives, it is important for the Government to play a proactive role in this area. Programs should be developed to employ NGOs and competent commercial institutions that have the expertise to target rural customers. Financial service providers should also be encouraged to participate in these programs. This will help in alleviating the general fears and concerns that some of the marginal customers have about large organized service providers. The Government could create a fund for financial literacy, to be managed at the district level by the DLCCs of the banks. The performance of such a fund can be measured bi-annually by the DLCC and reported to the RBI and the Government. Also, the Government should pursue Public Private Partnerships (PPP) to setup vocational training institutes for rural youth.

There are several learnings from other successful awareness programs undertaken by the Government. Illustration 5 gives details of one such highly successful program run by Government — the pulse polio immunization drive.

Regulatory relaxation to ease account opening process

Traditionally, banks incur a cost of about ₹50–100 per account for the acquisition of each marginal customer (as compared to ₹150–250 for full KYC) through a no-frills KYC. This cost comprises of the employee cost, travel to the customer if needed, verification and the storage of documents and supporting technology cost for enabling the accounts. While being substantial even for normal banking customers, the acquisition cost challenge becomes acute for marginal customers as they have low revenue potential and thus every small increase in cost makes the customers unprofitable to serve.

This cost burden can be substantially reduced by permitting the use of Aadhaar for meeting the KYC requirement. Even though the RBI has relaxed the document requirements for no-frills accounts, including the recent inclusion of Aadhaar issuance letter in the list of accepted documents, the need for physical collection of documents, their verification and storage still leads to substantive costs and effort in conducting KYC. In addition to the paper documents, the financial service providers

Illustration 5: Pulse polio awareness program

The pulse polio immunization drive was a nationwide campaign supported by an elaborate communication strategy. Mass media campaigns along with a widespread, yet customized social mobilization formed the core of this strategy.

- ◇ **Mass media campaign:** Television and radio advertisements informing people about polio and the relevant dates for immunization have been relayed successfully for quite sometime. These advertisements are put up well in advance. Many believe that the campaign hinged on the personal appeal of Hindi film actor and UNICEF Goodwill Ambassador, Amitabh Bachchan, who has been regularly appearing in these advertisements since 2003. Studies show that he brought in a tremendous amount of credibility to the entire campaign and he could appeal to people across all social groups.
- ◇ **Localized social mobilization:** Along with the national advertisement campaign, awareness drives were also conducted by each state to drive home the message at the local level, customized to the target set. For instance:
 - In Delhi, resident welfare associations were engaged in reaching out to the local residents. These agencies were engaged in educating the members regarding the importance of immunizing their children and motivating them to visit the center. Not only was awareness created, doubts, misbeliefs and taboos were also removed by actively sharing information.
 - In Gujarat, to spread the message clearly among the tribal population, Anganwadi workers were used as the primary source of information.

can be allowed to use the UIDAI's KYR requirement for verifying customer's identity through an online Aadhaar authentication system. To that extent, the KYC regulation can be modified. The current minimum KYC requirements are met by the UIDAI's KYR (as shown in Exhibit 23). The KYR–KYC parity would ensure the consistency of verification across service providers through biometric authentication and would also substantially lower the cost of acquisition.

Disbursal of Government payments through Aadhaar-linked bank accounts

One of the critical platforms for business viability in rural areas can be the disbursal of Government payments and subsidies across various schemes, like the MGNREGA and Sarva Shiksha Abhiyan. Currently, the Government incurs substantial cost in delivering these payments in the form of cash or cheques. The cost is not only high due to the inefficiencies involved in delivery through cheques or cash, but also due to the significant amount of leakages.

There is a potential for significantly reducing this disbursal cost for the Government while ensuring that the intended recipient is the only one benefitting from

the funds. To achieve this, the Government should ensure that all payments and subsidy disbursals are made through this new infrastructure being created by the banks and other service providers.

This can be achieved by linking all Government payments and subsidies to the Aadhaar number of the resident and transferring the funds directly to the resident's bank account. This will reduce the disbursal cost and leakages as the funds can only be withdrawn by the intended recipient if online Aadhaar authentication is used. An example of this transaction is shown in Exhibit 24.

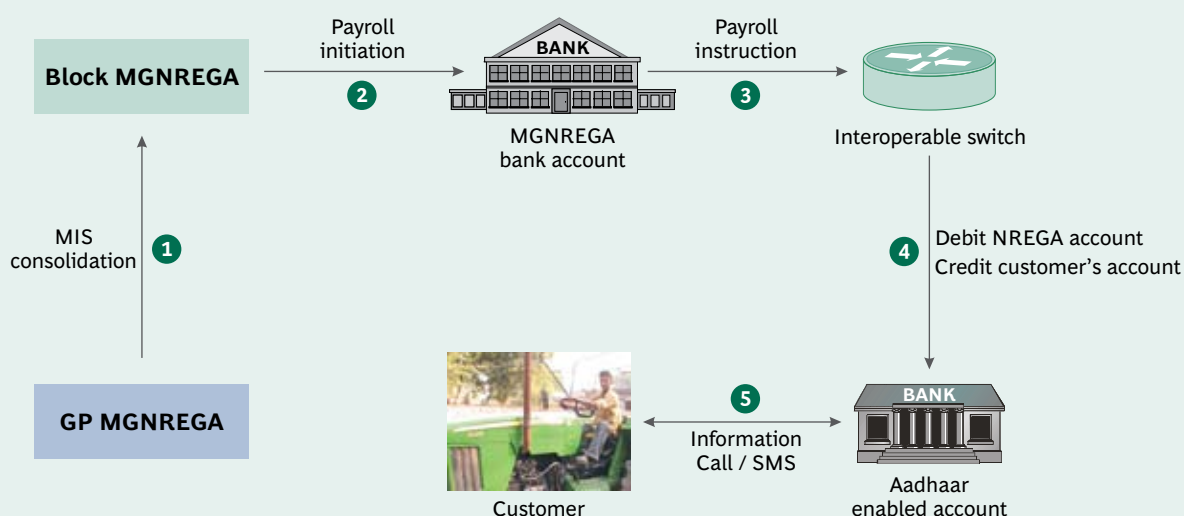
This will result in a win-win situation for both the Government (through the reduction outlays) and the financial service providers by increasing the viability of the new infrastructure that they create and the beneficiary in receiving the full subsidy. For this purpose the Government can pay the appropriate charges to the financial service providers that deliver the payments to the customer.

One of the reasons spelt out by Government bodies for not giving commission to banks is that the banks enjoy

Exhibit 23. Comprehensive customer information captured in Aadhaar KYR meets minimum requirement for KYC

Necessary information	'Know Your Customer' for bank account	'Know Your Resident' for Aadhaar
Capture name		
• Verify identity proof documents	✓	✓
Capture address		
• Verify address proof documents	✓	✓
Capture photograph	✓	✓
Capture date of birth	✗	✓
Capture gender	✗	✓
Capture biometric		
• All 10 finger prints	✗	✓
• Iris scan		

Exhibit 24. Online BC-enabled payroll: Example MGNREGA wages



float interest on these funds. Here, it is important to understand that the bank where the funds are kept is not always the bank that provides banking services to the end recipient. Thus, float-based economics not only has a misaligned incentive for the bank with funds to delay payment, it also does not hold any incentive for the service provider bank to open and service the customer's account in a remote village.

Hence, moving from float-based model for banks to a commission-based model for the end recipient's bank will incentivize banks to set up the delivery infrastructure (as shown in Exhibit 25). The Government could decide to set the amount of commission for the next three to five year period, beyond which the amount of commission could be arrived at through a market-driven auction process (once the service provider ecosystem matures).

Promote interoperable customer servicing networks

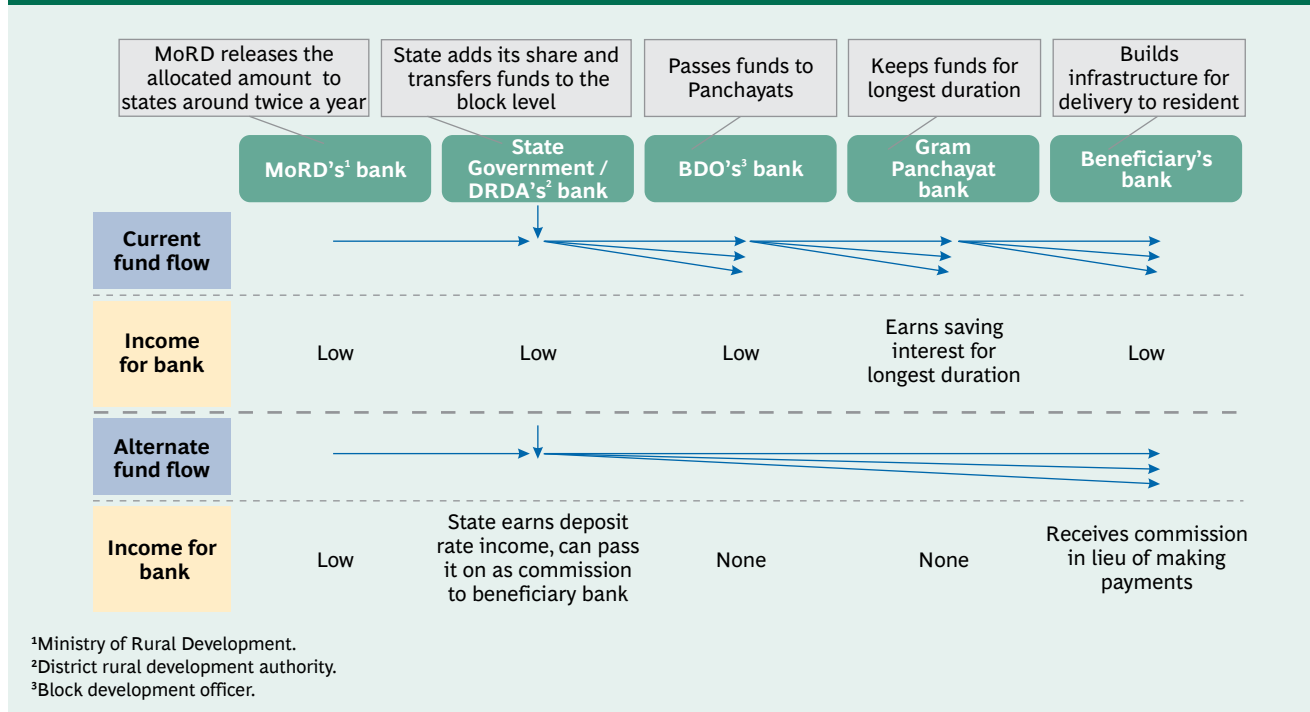
Interoperability of the customer servicing points is not just desirable, but almost a critical prerequisite to ensure sustainability of the financial inclusion initiatives. This

not only provides more flexibility to the end customer, who can then go to any BC of any bank similar to the ATM network in the current scenario, but also results in many systemic benefits. Some of them are:

- ❖ The cost of service delivery would get reduced as the overall infrastructure requirement would be shared among service providers.
- ❖ Driven by a multitude of schemes and initiatives, different financial service providers have created accounts for these customers. An interoperable payment network would ensure that the customer can access the account through other service provider's network as well and thus the constraint imposed by account ownership would reduce.
- ❖ Interoperability will bring greater competition among the financial service providers and create a level playing field.

Even though all stakeholders, including the end customer, financial service providers and policy makers are to gain from interoperability of the network, it is difficult to come

Exhibit 25. Government funds should either be kept in the last mile bank or the last mile bank should be paid transaction charges



about, if left to individual service providers. It requires policy support and push like the ATM networks of the past.

Tracking of transaction history across products and financial service providers

For financial inclusion to have a wide-reaching impact, successful credit at the grassroot level from formal institutions has to be established. It is a complex problem for these customers as many of them do not have any collaterals and hence credit cannot always be backed up with a material asset. Many MFIs and other institutions have tried to address this problem through the JLG route by creating collective collateral. Over time, a more systematic solution through the route of building transaction and credit history for these customers needs to be created.

At present, financial service providers and credit bureaus struggle to identify a customer uniquely across multiple products within a financial service provider or accounts across financial service providers. While some financial service providers have sophisticated technology solutions to collate information for the different accounts of the

same person (combination of customer information like name, address, date of birth, etc. are used to establish a customer's identity), these are only approximations and are, therefore, sub-optimal.

With the adoption of Aadhaar, financial service providers will have a unique customer identification that would enable them to better assess customers' credit worthiness for offering products and services. This will help the service providers reduce their credit risk as well and help address one of the key challenges that they face — that of identifying their customers.

Creation of FII for monitoring service delivery

There is an urgent need to build a transparent yet simple FII that indicates the coverage, quality of service as well as the extent of financial inclusion for a financial service provider as well as a geographical entity such as a district or a state. The DLCCs of the banks could be used to coordinate the entire data collection process. Some of the metrics that the index could consist of are:

- ◇ Number of individuals having Aadhaar number

- ◇ Number of customers that are included
- ◇ Percent of active accounts (indicated by number of annual transactions — accounts below 4 transactions per annum considered inactive)
- ◇ Average interest rates for credit offered
- ◇ Remittances received or made — total number, total value, average value
- ◇ Range of products / services offered
- ◇ Ubiquity of service points (number of villages with either branch or BC, with interoperable micro ATM, population per branch or BC, etc.)

These parameters should be reviewed every six months across all districts and the trajectory of the change should be considered.

Other regulatory changes to facilitate market growth

Given the massive challenge that financial exclusion constitutes, not just for the existing financial service players, but also for the nation, it is critical that all possible methods of easing this challenge are explored. While it is critical that the existing ecosystem participants continue to make concerted efforts to address the challenge, the introduction of new participants into the ecosystem should also be explored in order to spur market growth. These new participants could leverage their existing capabilities to help augment the financial inclusion ecosystem. For this, two possible options exist:

- ◇ Allowing NBFCs to participate as BCs: The large distribution network that some of the NBFCs have created, especially in the rural areas, can be a big asset for the financial service providers. Along with the reach, the NBFCs have also built deep relationships with customers and thus would be able to provide faster ramp up as compared to new BC partners.
- ◇ Introduce new participants in the ecosystem: In order to manage the risk associated with a controlled sector like financial services, it is obvious that the Regulator would want to be extra cautious. Thus, there are two potential approaches that could be explored in this regard:

- i. Allow a few well capitalized new players to offer the full range of financial services by giving them a new banking license.
- ii. The mobile device with its functionality can bring in a convenience in some financial services, like remittances, which break the compromise for our most marginalized citizens between cost, convenience and safety that traditional forms do not offer at all. There are some genuine areas of concern for Regulators and real areas of tensions in collaboration across industry boundaries between banks and mobile operators that currently constrain the offering. It is important to ensure that progress is made here quickly so that the plight of the disadvantaged citizens is sustainably and profitably alleviated.

Other Potential Initiatives to Spur Market Growth

In addition to the 'no regret' moves, the policy makers could also adopt a few additional initiatives that may require some expense but actually have a very quick payback on their part.

Targeted incentives to promote viability of financial inclusion

Today, most financial service providers and service providers are not confident about venturing into the financial inclusion ecosystem as the business viability of these initiatives is yet to be proven in the marketplace. This leads to a 'Catch-22' situation where limited experimentation leads to the perception of low viability, which in turn results in limited experimentation. It may, therefore, take longer for business viability to be established through demonstrated programs in the marketplace.

Policy makers can step in by providing targeted incentives to foster experimentation and support the financial inclusion initiatives during the early stage. For this purpose the Government could provide the following incentives:

◇ Subvention

The Government or the Regulator could provide a one-time payment to the service provider for each 'marginal' customer acquired. This would facilitate the customer enrolment process by reducing the cost burden on the financial service providers. The exact amount of subvention could depend on the amount

paid per no-frill account. It is estimated that at least 20 crore functional no-frills accounts are needed.

◆ Tax breaks

The Government could look to provide tax breaks for the financial inclusion initiatives for a period of seven to ten years where profits, if any, from these initiatives should be exempt and losses should be allowed to be carried over. This would lessen the financial burden on the service providers during the experimentation phase and encourage them to launch more innovative initiatives.

The Government could also look to offer other smaller targeted incentives to foster growth in particular domains of the ecosystem, such as:

- ◆ Exempt financial inclusion initiatives from service tax on insurance policies up to a predefined limit disbursed through BC or financial inclusion channels.
- ◆ Exempt the transaction enabling devices for customer service points from excise duty, VAT, etc.

This will help ensure that more participants find it attractive to experiment and launch financial inclusion initiatives, thus speeding up the deepening of financial inclusion.

Going beyond financial inclusion initiatives — Enable rural infrastructure development

Financial inclusion initiatives alone are not sufficient to drive inclusive economic growth. Economic activity in the local area (especially rural) has to be given a fillip through concurrent, multi-disciplinary interventions embedded around core infrastructure development projects. The interventions need to vary across locations depending on the area's economic potential. Such interventions should cover a range of initiatives like capacity building, irrigation, water supply and sanitation, rural roads, rural electricity and telecommunications.

Recent administrations have rightfully embraced and emphasized the importance of rural infrastructure development as part of the agenda for inclusive growth. The Planning Commission has also emphasized infrastructure development in the 12th Five Year Plan with allocations set to increase two times over the previous five-year periods. But they still appear

insignificant in comparison to countries like China whose spend on rural infrastructure, at about 5 percent of GDP in China's 11th Plan is significantly higher than India's 1.5 percent of GDP (despite an economy that is more than three times the size of India).

From a supply perspective, private parties are likely to play a very limited role in rural infrastructure development given its inherent market risk — most projects are not revenue generating and even those that are have long gestation periods of 10 to 15 years. Thus the Government needs to continue playing the key role in infrastructure financing. With this support, private expertise can be brought in for execution through annuity schemes focused on both implementation and ongoing maintenance. However, the significant infrastructure investment planned will result in huge lost opportunities if development is not undertaken in an integrated manner.

There are gaps in institutional capability in this area. While there are multiple state sponsored financial institutions that are involved in rural infrastructure financing, few have sufficient expertise, project development skills, depth in balance sheet and backing from the Government. NABARD should play an important role in this space as it has done in the past. One example of their approach is the Credit plus (Credit+) model, which brings together a set of credit and non-credit support to ensure integrated rural development. The challenge is to ensure that such initiatives are taken up as the norm and not as an exception.

In the last few years, rural infrastructure investment by State Governments through the Rural Infrastructure Development Fund (RIDF) has seen significant uptake. With the above Credit + proposition, the attractiveness of such funding is very high and exactly the kind of incentive needed to promote spend in rural infrastructure.

Finally, financial inclusion also needs to go beyond scheduled commercial banks to rural financial institutions (RFIs) like cooperative banks and RRBs. These provide last-mile access to rural financing, which is critical. Scheduled commercial banks will not be able to address this space on their own. However, many RFIs have a huge capability and technology deficit and need to embrace newer areas like deployment of core banking technology in the cooperative banks.

Exhibit 26. Policy support helps reduce burden on customers

	Use cases	Charges under 'Opportunity' paradigm	Charges under 'Enabling' paradigm
Support from Government	Government to customer	• Nil	• 2% of transaction amount (paid by the Government)
	KYC Cost	• ₹50–100¹ per account	• Nil (with KYR = KYC)
Reduced customer burden	Loan	• 22–28% effective annual interest rate	• 18–20% effective annual interest rate
	Customer to customer	• 3% of transaction amount (₹40–50 per remittance)	• 2% of transaction amount (₹25–35 per remittance)

Sources: BCG analysis.

¹₹50–100 per account is the KYC cost for a no-frills account as compared to ₹150–250 for a normal savings account

To deliver on the ambitious target of rural infrastructure development, the Government should direct additional funds and support towards rural infrastructure finance. This funding could be at attractive rates and can be provided through multiple channels including Government of India programs, Government departments and institutions like NABARD.

Impact of the 'Enabling' Paradigm on Economics and Penetration

An enabling policy environment will lead to reduction in the service delivery cost. As a result, the service providers will be able to deliver the same set of services at a lower cost to its customers. This reduction of charges to the customers is based on the premise that service providers will want to retain the same profit margins as in the 'Opportunity' paradigm and will pass on the benefits to the end customers. This can be monitored by the policy makers to ensure that the profitability of financial inclusion initiatives is in line with the normal banking business. Exhibit 26 shows the potential changes in charges to the customer by moving from the 'Opportunity' paradigm to the 'Enabling' paradigm.

With the reduction in cost to customers, the penetration of financial services can increase substantially such that about 80 percent of the households will become included. This will be because of two reasons — one, better affordability among the customers and two, higher push from the service providers who would see some profit potential even for products that were earlier unprofitable, like the disbursement of Government payments. Exhibit 27 shows the potential increase in adoption rates while moving from 'Opportunity' paradigm to the 'Enabling' paradigm.

Not only would the revenue potential more than double, but the contribution of various products and services would also change based on the market situation. In the 'Opportunity' paradigm, where there is limited policy support, most charges are borne by the customers. Whereas in the 'Enabling' paradigm, where the Government pays for disbursement of its payments and more customers adopt the services, the revenue mix moves away from credit products and direct charges to customer to products like remittance and third party products (as shown in Exhibit 28). Please refer Appendix III for details.

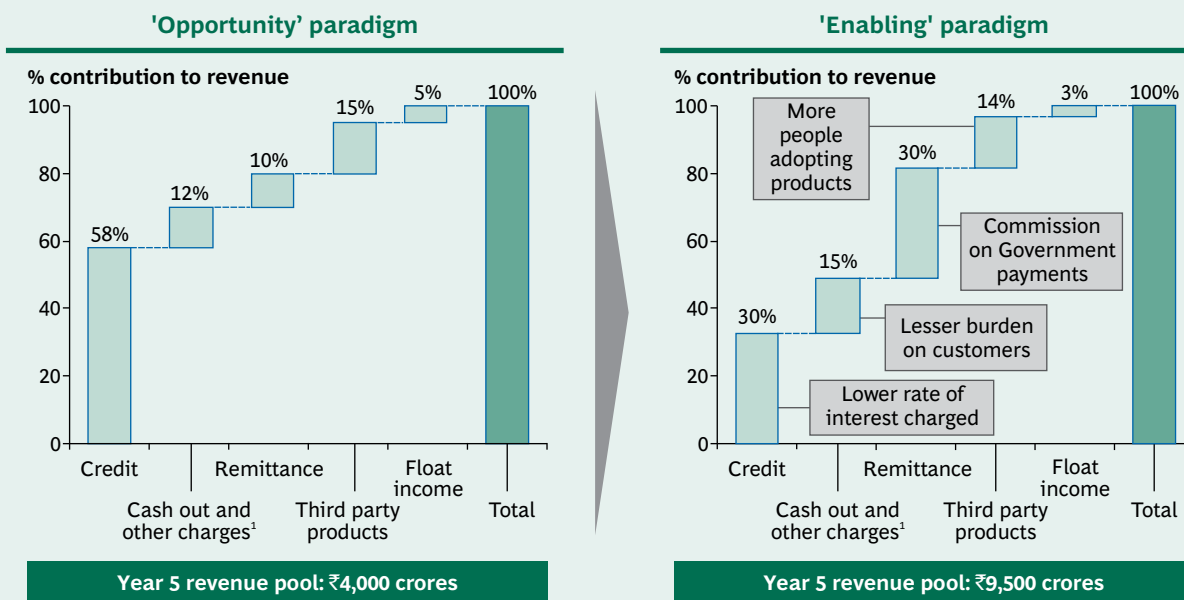
Exhibit 27. Reduced charges translate into higher adoption of all products

Use cases	Adoption under 'Opportunity' paradigm	Adoption under 'Enabling' paradigm
Loan - Income generating - Consumption	10% of customers 5% of customers	20% of customers 10% of customers
Customer to customer remittances	25% of remittances	50–60% of remittances
Government to customer - Welfare schemes - Pension payments	10–20% of welfare payments 5–10% of pension payments	55–65% of welfare payments 20–30% of pension payments
Customer to business (bill payments)	5–20% of bill payments	10–35% of bill payments
Total new accounts opened	'Opportunity' paradigm Approximately 70 million	'Enabling' paradigm Approximately 175 million
Total households included	Approximately 65%	Approximately 80%
Extent of geography covered	All cities and large villages; 30% small villages	All cities, large and most small villages

Sources: BCG analysis.

Note: Adoptions differ across the different locations.

Exhibit 28. Revenue contribution changes under different paradigms



Sources: BCG analysis.

¹Other charges include annual village access fee.



The Way Forward: Imperatives for Stakeholders

There is a strong recognition across the world that India is emerging as a major economic force. This is largely driven by the tremendous growth that India has seen in the past decade and is also reinforced by the fact that it has over 600 million people under the age of 30. However, India's chances at succeeding and partaking in this unique opportunity can be severely dampened if the growth is not broad-based and a majority of its population remains excluded from the financial services sector. Even though many attempts have been made in the past, the challenge of financial exclusion continues to loom large over India.

As discussed earlier, financial service providers can solve this problem if they are willing to fundamentally rework their business model. Applying the traditional banking models or incremental tweaking of the existing model for the marginal customer is not sufficient to address this challenge. There is need for a new approach that would require financial service providers to think of innovative ways to significantly reduce costs and increase revenues from the excluded customers. This would require partnering with other players, lowering manpower costs, deploying cost-effective technology solutions and leveraging new infrastructure like Aadhaar. The end-customer will have to pay adequate charges to avail the services. However these charges will be significantly lower than what the customer is paying currently.

If the polity believes that the marginal customers should not pay or should pay only minimal charges for availing financial services, then they need to create an 'Enabling' paradigm for financial inclusion. They need to make a set of 'no regret' and additional changes so that the service providers can offer financial services at a reasonably low

cost to the customers while making adequate profits for themselves. It is important to take the mindset of obligation out of financial inclusion initiatives to create the real thrust that is needed to increase the penetration of financial services in India.

As discussed earlier, the overwhelming feeling is that the time for inclusion has come. Financial inclusion is poised to happen not because it is politically correct but because it will soon be economically correct. It is no longer a question of whether the marginal customers are bankable or not. It is a question of how all the stakeholders can come together and make this happen sooner rather than later.

Fifteen Point Agenda for Stakeholders

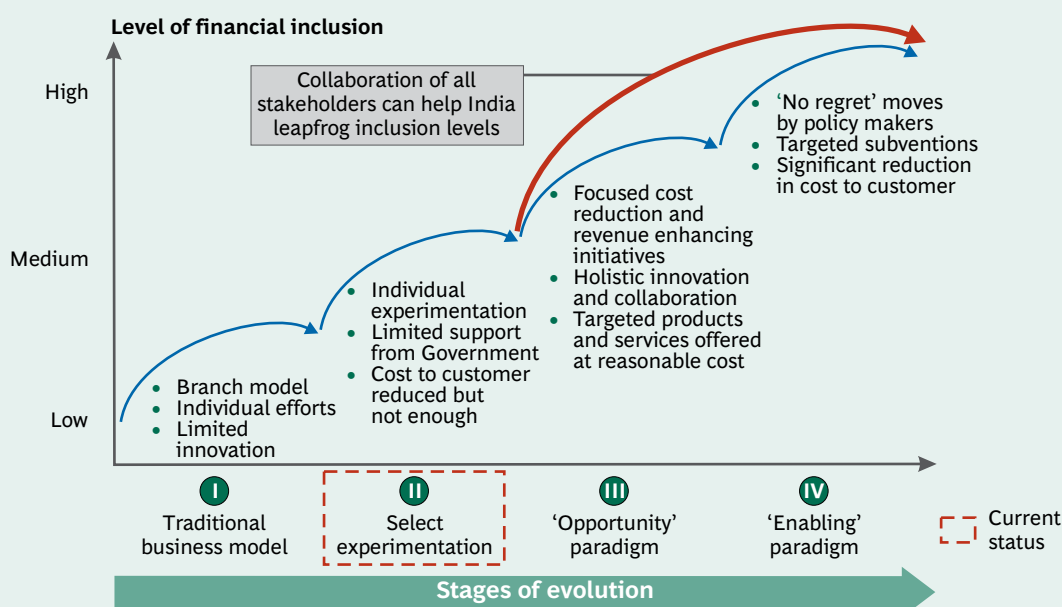
Exhibit 29 depicts the four stages of evolution in the deepening of financial inclusion in India. Currently, the country is on the second leg of this four-stage journey. The country can leapfrog from the second to the fourth stage, provided the various stakeholders collaborate, experiment and innovate while the policy makers create the right environment to foster financial inclusion. Below we list out a fifteen point agenda that the market participants as well as the policy makers need to jointly undertake so as to ensure widespread success of financial inclusion initiatives.

Market participants

1. Lower human resource costs significantly

Employee costs contribute to more than half of the total operating costs of a bank. Hence, service providers need to actively work on bringing down the manpower cost in order to improve the economics of financial inclusion initiatives. The reduction in cost will have to

Exhibit 29. Collaborative effort of all stakeholders can help India leapfrog from second to fourth stage of inclusion



come from a combination of efforts, such as use of technology that reduces human intervention and the use of local talent pools that are available at much lower costs and provide them adequate training.

2. Build a low-cost distribution network

Service providers need to make appropriate choices regarding developing and leveraging distribution networks. This can be done through partnerships with players from other industries to leverage their existing distribution network and by sharing infrastructure with other financial service providers. In this regard, financial service providers should consider various options; some of these are enumerated below:

- Leverage the new for-profit BC regulation to tie up with established players from other sectors, like telecom, FMCG and agri-based companies that have complementary reach, especially in the rural areas. Some early moves in this regard have already been made.
- Share infrastructure with other service providers by making the network interoperable and by piggyback riding the network of other service providers.

- Leverage the network of self-help groups (SHGs) as BCs to deliver normal banking services and credit offerings.
- Banks / BCs must tie up with companies that have a rural presence for cash management.

3. Deploy efficient and cost-effective technology

It is critical to choose technology that will not only help reduce delivery cost, but will also help improve service quality in the long run. Technology solutions should be chosen with a longer term vision of how the landscape is likely to evolve. In this regard, financial service providers have three key issues to consider:

- Build an interoperable customer service network. This allows usage of other people's network and reduces costs over time.
- Choose the online model wherever it is practical to do so. Over time, it is important to comprehensively migrate to the online solution. This has direct implications on the service quality on offer as well as on the cost and risk management of the solution.
- Make a judicious trade-off between existing CBS and a relatively cheaper IT platform for hosting

the financial inclusion accounts, keeping in mind the features on offer and the cost of the solution.

4. Use Aadhaar platform for rapid growth and lower costs

The UIDAI is expected to roll out 600 million Aadhaar numbers (in a phased manner) over the next four years. This is an extremely ambitious Government of India program and financial service providers should leverage the Aadhaar platform to get the following benefits:

- One-time opportunity to reduce customer acquisition cost
- Ongoing reduction in the cost of KYC
- Creating an interoperable network using Aadhaar prescribed biometric micro ATMs and hence sharing of BC cost with more than one bank

5. Create targeted product and service offering

It is important to make a judicious trade-off on the bouquet of products that one offers to the marginal customers who actually need the entire set. Initiatives with limited product offerings will have restricted revenue potential, thus making the economics difficult. Service providers should consider products from all key categories namely — savings, credit, remittance and other banking and third party products like insurance, investment and bill payments.

6. Shift from conventional float-based economics to pay-per-use economics

Service providers should experiment and innovate with their business model to meet the specific needs of the marginal customers. For example, the usage of transaction-based-pricing models is critical to ensure viability of service offerings and long-term sustainability of financial inclusion initiatives, which otherwise would see limited push from any service provider. Similarly, there is a need to experiment with other products as well, like repayment terms and frequency of loans.

7. Conduct aggressive customer awareness programs

Customer education should be an integral part of all financial inclusion initiatives. The marginal customer segment has limited understanding of financial products and without these awareness programs, financial inclusion initiatives will see limited adoption. Here, the onus is on the financial service providers to

leverage the support structure for creating customer awareness (through dedicated funds, tax breaks, etc.) as and when put in place by the Government.

Policy makers

8. Dedicate funds for literacy drives and vocational training

The Government should set up funds to be used for the development of the rural financial market for not only educating the customers regarding the financial products but also training the local population to participate in the delivery of financial services. These funds should be set up so that they can be used in partnership with private players who have expertise in conducting customer awareness and skill development programs. The funds can be managed at the local level by the DLCC of the banks. The performance of the funds can be managed at half-yearly intervals by the DLCC and reported to the RBI and Government.

Financial service providers would need to deploy large number of personnel for managing the distribution network. Sourcing new recruits from the local population would help better manage linguistic and cultural challenges. However, this requires the local youth to be trained and equipped to take on new roles. Government could pursue this agenda through PPPs to setup vocational training institutes for rural youth.

9. Disburse Government payments through Aadhaar-linked bank accounts

Government payments and subsidies form a large portion of the rural economy. Therefore, it is critical to secure that these funds flow on the new infrastructure to ensure the viability of this infrastructure. Without Government payments and subsidies being diverted to this infrastructure, the rural initiatives may see a limited push from the service providers. In addition to ensuring the viability of the infrastructure, the disbursement of Government payments through this infrastructure will also result in large cost savings for the Government by:

- Reducing the inefficiency in the system through electronic transfer as compared to paper or cash
- Reducing leakages in the system through targeted biometric-based disbursement

10. Promote interoperable customer servicing networks

Interoperability of the customer servicing points will result in multiple benefits not only to the end customer but also for other stakeholders. Apart from providing more flexibility to the end customer, it will help reduce service delivery cost and increase competition among service providers.

11. Facilitate tracking of transaction history across products and financial service providers

Credit is the biggest need for the marginal customers and financial service providers have to turn down many customers in order to manage risk. Facilitating tracking of transaction history can provide a big boost to credit disbursal among the marginal customers. This will enable financial service providers to better assess customer's credit worthiness and thus offer more targeted products.

12. Creation of FII for monitoring service delivery

The financial inclusion ecosystem would get a significant boost by creation of a transparent yet simple FII. The index should indicate the coverage, quality of service as well as the extent of financial inclusion for a financial service provider as well as a geographical entity such as a district or a state.

13. Targeted incentives to promote financial inclusion viability

Large customer acquisition costs are a big hurdle for financial service providers. Policy makers should either look to reduce this hurdle with regulatory relaxation or compensate the service providers adequately for the cost incurred. It is critical that the Government supports the financial inclusion initiatives in the early phase when viability is still being proven. Government subventions would ensure that a lot more service providers are willing to experiment and thus give a big boost to these initiatives, resulting in deeper penetration of financial services. Some possible options in this regard are:

- Provide tax breaks for financial inclusion initiatives for seven to ten years where profits should be exempt and losses should be allowed to be carried over.
- Exempt financial inclusion initiatives from the service tax (for example on insurance policies up to a predefined limit disbursed through BC or

financial inclusion channels).

- Exempt the transaction enabling devices for customer service points from excise duty, VAT, etc.

14. Enable rural infrastructure development

Financial inclusion initiatives by themselves are not sufficient. They need to be supported by increased economic activity in the rural areas. Hence, there is need for interventions on the rural infrastructure front and this will require focused efforts from multiple Government agencies. For this, the policy makers should consider three key fronts:

- Significant increase in rural infrastructure investment — Earmark portion of the proposed Infrastructure Development Funds (IDF) for rural infrastructure to reduce cost of funds and increase viability of rural projects.
- Develop systems to ensure integrated rural development — Empower nodal agencies to promote convergence of complementary developmental initiatives across state departments.
- Reinvigorate institutions focused on rural development — Energize independent nodal agencies like NABARD to play a multi-faceted role — manage rural IDFs, ensure coordinated planning of investments and ensure transparent execution.

15. Facilitate further regulatory changes

It is critical for the Regulator to continue to relax the market restrictions and not only allow existing players to leverage the new technology and solutions but also to introduce new participants from time to time so as to increase competition and spur market growth. Some of the key changes that should be considered in this direction are:

- **KYC = KYR:** Aadhaar's KYR information provides robust verification on a customer's identity, especially given the biometric de-duplication process. Thus the Regulator or the Government should look to leverage this infrastructure in order to reduce the customer acquisition and authentication cost for financial service providers. In this regard while the Aadhaar paper document from UIDAI has been allowed, the online Aadhaar authentication system should also be considered for fulfilling the KYC requirement for opening a bank account.

- **Allow NBFCs to participate as BCs:** Given the deep penetration that many NBFCs have achieved in the rural areas along with the relationships they have already established with the customers, it would be prudent to allow NBFCs to be part of the BC ecosystem. This would open up access to large distribution networks for banks to reach out to the rural customers. The point about conflict of interest should be left with the banks and NBFCs to decide (for instance, how they share the benefits arising out of this partnership and which credit products they offer to the customers).
- **Introduce new participants in the ecosystem:** Given the urgent need to expand the reach of financial services and the large magnitude of the effort required, it is prudent to allow new players to participate in the ecosystem. The Regulator obviously needs to manage this cautiously and could explore two possible approaches in this regard:
 - i. Allow a few new well-capitalized players to offer the full range of financial services by giving new banking licenses with extra emphasis on financial inclusion.
 - ii. The mobile device with its functionality can bring in a convenience in some financial services, like remittances, which break the compromise for our most marginalized citizens between cost, convenience and safety, that traditional forms do not offer at all. There are some genuine areas of concern for Regulators and real areas of tensions in collaboration across industry boundaries between banks and mobile operators that currently constrain the offering. It is important to ensure that progress is made quickly so that the plight of the disadvantaged citizens is sustainably and profitably alleviated.

It is important that the expanded list of participants follow the desired MIS and KYC guidelines and can be put through to the highest level of scrutiny.

What will Define Success?

It is our belief that the challenge of financial inclusion is addressable. A concerted effort by all stakeholders can make a significant dent in this area in the coming years. It is also important that all stakeholders realize the criticality of this challenge, which, unless addressed,

threatens to disrupt India's growth trajectory. If we continue to allow the gulf between the haves and the have-nots to widen, India stands to lose the opportunity to make an impact on the world stage.

Thus we should seize this opportunity with the full might of the nation. If all stakeholders were to work collaboratively towards this vision, then the benefits to all of them as well as the nation at large would be immense. Some of these benefits are listed below:

- ◇ As compared to the current potential losses of ₹20,000 crores in serving the excluded customers, the **financial service providers** would be able to unlock a hitherto untapped profit opportunity of ₹3,500 crores per annum in a five year period, which holds a much higher lifetime value for them in a young nation like India. In addition, the service providers can gain further value by leveraging the new low-cost distribution for their current customers as well.
- ◇ **The Regulator** will be able to achieve its vision of strengthening the financial service delivery and include more people in the mainstream of financial service by increasing formal financial penetration from about 47 to 80 percent of the households. This would also result in credit disbursal to one-fourth of these customers.
- ◇ **The Government** would be able to provide meaningful opportunity to the masses to improve their life chances and also reduce leakages and corruption in the delivery of Government payments.
- ◇ **The marginal customers** would not only gain access to formal financial services at reasonable cost, but would also be able to ensure a better quality of life for their families through improved economic activity.

And lastly, **India** would benefit immensely as this inclusion would also lead to multiplier effects on the income of the 'included' families. This could lead to substantial improvements in the economic potential of the country.

An economically advancing India cannot in anyway fulfill its potential if more than half its population cannot meet their financial access needs. This report argues that the conditions today permit the financial needs of its citizens

to be met sustainably if market players were willing to invest in this massive long term opportunity. New innovative models in collaboration with other industry verticals can allow market players to serve the needs of the excluded segments profitably. If the Government would facilitate the environment by making some 'no regret' moves, financial inclusion could happen faster,

more efficiently, and with no increase in spending in welfare outlays. The time has come to make financial exclusion an opportunity which is current, real and meaningful. It will serve our disadvantaged citizens join the main stream faster, provide millions of customers to financial service providers for decades and give Indian democracy a more just and responsible feel.

Appendix I: Financial Inclusion Survey

A BCG team conducted a nation-wide survey (October–December 2010) to measure the level of financial inclusion in India and understand the real needs and challenges of the marginal customers with respect to financial products.

Coverage of Financial Inclusion Survey

A quantitative and qualitative study was conducted across 12321 households between October–December

2010 to assess the level of financial penetration in India.

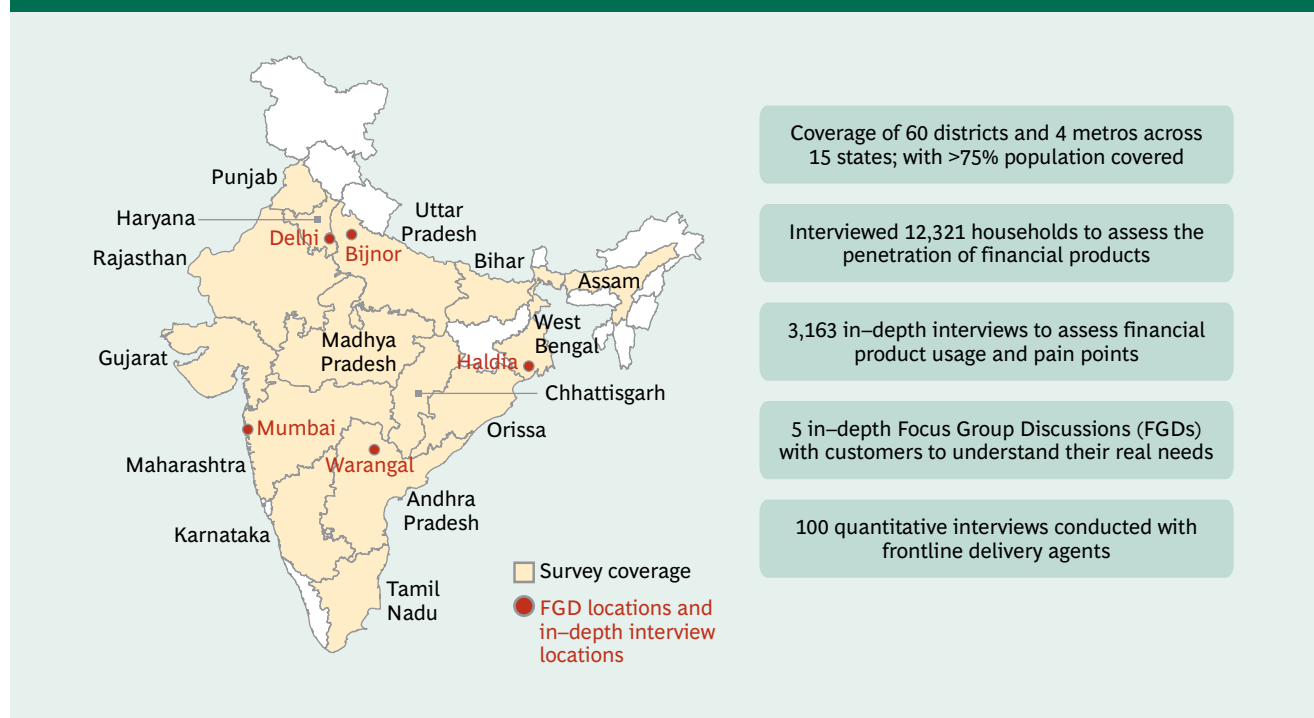
Please refer Exhibit 30 for the Pan–India coverage of BCG Financial Inclusion Survey.

Financial Inclusion Survey Methodology

Assessment of financial penetration in India

- ◇ 15 states were selected to cover more than 75% of India's population in order to maintain regional spread

Exhibit 30. Pan–India coverage of BCG financial inclusion survey



across North, South, West, East and North–East.

- ◇ Urban (4 different tiers of cities) and rural (consisting of villages having population < 2,000, 2,000–5,000 and >5,000) mix was maintained for each district surveyed to ensure representative coverage.
- ◇ 12,321 households were interviewed at random to assess the extent of financial deepening in India across socio–economic (SEC) groups A, B, C, D, E in urban areas and R1, R2, R3, R4 in rural areas.
- ◇ Respondents were limited to the age group 25–55 years to ensure adequate understanding and usage of financial products.

In–depth interviews to assess financial product usage characteristics

- ◇ From the above households, in–depth interviews were conducted with 3,163 chief wage earners from SEC C, D and E in urban or R1, R2, R3, R4 in rural households.

- ◇ Minimum quotas were defined across occupation groups, income categories and interaction of the households with formal and informal channel to maintain adequate representation.

Frontline agents interview

- ◇ In addition, the team interviewed 34 MFI agents, 32 BC agents and 27 bank branch personnel across 15 states.

Focus Group Discussions (FGDs) for customers

- ◇ 5 FGDs were held at 3 rural centers — Haldia, Bijnor and Warangal and 2 urban centers — Mumbai and Delhi.
- ◇ 2 FGDs included all participants using the formal channel of finance, 2 groups with all participants not using the formal channel and 1 group was a combination of the above customer types.
- ◇ The participants were representative across income categories and occupation profiles.

Appendix II: Select Customer Profiles

To address the challenge of financial exclusion, it is important to first build a deep understanding of the excluded customer including their lives, needs and current challenges. This will go a long way in understanding why the traditional market players have

struggled to serve them in an economically sustainable manner. During the course of compiling the report and especially while conducting the Financial Inclusion Survey, the BCG team met with many customers to develop this understanding. Given below are some of the illustrative profiles of the customers that we met.

Illustration 6: Rickshaw puller, New Delhi



Surinder

- Rickshaw puller
- Earns up to ₹36,000 per annum
- Lives with wife and 3 kids
- Lives in a *kutcha* house

Surinder is a 28-year old rickshaw puller who resides in north Delhi. His parents live in a small village in eastern Uttar Pradesh. He came to work in Delhi four years back. Two years back, he took to pulling rickshaws.

Surinder earns around ₹3,000 every month and is not able to save anything. He owns durables such as a TV set and a cycle. Two of his children go to the Government school. Every two months, Surinder sends ₹1,000 to his parents through an agent. The agent charges him ₹100 for every transaction. He is satisfied with this set up. Besides, he has no other choice.

Surinder does not have a bank account. He has not even tried opening one since he cannot meet the bank's minimum balance requirements and does not have all the required documents. He also fears that if he opens an account, the Government might realize that he does not have all the documents to his house and could send him back to Uttar Pradesh.

Surinder has borrowed money on three occasions from different sources. His first loan of ₹10,000 from a money lender was to purchase a rickshaw. Over a period of 10 months, Surinder paid back the principle amount, along with ₹2,000 as interest.

The second time he had to borrow money it was for his mother's medical treatment. This time, he borrowed from a local agent who charged him 24 percent interest per annum. The last loan was taken from a friend for buying another rickshaw for his eldest son.

Surinder aspires to get his children educated and married and then plans to return to his village with some money to start a small shop.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 7: Stage artist, Ultadanga, West Bengal



Narayan Bhowmick

- Struggling actor
- Lives with mother and wife
- Educated in Bengali till standard IX
- Volatile income — ₹30,000–50,000 per annum
- Lives in a 150 square foot room in a slum

Narayan is a 36-year-old, struggling actor, who lives in a one-room tenement in a slum in Kolkata. He is the sole earning member in the family and has an annual income of ₹30,000–50,000, which leaves him with little surplus. Narayan works for a theatre group and his income fluctuates through the year. He also takes up odd jobs such as painting houses to make ends meet. The family has few durables — a TV, an old cycle and a brand new mobile phone.

He used to have a savings account in a public sector bank but since he could not maintain the minimum balance of ₹1,000 he closed the account. He was unaware of the fact that these days there are no-frills accounts with zero minimum balance. He thought such products could become as popular as mobile phones.

Narayan also takes loans from his friends and money lenders once or twice in a year. The loan amount is generally ₹500–1,000, taken to sustain his family when he is out of work. He has never explored the possibility of getting a loan from a bank and is completely unaware of BCs and MFIs.

Narayan's only interaction with a formal channel of finance is the post office which he visits once in a quarter to collect his mother's widow grant. He is very satisfied with the efficiency of the post office.

He strongly believes that the poor need financial products that are flexible since most people in this country are unsure of their income or have volatile incomes.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 8: Shop owner, Ultadanga, West Bengal



Gopal Dhar

- Sells children's clothes in a roadside shop
- Lives with his wife, two daughters and a son
- Educated till standard IV
- Income — ₹60,000 per annum
- Lives in a 300 square foot room in a slum

Gopal is a 51-year-old shop owner who sells children's garments at the roadside flea markets. About a decade ago, he used to work at a biscuit factory in Kolkata. Once the factory shut down, he struggled to get alternate employment and started his own shop.

His family income is about ₹5,000 per month; it peaks during festive and wedding seasons. His son is 15 years old and has opted out of school due to lack of interest in studies.

Due to inflation, he manages to save nothing these days. However, he does have a savings account at SBI. He hardly ever visits the bank. However, he does acknowledge his ignorance about financial products and wishes he had somebody who could guide him on financial matters.

During peak seasons, he needs to take a loan for cash flow management as he has to stock more inventory. He takes a loan every year during the Durga Puja festival from his friends/relatives of around ₹30,000 at 3 percent interest for two to three months. He had once approached a bank for a loan but was declined since he did not have any collateral.

Gopal used to have a life insurance policy when he worked for the biscuit factory. Now that his income is erratic, he can no longer afford to pay the premium for insurance and hence the policy has lapsed.

In future, Gopal hopes banks would be willing to lend him money without any collateral, even at a higher interest rate, so that he does not need to approach his relatives and friends.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 9: Betel leaf shop, Nasik, Maharashtra



Sagar Sudam Jatap

- A shopkeeper who sells betel leaves (paan), toffees, etc.
- Lives with his father, younger brother, wife and two girls
- Educated till class VIII
- Income — ₹60,000 per annum
- Rented shop and house

Sagar is a 32-year-old shop owner who sells betel leaves (paan) along with his brother. The shop is 108 years old and was started by his grandfather. Everyone in Nasik knows 'Jatap Paan Bhandar'. From a simple shop that his grandfather started, Jatap Paan Bhandar today sells a lot of other things such as toffees, cold drinks and mobile recharge cards. Their monthly income is approximately ₹5,000.

Sagar manages to save around ₹500 per month, which he deposits in a local "patt pedi" (on the lines of a chit fund). The agent of the fund comes to collect savings on a daily basis from his shop. More than the fund, he trusts the agent with whom he has dealt for 30 years.

Sagar had once tried to open an account with a Government bank, but since he did not have the required documents, he was unsuccessful. Today, he has a ration card, voters ID card and all other proofs required to open an account. But he never tried approaching a Government bank again. He feels, having an account in a bank will require him to travel to the bank everyday to deposit the small sums of money and hence it's better if he saves in the local fund.

Sagar and his brother also have a life insurance policy. He views insurance as a savings instrument and not as an instrument that will secure the future of his family.

He has never taken a loan except once, when he approached a Government bank for a housing loan. His loan, however, was rejected since he did not pay income tax.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 10: Fruit vendor, Nasik, Maharashtra



Dilip Ambedkar

- Sells fruits on a cart
- Lives with wife and two sons
- Educated till class VI
- Income — ₹120,000 per annum
- Recently purchased an 800 square foot house

Dilip is a 43-year-old vendor who sells fruits on the banks of river Godavari. The family owns a TV, radio and a mobile phone. His sons go to a private school and help their father at the fruit cart in the evening. Dilip earns ₹10,000–15,000 a month. He does not manage to save much because he recently took a housing loan. Most of his income goes towards the EMI.

Whatever he manages to save, Dilip puts it away in a local co-operative bank. He is satisfied with the bank because it does not have any minimum balance requirement and he has personal relations with the owner of the bank.

He recently took a housing loan of ₹5 lakhs from a PSU bank. For this, he first contacted an agent and then built strong relations with him. He then filed his income-tax returns and had to provide income-tax papers of the previous three years. He had to influence the agent and had to pay a bribe to get his loan finally sanctioned.

However, he found the documentation required to take the loan very cumbersome and mentioned that he spent ₹500 only to photocopy various papers required for getting the loan. However, he believes his family's future is now secure and his children have better company of friends in the new complex. He feels he may take fresh loans in the future and perhaps convert his cart into a proper fruit shop.

Dilip also has a life insurance policy which also covers him against accidents.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 11: Tailor, Bijnor, Uttar Pradesh



Nafeesh Ahmad

- Tailor (works at a tailoring shop)
- Lives with his parents, wife and 3 children
- Educated till class V
- Income — approximately ₹48,000 per annum
- Semi-*pucca* house

Nafeesh is a 28-year old tailor in Bijnor (Uttar Pradesh). His son works as a labourer on the fields of other farmers and both his daughters go to the Government school in his village. He earns ₹4,000 per month. His income is variable as sometimes the shop-owner does not pay him on time.

His son earns approximately ₹60 on a daily basis from the fields. Nafeesh is unable to save a fixed amount of money. They live in a semi-*pucca* house. The family owns a cycle, radio and utensils.

Nafeesh tried twice to open a bank account but was unsuccessful because he did not have the documents for the land on which his house is built. Nafeesh wants to open a bank account so that he is able to take a loan and build his own tailoring shop. He believes that unless he starts his own shop he will not be able to improve his standard of living.

Nafeesh takes a loan every year in the months of October–November (during the festive season) from the local money lender who charges him an interest rate of 2 to 3 percent per month. The loan amounts are small ₹5,000 to 6,000 and he generally repays it within six months. He agrees that the money lender charges him high interest rates but they are his only resort for a small loan.

Nafeesh has not purchased any insurance, even though the insurance agent has visited him on several occasions. He wants to buy an insurance policy only when he is able to open a bank account.

Source: BCG's Financial Inclusion Survey, October–December 2010

Illustration 12: Labourer, Madurai, Tamil Nadu



Murgan

- Labourer working at construction sites and fields
- Lives with his wife and 3 children
- Income of ₹34,000 to 36,000 per annum
- Lives in a *Kutcha* house

Murgan is a 32-year-old labourer from Dindigul district of Tamil Nadu. He works at construction sites. He lives with his wife and three children in a rented 500 square feet room. His children attend the local primary school and also take up menial jobs in the village.

His wife also works as a labourer along with him and they are both able to earn around ₹100 per day. His annual income is approximately ₹34,000–36,000. It varies depending on how much work he gets as a labourer. He usually works at construction sites and sometimes also on fields.

Murgan has a bank account with a local co-operative bank. His annual savings are ₹2,000. With the help of this bank account he was able to take a loan and start a fruit cart, which his wife now operates. He wants to take a housing loan some day in order to build a *pucca* house.

Murgan has heard of insurance products but has never bought one. He wants to insure his wife but believes they still do not earn enough money to buy an insurance product.

Murgan never compromises on his children's education. He believes that proper education is the only means of making them prosper in life.

Source: BCG's Financial Inclusion Survey, October–December 2010

Appendix III: Detailed Economics of the Proposed Model

Economic Model Configuration

The proposed model is created in an ecosystem of servicing the customer with the help of different market participants. A customer transacts with different entities — the Government, business houses as well as other customers. All these transactions are processed by the bank and are serviced to the customer through a BC set-up. The role of various players in the ecosystem is outlined below in Exhibit 31.

The ecosystem rests upon the customer being serviced through a business correspondent. A key to ensure the success of this low cost BC model is agent viability. The last mile BC agent can be engaged in these activities either on a full-time basis, or as a part-time agent working along with his current occupation. In both cases, it is imperative to ensure that his earnings are commensurate to the time he spends. Moreover, as a part time agent, there is an additional benefit of increased footfall at his shop thereby indirectly increasing his earnings. These two operating models are shown in Exhibit 32.

Exhibit 31. Player interaction among the different participants

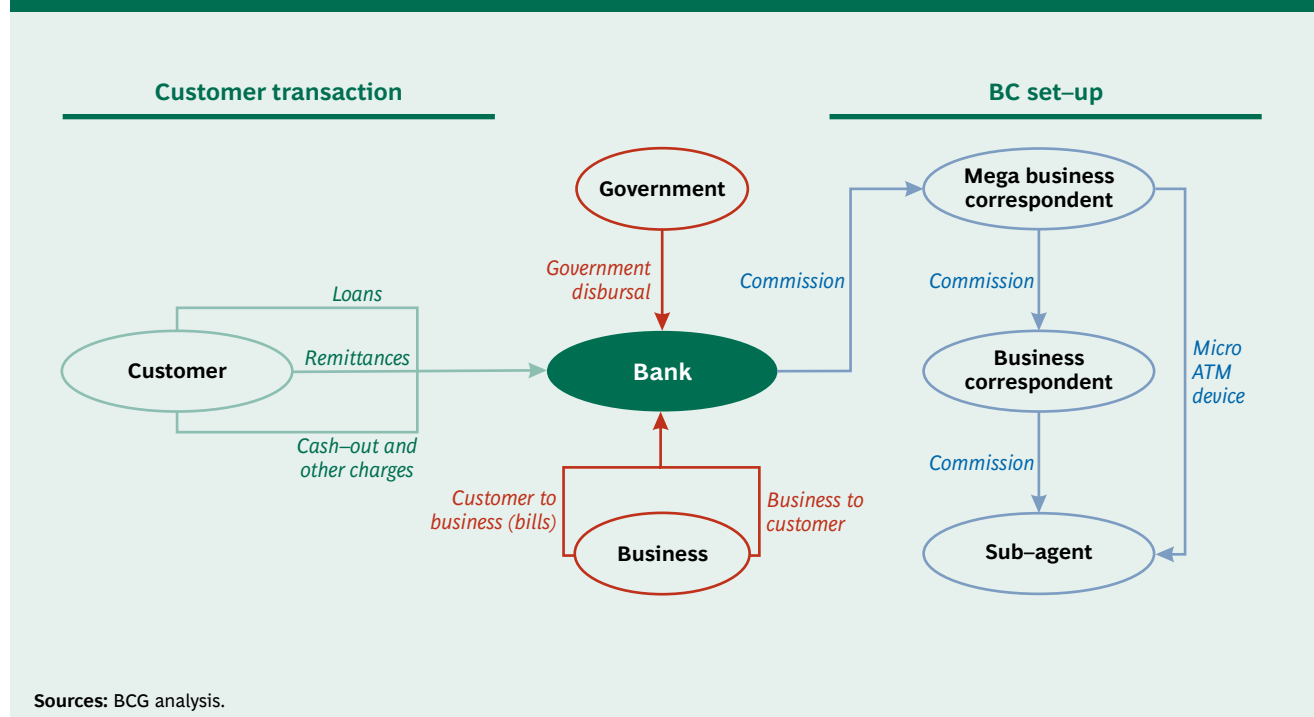
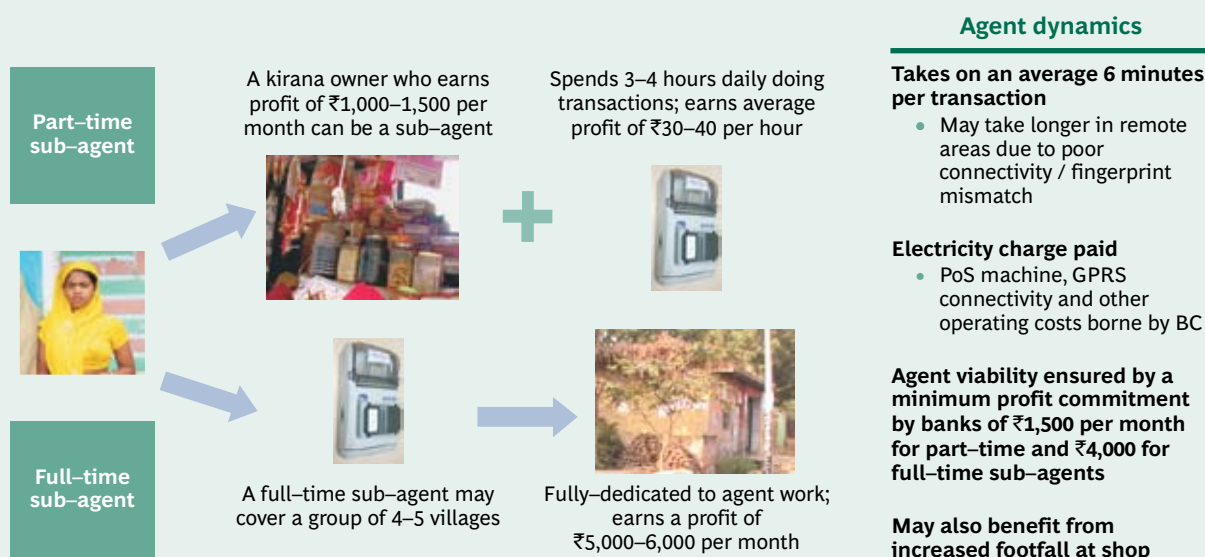


Exhibit 32. Sub-agent can operate under two models



Sources: BCG analysis.

Economics under the ‘Opportunity’ Paradigm

As explained in section four of the report, in the ‘Opportunity’ paradigm the customers are charged in order to enable the financial service providers to service them profitably. As shown in the left panel of the player interaction in Exhibit 31, revenue comes from the charges the financial service provider levies on the customers and other transacting parties. Looking at an all-India level after the first five years of financial inclusion initiatives have elapsed, the key products lead to revenue build up of ₹4,000 crores include loans and remittances. Owing to the large need for loans and high interest rates, these make a large portion of the bank’s revenue pool. The detailed break up is given below in Exhibit 33.

To serve these customers with a host of products, the financial service provider incurs channel cost, technology and other administrative expenses. Overall costs for serving the target population amount to ₹2,500 crores in the fifth years. The contribution of each cost item in the ‘Opportunity’ paradigm is shown in Exhibit 34.

Economics under the ‘Enabling’ Paradigm

The operating model under the ‘Enabling’ paradigm remains the same as that under the ‘Opportunity’ paradigm. However, given the Government and Regulator support, there is a change in the mix of both revenue and cost.

Customers are charged lower rates for both loans and remittances which lead to higher adoption and thus an increase in the overall revenue pool. Moreover, commission on government payments adds substantially to the revenue pool. For the same steady state after five years, at an all India level total revenue amounts to ₹9,500 crores (as shown in Exhibit 35).

With increased economic activity, the number of BC agents increase and so does the total BC payout. An increase in the number of transactions also leads to an increase in the technology cost over the opportunity paradigm. Overall costs by Year 5 are ₹6,000 crores (as shown in Exhibits 36).

Exhibit 33. Key revenue streams in 'Opportunity' paradigm at an all-India level

Products	Contribution to revenue (Year 5)		Additional details
	₹ Cr.	%	
Loan	2,300	58%	- Outstanding loan portfolio of about ₹15,000 crore with approximately 1 crore borrowers - Loan size of ₹12,000–15,000
• Income generating (e.g. agricultural, livestock)	1,400	35%	
• Consumption (e.g. health, marriage)	900	23%	
Remittances	400	10%	3 transactions of ₹1,500 by average sender; total remittance volume of about ₹11,500 crores charged @ 3%
• Government to customer	400	10%	
Cash out and other charges	500	12%	Cash out on all remittances and loan disbursements received by customer; ₹8,000–10,000 per customer per annum @ 0.5%²
• Cash out	350	8%	
• Other charges ¹	150	4%	
Others	800	20%	- Include bill payments, micro insurance premium, recharges and cross sell - Float income on average balance of ₹500–1,000
• Third-party products	600	15%	
• Float income	200	5%	
Total	4,000	100%	

Sources: BCG analysis.

¹Other charges include village access fee of ₹10 per quarter.

²Subject to a maximum of ₹100.

Exhibit 34. Key cost heads in 'Opportunity' paradigm at an all-India level

Cost parameters	Contribution to cost (Year 5)		Additional details
	₹ Cr.	%	
Business correspondent	1,600	65%	2.2 lakh part-time agents earn average monthly profit of ₹3,000 0.6 lakh full-time agents earn average monthly profit of ₹5,500 - Mega BC, BC keep 25% of commission
Technology cost	300	12%	- CBS light used to host financial inclusion accounts ₹1.5 per transaction i.e. ₹30–50 per account per annum¹
Organization cost	250	10%	Establishment, people and maintenance cost are ~6% of revenue
KYC cost	125	5%	One time KYC cost of ₹50–100 per account
Sales and marketing cost	125	5%	4–5% of revenue spent on publicity and sales
Others	100	3%	Others include risk of fraud, communication cost
Total	2,500	100%	

Sources: BCG analysis.

¹Based on discussions with banks and vendors.

Exhibit 35. Key revenue streams in 'Enabling' paradigm at an all-India level

Products	Contribution to revenue (Year 5)		Additional details
	₹ Cr.	%	
Loan	2,800	30%	- Outstanding loan portfolio of about ₹40,000 crore with approximately 5 crore borrowers - Loan size of ₹12,000–15,000
• Income generating (e.g. agricultural)	2,400	25%	
• Consumption (e.g. health, marriage)	400	5%	
Remittances	2,800	30%	- Total Government payments (like MGNREGA, NOAPS) of about ₹65,000 crores earn commission @ 2% 3–4 transactions of ₹1,500 by average sender; total remittance volume of about ₹28,000 crores charged @ 2%
• Government to customer	1,900	20%	
• Customer to customer	900	10%	
Cash out and other charges	1,400	15%	Cash out on all remittances and loan disbursements received by customer; about ₹10,000 per customer per annum @ 0.5%²
• Cash out	900	10%	
• Other charges ¹	500	5%	
Others	2,500	25%	- Include bill payments, micro insurance premium, recharges and cross sell - Float income on average balance of ₹500–1,000
• Third-party products	2,000	20%	
• Float income	500	5%	
Total	9,500	100%	

Sources: BCG analysis.

¹Other charges include village access fee of ₹10 per quarter.

²Subject to a maximum of ₹100.

Exhibit 36. Key cost heads in 'Enabling' paradigm at an all-India level

Cost parameters	Contribution to cost (Year 5)		Additional details
	₹ Cr.	%	
Business correspondent	3,300	55%	3.1 lakh part-time agents earn average monthly profit of ₹4,000 1.2 lakh full time agents earn average monthly profit of ₹6,000 - Mega BC, BC keep 25% of commission
Technology cost	1,500	25%	- CBS light used to host financial inclusion accounts ₹1.5 per transaction i.e. ₹50–60 per account per annum^{1,2}
Organization cost	600	10%	Establishment, people and maintenance cost are ~6% of revenue
Sales and marketing cost	300	5%	4–5% of revenue spent on publicity and sales
Others	300	5%	Others include risk of fraud, communication cost
Total	6,000	100%	

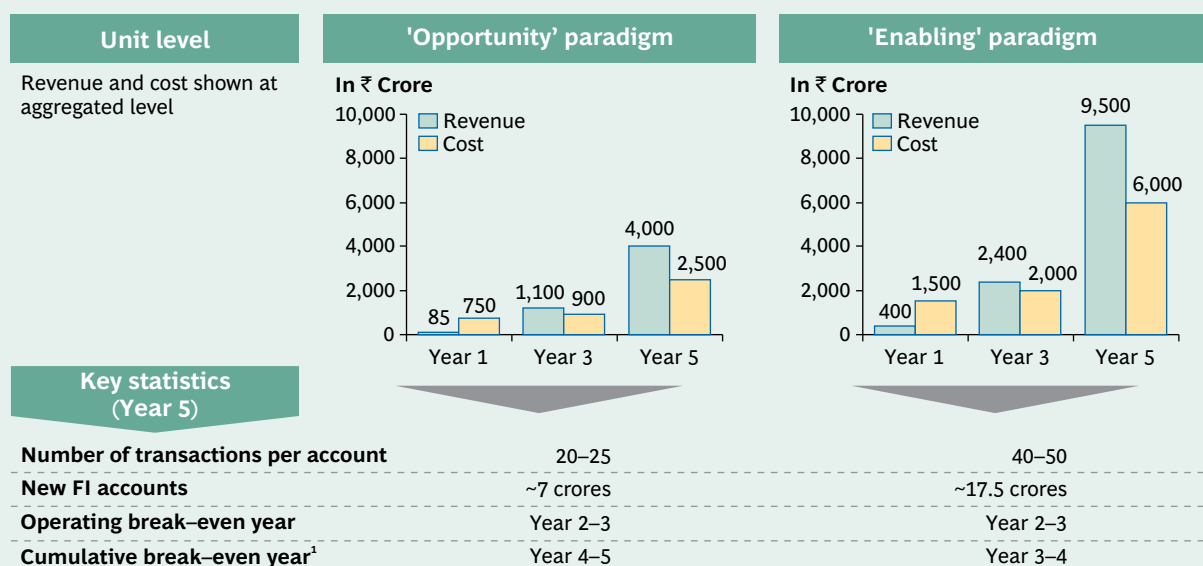
Sources: BCG analysis.

Note: No KYC cost as model assumes that with Government support KYR = KYC.

¹Based on discussions with banks and vendors.

²Per account figure higher than 'Opportunity' paradigm due to increased number of transactions.

Exhibit 37. Economics at an all-India level in the two scenarios



Sources: BCG analysis.

Note: On an average 1.5 accounts per household in 'Opportunity' paradigm and 2 accounts in 'Enabling' paradigm.

¹Life to date revenues and costs added up to calculate cumulative break-even

Exhibit 38. Economics of a small village (< 2000 population) in the two scenarios

		'Opportunity' paradigm	'Enabling' paradigm
Key statistics for a small village (<2,000 population)	Number of transactions per account	20–25	25–35
	New financial inclusion accounts	40–60	100–120
	Average population	800	800
	Operating break-even year	Year 4–5	Year 3–4
Key statistics for a large village (>2,000 population)	Number of transactions per account	20–25	35–40
	New financial inclusion accounts	300–350	650–700
	Average population	4,650	4,650
	Operating break-even year	Year 2–3	Year 1–2
Key statistics for a city / town	Number of transactions per account	40–45	50–55
	New financial inclusion accounts	3,500–4,000	7,500–8,000
	Average population	73,000	73,000
	Operating break-even year	Year 1–2	Year 1–2

Sources: BCG analysis.

Note: On an average 1.5 accounts per household in 'Opportunity' paradigm and 2 accounts in 'Enabling' paradigm; Cumulative break-even (life to date revenues and costs added up) will be longer than operating break-even.

Exhibit 39. Current offline BC model making losses

	Model description	Calculation (per account per annum)
Cost	300–700 customers at each BC outlet - Monthly pay of ₹1,500–3,300 to the BC per month - Smart card cost of ₹100–130, amortized over 3 years - Accounts hosted on BC server: ₹60–85 per account per annum	Total BC cost ₹50–70 employee cost ₹30–40 card cost ₹60–85 technology cost
	Accounts also hosted on full CBS by bank ₹100–150 per account per annum	Bank technology cost ₹100–150 technology cost
	Other expenses of about 10% of costs	Other expenses ₹25–35 operating cost
Revenue	Average balance of ₹500–1000	Float income ₹18–35
	Remittances charged on a per transaction basis ₹20–30 per remittance; 2–3 remittances per customer	Remittances income ₹40–90
	Government payments disbursed 1–2% commission on about ₹500 payment; 2–3 disbursements per customer	Government payments disbursed ₹10–30
	Cash out charged @ 1% 1 cash out of ₹100 per customer per month	Cash out charge ₹12

Sources: BCG analysis.

Varying economics under varying locations

As discussed, a financial service provider operates under different ecosystems under the two scenarios. Even though the operational model remains the same, a very different set of transaction mix is observed in the two scenarios and accordingly the economics vary. The economics also vary by the location of operations, each serving a different set of customers varying by both demographic and occupational attributes. Exhibit 37

shows the all-India picture of how the economics would pan out over the next five years. The de-averaged pictures of the small village, large village and city / town are shown in Exhibit 38.

Details for Current Offline BC Model

As explained earlier, the current offline BC model has not yet achieved break-even, suffering losses to the tune of approximately ₹200 per account per annum. The contributing costs and revenues are detailed in Exhibit 39 above.



Note to the Reader

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For Further Reading

The Boston Consulting Group has published other reports on this topic which may be of interest to senior management. Recent examples include:

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A report by The Boston Consulting Group in association with The Confederation of Indian Industry, February 2011.

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A report by The Boston Consulting Group, February 2011.

Digital India: The \$100 Billion Prize

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A report by The Boston Consulting Group in association with Federation of Indian Chambers of Commerce and Industry and Indian Banks' Association, September 2010.

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The Next Billion Consumers: A Road Map for Expanding Financial Inclusion in India

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