MOBILIZING BANKING FOR INDONESIA'S POOR

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Institute For Business In The Global Context
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This report is the result of this innovative collaboration.

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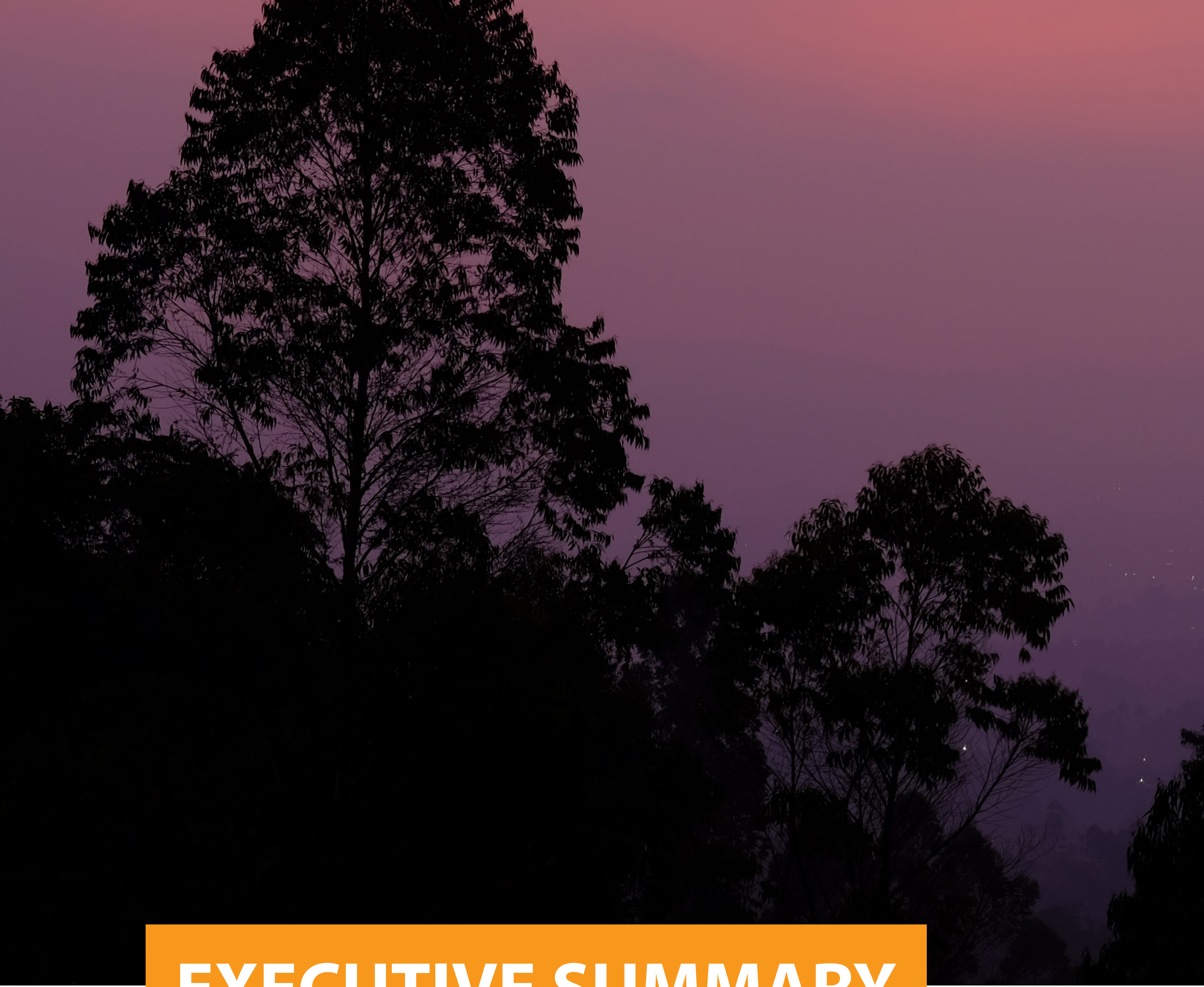


EXECUTIVE SUMMARY

Indonesia is the largest market in Southeast Asia and a member of the G20, yet it has one of the biggest underbanked populations in the world. Only 20% of Indonesia's 243 million people were banked as of 2011.[1] Most are financially excluded, exposed to risk and left to manage their financial portfolios with mostly inefficient informal services. Formal financial services have the potential to improve the livelihoods of millions.[2]

In contrast to formal financial services, growth in the mobile phone market has been much more inclusive. As of 2012, there were over 143 million unique mobile subscribers in Indonesia, more than double the number of bank accounts.[3] Using mobile phones to offer mobile financial services and branchless banking (MFS/BB) is one promising solution for reaching the underbanked. Under MFS/BB schemes, financial services are delivered by agents who are contracted by institutions to process customers' transactions off-site, without the need for physical bank branches.

MFS/BB has failed to gain traction among Indonesian consumers. The first MFS/BB products entered the market in November 2007, yet only 0.4% of Indonesian adults have registered electronic wallets (e-wallets) while 8% have unregistered e-wallets with more limited functionality.[4] Designing MFS/BB to better meet the needs of consumers—the focus of this report—requires that we first understand the evolving regulatory environment in which the emerging industry operates.

Regulators have maintained a cautious approach as they determine the most effective way to govern the new MFS/BB market. This approach has hindered the development of a ubiquitous network of mobile and branchless banking agents, the backbone of the MFS/BB ecosystem, and limited product offerings to transfers and payments. As a result, service providers have yet to fully commit to MFS/BB, and are unable to develop extensive agent networks or design products to meet the biggest needs of poor consumers: savings and loans.

Demand for MFS/BB

With most research and reporting focused on the regulatory feasibility and commercial viability of MFS/BB, it is easy to lose sight of the most important player, the consumer. Several fundamental questions remain unanswered: is there demand for MFS/BB among poor Indonesians? How should businesses design and market MFS/BB products to incentivize adoption? What factors should regulators consider when designing MFS/BB regulations?

To answer these questions, we spent June and July 2014 immersed in three communities in Java. We analyzed consumer preferences and explored the emotions and logic of consumer behavior. We conducted a pain point analysis* detailing the perceived strengths and weaknesses of the formal and informal financial services currently available in these poor communities.** While our data is not representative of all of Indonesia, we complemented our fieldwork with an extensive literature review and a series of expert and stakeholder interviews. We are confident that our data provides insights that are broadly indicative of the challenges and opportunities faced by poor Indonesians

* A pain point analysis explores the moments when a consumer experiences frustration, difficulty, or uncertainty when using a product or service. Pain points indicate unmet user needs (Datar, S. and Lal 2014)

** We selected these locations based on the prevalence of micro enterprises in the urban locations, and small holding farmers and agricultural workers in the rural location. Previous segmentation analyses have suggested that these two populations are underserved by formal financial services and are likely to adopt MFS/BB.

as they manage their financial portfolios. Combining a nuanced understanding of consumer behavior and our analysis of competing financial services, we conclude that there is significant latent demand for MFS/BB amongst poor Indonesians.

This potential demand for MFS/BB emanates from dissatisfaction with existing services. MFS/BB must compete with an assortment of formal and informal financial product offerings that are already socialized, trusted, and tailored to the poor's specific expectations and needs. However, these existing services come with many burdensome tradeoffs, presenting an opportunity for well designed, competitively priced, and widely distributed MFS/BB products.

Design Principles

Through our analysis of consumer behavior and pain points, we derived three design principles that reflect the qualities poor consumers demand most in financial services: accessibility (simplicity, convenience, and physical and psychological proximity), affordability (flexible and competitive pricing), and security (protection from impulsive spending and reliability of service). In order to meet unmet needs and activate latent demand, businesses and regulators should keep these principles at the forefront of the decision-making process as they design MFS/BB services and regulations.

Market Opportunities

We identified several clear market opportunities for businesses. MFS/BB can transform the financial lives of poor consumers by providing a simple one-stop shop for a suite of savings, microloans, electronic transfer, and payment tools.[*] However, MFS/BB will continue to disappoint unless the agent network is greatly expanded, and the products are accessible, affordable, and secure. Many of these developments are contingent upon enabling regulations. While success is far from guaranteed, businesses should work with regulators at Bank Indonesia and the Financial Services Authority, who continue to release increasingly progressive and clarifying regulations.[**]

We found the strongest demand for an end-of-the-day savings tool. Participants expressed a strong preference for making purchases and transfers with cash and consistently expressed the desire for a savings tool that facilitates accessible and affordable deposits of small, end-of-the-day cash balances. Furthermore, participants only clearly understood the concept and value of mobile payments, loans, and transfers in the context of a mobile savings account. They could easily imagine how these services would be linked to an e-wallet functioning as a savings account, but otherwise did not see how these services could be useful. These two findings taken together lead us to conclude that savings is the gateway to MFS adoption in Indonesia.

We also observed a clear market opportunity for a service that disperses small and immediate loans. Not surprisingly, we found that poor consumers have limited options when it comes to borrowing, yet they have a strong need, poorly met by existing services, for small and immediate cash loans to smooth erratic income cycles. Once MFS/BB users have generated a savings history and data trail, microloans could be extended with their savings as collateral.

* Participants often employed five or more formal and informal tools to manage their finances. These services are rarely integrated, and moving funds between them, if possible, is typically costly and time consuming.

** New branchless banking regulations are expected before the end of 2014.

Recommendations for Businesses

To compel poor Indonesians to adopt MFS/BB, businesses should:

- Work with customers to design products and services that embody the three design principles: accessibility, affordability, and security; and work with regulators to develop supporting regulations.
- Expand networks of MFS/BB agents to include informal, unlicensed businesses—where the majority of Indonesians work and shop. These businesses are embedded in communities and are trusted.
- Use key influencers to socialize new products. Trying untested financial products is risky, and the poor rely on respected members of their community to vouch for new products and services.

Recommendations for Regulators

To spur the nascent market, regulators should:

- Allow unlicensed businesses to act as MFS/BB agents in order to expand the cash-in (deposit)/cash-out (withdrawal) network to the community level.
- Empower agents to register new customers away from bank branches and Mobile Network Operators (MNOs) branch offices, which are difficult to reach and inconvenient for many poor consumers.
- Empower medium-sized banks and MNOs to license agents that can both register customers and perform cash-out. Some of these organizations have more experience serving poor Indonesians, and MNOs can leverage their extensive network of phone credit agents to provide MFS/BB.
- Allow MFS/SS service providers to offer savings accounts and micro-loans in addition to payments and transfers. Poor consumers demand new savings and loans products.
- Expand e-wallet size limits so customers with registered e-wallets can maintain larger balances, thereby permitting more robust savings products.

RESEARCH METHODS

To understand the potential market for MFS/BB among poor Indonesians, we spent June and July 2014 immersed in three communities in Jakarta, Bandung, and the Ciwidey Regency of West Java Province. We created ethnographic profiles of each that detail the rhythms of their economic and financial lives.

We incorporated techniques of human-centered design, such as learning from the customer and participatory design, to test whether poor segments might adopt particular MFS/BB products on the market, in the pipeline, or yet unimagined, and whether these products might better livelihoods.[5] After completing focus group discussions, in-depth one-on-one interviews, and product ideation workshops, we developed a portrait of each community that captures the contours and idiosyncrasies of their financial management practices. In parallel, we conducted a series of stakeholder interviews with commercial banks, cooperatives, MNOs, regulators, government officials, and industry experts in order to incorporate their perspectives, interests, and concerns into our analysis.

In designing our research methodology, we prioritized depth over breadth, and recognize the limitation of the sample frame and size. Our data is not representative of all of Indonesia, and we do not seek to universalize findings specific to a moment and place; rather, we use insights captured from these communities to help us understand how mass market services can be tailored to specific segments and adopted in specific contexts.[6] Complemented by an extensive literature review and a series of expert and stakeholder interviews, we are confident that our data provides insights that are broadly indicative of the challenges and opportunities faced by the Indonesian poor as they manage their financial portfolios.

Characteristics of Participants

We selected three locations—Slipi, Pasir Layung, and Gambung Pangkalan. These locations were based on the prevalence of micro enterprises in the urban locations, and small holding farmers and agricultural workers in the rural location. Micro, small, and medium-scale enterprises (MSMEs) represent 98% of Indonesian businesses and employ 94% of the workforce,[7] and 40.8% of the labor force works in agriculture[8] (note that small holding farms are considered MSMEs). Previous segmentation analyses have suggested that these two populations are underserved by formal financial services and are likely to adopt MFS/BB.[9] Additionally, the locations we sampled correspond with those selected in previous studies and recent pilots.

The Indonesian government defines a micro enterprise (ME) as a business with less than 300 million IDR (24,500 USD)[*] in annual sales.[**] Based on these criteria, all of the business owners that we sampled, which represent 82% of total participants, operate MEs. Participants ranged in age from 19 to 64, and gender was equally represented. Based on estimates of monthly revenues, profits, and household size, all of the participants live above the national poverty line of 200,262 IDR (16.60 USD) per month,[10] and make between 21,500-50,000 IDR (1.80-4.15 USD) per day. Two dollars (24,220 IDR) a day is the "widely recognized benchmark for defining the world's poor."[11] It is important to note that Indonesia's national poverty line is well below one dollar per day, and has been criticized for being too low.[12]

* All conversions based on Oanda exchange rates calculated on October, 26th, 2014

** Definitions based on Law of Micro, Small, and Medium Business of 2008 (Law No. 20/2008)

Community Profiles

SLIPI, JAKARTA

Slipi is located in central Jakarta, wedged between the standing traffic of Parwan Toll Road and the stagnant Ciliwung River. It is one of the densest neighborhoods in the capital, a labyrinth of alleyways and sewers that pass alongside small family homes and businesses. Most residents are from the Betawi ethnic group, indigenous to the Jakarta area, with extensive social networks cast across the city.

As in all of the locations, participants in Slipi are typically responsible for multiple dependents, with limited education and financial literacy. Their economic lives are centered on their homes and immediate surroundings. Most of the women run small businesses from the family home, selling anything from gorengan (fried tempeh and tofu) or jamu (a traditional medicinal herbal drink), to household staples. The men help capitalize the warungs (small family-owned business) by working other jobs, as ojek (motorcycle taxi) drivers or day laborers, for example. Participants spend the majority of their day within a few hundred meters of their home, deepening the economic and social ties within the community.

PASIR LAYUNG, BANDUNG

Pasir Layung is a dense neighborhood in western Bandung, Indonesia's second largest city. All of the participants run MEs, and many also work in professional services as drivers, teachers, and civil servants. The community is more mobile, educated, and financially literate than their peers in Slipi and Gambung Pangkalan. This increases the frame of the participants' financial lives, which in Slipi and Gambung Pangkalan is constrained to participants' immediate surroundings. Due to their increased mobility and exposure, participants' financial management decisions are less reliant on community consensus. Rather, their decisions are informed by employers, mass-marketing, and the influx of newcomers to this migratory community.

SLIPI	PASIR LAYUNG	GAMBUNG PANGKALAN
13 Participants	12 Participants	13 Participants
7 Women, 6 Men	6 Women, 6 Men	6 Women, 7 Men
8 Warung Owners	7 Warung Owners	7 Small Holding Farmers
1 Gasoline Re-Seller	2 Day Laborers	2 Livestock Breeders
1 Masseur	2 Motorcycle Taxi Drivers	2 Warung Owners
1 Construction Worker	1 Private Driver	1 Fruit Wholesaler
1 Motorcycle Taxi Driver		1 Share Cropper
1 Tailor		

GAMBUNG PANGKALAN, CIWIDEY REGENCY

Gambung Pangkalan is a hilltop village populated by smallholding farmers and a handful of business owners that cater to them. Its terraced slopes abut a jungle, the source of a creek that cuts through the town and irrigates fields of tea, coffee, and fresh produce. The most remote location in the sample, it is also the least served by formal financial institutions, markets, and government services like schools and health facilities.* Limited access impacts the community in at least three ways that distinguish it from the urban communities we sampled: (1) villagers have fewer formal and informal financial services from which to choose, (2) villagers have difficulty moving their goods to market, and securing inputs for businesses and non-food items for household consumption, and (3) villagers have relatively poor access to information. Participants are hesitant to assume the risks with adopting new products unless their friends, family, and neighbors vouch for its credibility.

THE STATS

- 11 expert interviews
- 3 focus group discussions with 38 participants
- 25 in-depth interviews
- 12 financial diaries
- 4 ideation workshops with 12 participants
- 3 community ethnographies
- 12 retail audits
- 80+ secondary sources reviewed
- 7 person team
- 2500+ photos
- 48 hours of audio

* Elementary school is 1 hour by foot (15 minutes by motorcycle), junior high school is 1.5 hours by foot (20-25 minutes by motorcycle), and senior high school is 2 hours away by foot (30-40 minutes by motor cycle).

BACKGROUND

If designed well, priced competitively, and distributed widely, MFS/BB has enormous potential to drive financial inclusion and promote inclusive growth in Indonesia. Policymakers and businesses alike are aware of this potential. The Government of Indonesia is currently designing regulations to govern the emerging market. Meanwhile, Indonesian commercial banks and mobile network operators (MNOs) are testing and refining MFS/BB products as they await greater regulatory clarity. Yet, given the complexity of deploying MFS/BB products (it entails the development of new services and new markets), regulators, policymakers, and businesses must work together to realize their goals and entice consumers to adopt the new services.

MFS/BB industry experts, such as GSMA, the Consultative Group to Assist the Poor, and the International Finance Corporation, have been trying to push government and businesses closer together by producing research and reports aimed at helping these stakeholders understand their shared objectives and align their strategies. Significant research has explored the regulatory feasibility and commercial viability of MFS/BB in Indonesia, but less attention has been given to consumer demand. Creating desirable MFS/BB services that will incentivize consumers to switch from their proven and familiar financial tools is the third piece of the puzzle.

Our research finds strong potential demand for MFS/BB amongst poor segments of the Indonesian market, driven by their desire for financial services that are more accessible, affordable, and secure than those currently available. Yet, the dissatisfaction with the status quo is not enough to compel adoption of new products and services. The realization of a self-sustaining MFS/BB ecosystem requires government and businesses to tap into the logic and emotions that incentivize consumer behavior.

Mapping Risk and Reward Profiles Across Stakeholders

Indonesian regulators and policymakers hope to use MFS/BB to promote financial inclusion and drive inclusive growth. However, they are wary of creating systemic risk, as well as exposing poor consumers—the most vulnerable population—to the risks associated with unproven financial services. Banks and MNOs are eager to jump into the emerging MFS/BB market, but are reluctant to invest heavily before regulators have clarified the rules of the game. Their current market offerings are placeholders for full-fledged MFS/BB deployments. Poor consumers, while largely unaware of MFS/BB, have at their disposal a mix of expensive, inflexible, and risky financial instruments to manage their incomes.[*] With the right incentives, they might consider adopting MFS/BB, but only if the value of MFS/BB is clearly illustrated and the risks are largely mitigated.

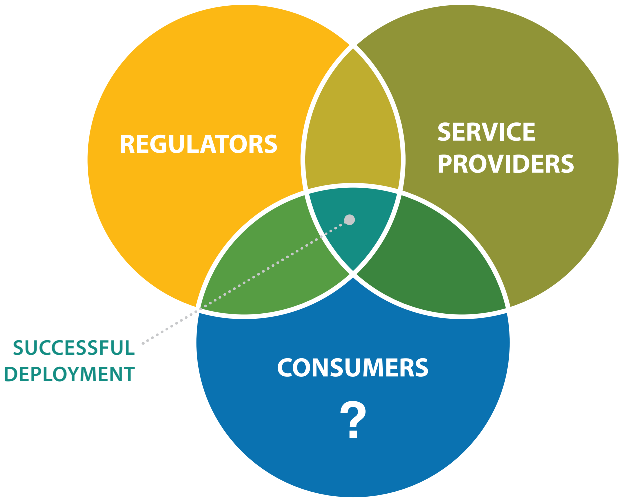
For government, businesses, and consumers alike, the decision to embrace MFS/BB is all about balancing risk and reward.

REGULATORY FEASIBILITY: PROMOTING FINANCIAL INCLUSION WHILE MITIGATING MICRO AND MACRO RISKS

Amidst the hype and considerable investment in MFS/BB in Indonesia, uptake has been slow. The first MFS products entered the market in November 2007, yet only 0.4% of Indonesians adults have registered e-wallet accounts.[13] Despite the Government's high-level commitment to promote financial inclusion, the conservative regulatory approach has constrained the growth of the MFS/BB market. Memories of the Asian financial crisis of 1997-1998, and the global financial crisis of

* Formal financial services are marketed towards middle and high-income earners, often priced too high for the low-income segment. Informal financial services fill the gap, but often have inflexible terms and are fully unregulated and therefore risky.

ALIGNING STAKEHOLDER INTERESTS



SERVICE PROVIDERS (commercial viability):

- High volume of low margin transactions
- For MNOs: increasing average revenue per customer, reducing high attrition rates
- For banks: expanding the customer base to low and middle income segments

REGULATORS (regulatory feasibility):

- Mitigating systemic risk
- Protecting the consumer
- Promoting financial inclusion

2007-2008, remain fresh in the minds of regulators. In the late 1990s, over 80 Indonesian commercial banks were nationalized or recapitalized.[14] In contrast, Indonesia emerged from the global economic crisis relatively unscathed, partly a result of more conservative policies and oversight of commercial banks.[15]

Provided this history, regulators are maintaining a cautious approach as they determine the most appropriate way to mitigate systemic risk and protect consumers. MFS/BB are new services, access new markets, and involve new providers such as MNOs, which lack financial services experience. Regulators must operate with little precedent.

We identified four principal regulatory barriers, including (1) constraints on the licensing of individual agents, (2) restrictions on cash-out transactions, (3) burdensome Know-Your- Customer (KYC) and registration requirements, and (4) limits on transaction volume, e-wallet value, and service offerings.[16] To overcome these barriers, Bank Indonesia and the Financial Services Authority (Otoritas Jasa Keuanganan, responsible for micro-prudential oversight) are issuing increasingly clear but cautious regulations. New branchless banking regulations are expected by the end of 2014.[17]

COMMERCIAL VIABILITY: LOW MARGINS, HIGH VOLUME

Indonesian commercial banks are among the most profitable in the world, but only accesses a narrow, high-income segment of Indonesian society.[18] MFS/BB presents an opportunity to expand to new markets. Since mobile coverage is universal and mobile use nearly universal, MNOs are interested in MFS/BB's potential to offer new products that will increase the average revenue per customer and reduce high rates of customer attrition. With less conservative corporate cultures than banks, MNOs have been aggressively pushing into the emerging MFS/BB space, but they are constrained by both the services they can offer, and who can qualify as an MNO agent. While MNOs have already penetrated low-income markets and developed vast networks of mobile phone credit agents, their MFS/BB products are limited to transfers and payments, and usage is low.

Despite differing motivations for entering the MFS/BB market, a successful outcome for the banks and MNOs has a similar look—a high volume of low margin transactions. Poor customers are price sensitive and their transactions are small. The potential profit margins from each transaction are even smaller. To be profitable, banks and MNOs must offer the right product, at the right price, to the right customers so that these low margin products are used frequently.

CONSUMER DESIRABILITY: OUTPERFORMING MARKET INCUMBENTS, FULFILLING ASPIRATIONS, AND MOLLIFYING FEARS

With regulators, businesses, scholars, and industry experts paying considerable attention to the regulatory feasibility and commercial viability of MFS/BB, it's easy to lose sight of the most important player: the consumer. The question remains: is there demand for MFS among poor Indonesians?

Our research suggests there is significant latent demand for MFS/BB products. Poor consumers we interviewed are not satisfied with the formal and informal financial services currently at their disposal. These services come with many tradeoffs, not the least of which is the inefficiency with managing a complex mix of financial instruments. Poor consumers are constrained in their choices by both price and time. Yet emotion is as important as cost-benefit calculations in compelling consumer choice. Above all, we found that consumers value financial services that are accessible (easy to use and conveniently located), affordable (flexible and competitively priced), and secure (safe from impulsive spending and reliable).

MFS/BB can simplify the financial lives of poor consumers by providing a one-stop shop for a suite of savings, loans, and money transfer tools that are accessible, affordable, and safe. Regulations aside, the biggest challenge to generating demand is designing simple, user-friendly products that embody these principles, and clear marketing campaigns that illustrate their value while assuaging consumers' fear of the unknown. Regulators should support the development and deployment of these new products, and design regulations with these principles in mind, as well.

Understanding the Financial Needs of the Poor (theoretical framework)

Our research is influenced by the 2010 book *Portfolios of the Poor: How the World's Poor Live on $2 a Day*, which explores how the poor cope with small, irregular, and uncertain incomes. Putting food on the table, and paying suppliers, utility bills, and children's school fees is very challenging for the poor to manage using current income alone.[19] Responding to unexpected health emergencies and raising lump sums for the occasional large purchase is often impossible. Despite the need for tools to help the poor contend with meager and unpredictable incomes, "…too few financial instruments are available to effectively manage these uneven flows. It is a 'triple whammy': low incomes; irregularity and unpredictability; and a lack of tools." [20]

Participants across the sample have a much greater need for financial intermediation than is evident from taking a measure of their income alone. When choosing financial services, consumers weigh considerations of trustworthiness, security, convenience, and affordability. All of the services currently available, whether formal or informal, come with significant trade-offs. Banks are often inaccessible, complicated, and expensive, though secure; loans from family and friends cost social capital and pose a risk to close relationships, but are cheap, easy to acquire, and flexible in terms of repayment; informal services are unregulated, expensive, and carry security risks not associated with formal services, but are often more convenient and tailored to the specific needs of poor consumers.

The demand for financial tools in poor communities derives from three principal needs. The first need is to **manage the basics**, and participants employ different means such as borrowing from friends and family, purchasing goods on credit at the local warung, and keeping cash on-hand to "transform irregular income flows into a dependable resource to meet daily needs."[21] Second, participants devise strategies to **cope with risk**, often relying on family, friends, and neighbors for support. When families live on the margin, emergencies can "derail families with little reserve."[22] Finally, participants use banks, cooperatives, consumer finance companies, and informal services developed by members of their community to **raise lump sums** to pay for the occasional "big-ticket expenses" like motorcycles, homes, or weddings.[23] As we explore the values and pain points for the different savings, borrowing, payment, and money transfer tools that participants use to manage their financial portfolios, we will return to the typology of needs as identified in Portfolios of the Poor.

FINDINGS

Across all three communities, participants cited similar aspirations that drive their financial management strategies: providing their children a better life (when applicable), growing their income opportunities, securing their lifestyles, and insuring against future risk. Personal histories, individual preferences, behavioral norms, and community values shape aspirations and influence financial management choices. While the relevant personal factors we observed are as varied as the number of individuals we sampled, the behavioral norms and community values that shape aspirations were surprisingly consistent.

Understanding Participants' Financial Practices

Fluctuating cash flows make it difficult to manage a budget on current income alone. Each time participants need to financially intermediate in some form, such as making a purchase, paying on credit, or saving money, they first determine if they are able to do so with cash reserves on-hand. This consideration is more complicated than merely counting the cash in their wallet. It requires a mental tabulation of their balance sheet that takes into account competing obligations such as food, re-stocking the family business, paying debt obligations, and reaching savings goals. If they deem it imprudent to make a purchase with current cash reserves, most participants have the option to use either "past income [savings] or future income [loans] to fund today's expenses."[24]

How the Poor Save

Participants employ a variety of savings tools that inadequately address their savings objectives. Cash saved under the mattress, a common strategy employed to smooth over irregular daily income flows, is difficult to resist: participants complain that cash saved at home is too accessible and easy to spend on unnecessary items. Cash saved with informal services (e.g. Bank Harian, Bank Percayaan, or Arisan) is illiquid, and these services often have rigid and burdensome daily deposit requirements, restrictions on withdrawals, and charge substantial withdrawal fees (1-5%). These informal savings tools are unregulated and insecure, vulnerable to theft and loss with little recourse.

Formal savings accounts at banks and cooperatives, while regulated and relatively safe, are not well suited to the needs of the poor. Making regular small deposits and withdrawals at these institutions is time consuming and expensive. Travel to and wait time at ATMs and branches can be long, in excess of 2.5 hours in Gambung Pangkalan. Participants fear that tellers might scoff at their small deposits. In addition, bank and cooperative accounts are difficult and expensive to maintain, with relatively high minimum balances, stiff penalties, and frequent account maintenance fees. Often, cooperatives restrict members' ability to freely withdraw funds.

Savings Tools

BANK CELENGAN (PIGGY BANK): All participants used some form of Celengan to save their daily cash balances. After a while, cash accumulates and they have enough on-hand to manage the basics even if business is slow. We expected participants to be concerned with the security risk of storing a good proportion of their assets as cash in their homes. However, participants were much more concerned with the risk of impulsive spending rather than the risk posed by thieves. Participants cited the temptation to spend their available cash on unnecessary purchases as the greatest risk of saving at home.

PAIN POINTS: A moment when a consumer experiences frustration, difficulty, or uncertainty when using a product or service. Pain points indicate unmet user needs. These are the pain points/unmet needs that a product, service, process, or business model seeks to address.

VALUE PROPOSITION: How a particular product or service responds to customer needs.

(Datar, S. and Lal 2014)

Value:

- The Celengan is very liquid; cash saved is immediately available to pay for household consumption and business capitalization
- Depositing into a Celengan is as easy as tucking cash under the mattress, and there is no minimum deposit requirement or withdrawal fee
- Cash saved in a Celengan can be spent anywhere

Pain points:

- Cash saved in a Celengan is very vulnerable to impulsive spending; there is a constant temptation to spend cash that is saved in the home
- The Celengan is not conducive to raising lump sums
- Cash saved in a Celengan cannot be collateralized for loans and does not build credit
- Cash saved in a Celengan can be easily lost or stolen

BANK HARIAN/BANK PERCAYAAN (DAILY BANK/TRUST BANK): Members of the sampled communities have developed informal savings tools that are tailored to the specific needs of the community. We observed Bank Harians and Bank Percayaans in every community sampled. Under these informal banking schemes, pengumpul uang (money collectors, akin to banking agents) collect daily deposits from customers. Customers cannot withdraw their savings until their account matures—often at Ramadan, after one year of saving—with the option to withdraw in cash or in the form of a siraya lebaran (Ramadan parcel consisting of staple foods and household items). Early withdrawals are often penalized, and require several days advanced notice.

Value:

- Specifically designed to raise lump sums from very small daily deposits
- Forces disciplined savings and protects customers from impulsively spending their savings
- Money collectors make depositing very convenient
- There are no start up fees
- There are no account maintenance fees

Pain points:

- The deposit schedule is rigid and not all customers are confident in their ability to save money every day for a year while contending with their small and irregular incomes
- Money saved can only be withdrawn once per year at a set date, early withdrawals are often penalized (does not apply to all services)
- Deposits are unregulated, vulnerable to bookkeeping errors or manipulation by money collectors, and there is no formalized dispute resolution process
- Early withdrawals are heavily penalized, so cash saved is not readily available to smooth income fluctuations or cover unexpected expenses

ARISAN (GATHERING): Seventy five percent of participants were members of one or more Arisan, which is a rotating savings club. An Arisan is typically formed by a preexisting group (e.g. family, friends, co-workers), and it serves a dual purpose: bringing the group together to reinforce social bonds, and enabling members to save lump sums for planned expenses. We observed Arisans composed of members from the same family, neighborhood, or organization. At regular intervals, members of the Arisan gather and contribute a set amount of cash to the savings pot, which is then awarded to one winning member through a lottery or pre-arranged distribution schedule. Over the course of the Arisan cycle, which lasts several months to a year or more, each member wins the pot once so that their winnings equal their total contribution over the course of the cycle.

Value:

- Enables savers to raise substantial sums of money with relatively small weekly or monthly deposits
- Protects savings from impulsive spending
- Reinforces social bonds

Pain points:

- Members do not have complete control over when they withdraw their savings, and must reach consensus with other members to set a withdrawal schedule
- Money saved through an Arisan is not readily available to smooth income fluctuations or cover unexpected expenses
- Many who do not participate believe their income stream is too irregular to meet the deposit schedule

KOPERASIS SIMPAN PINJAM (SAVINGS AND LOAN COOPERATIVES): Forty two percent of participants, the majority of whom were located in rural Gambung Pangkalan, are members of a savings and loan cooperative (also known as a credit union). These cooperatives are "user-owned organizations that operate for the benefit of members."[25] In fact, 20% of Indonesia's adult population belongs to a cooperative.[26] The objectives of the nearly 200,000 cooperatives across the country vary, but savings and loan cooperatives are the most common type in Indonesia.[27] While the rules that govern particular cooperatives differ from location to location, the general structure remains the same. Each member holds equity in the cooperative, and receives annual dividends. Often, cooperatives restrict members' ability to freely withdraw funds.

Value:

- Cooperatives are trusted. One participant said, "I know the people that run the coop, so it's safe and easy."
- Cooperatives provide relatively integrated services. Members can collateralize loans with savings, partition their savings account, and buy other financial products like life insurance.
- Cooperatives payout annual dividends, and savings accounts are interest-bearing
- Cooperatives often provide financial literacy education
- Savings deposits are semi-liquid, which helps protect against impulsive spending

Pain points:

- Cooperatives are not conducive to frequent small deposits
- Cooperatives have few branches and ATMs, so distance, wait time, and limited hours of operation impose significant costs on members
- Account fees cut into savings
- Some participants believe that cooperatives are not as secure as banks, and that the government is more likely to bailout a bank in times of financial crises

IBU DEWI'S BANK HARIAN

Ibu Dewi, a middle-aged woman in Slipi, runs a Bank Harian, an informal savings service with around 500 customers. To participate, customers must provide one of Ibu Dewi's money collectors the same amount of money every day, which Ibu Dewi then deposits into her bank account. Customers determine the amount of their daily deposits after Idul Fitri, the holiday marking the end of Ramadan (daily deposits range from 500 IDR-20,000 IDR (0.40 USD to 1.70 USD). Ibu Dewi then disperses the entirety of her customer's yearly savings to her customers one week before the next Ramadan. Some savings plans also pay out in the form of a parcel of household goods that roughly corresponds in value to that of their total daily deposits. Ibu Dewi charges between a 1-5% fee upon withdrawal just before Ramadan, and penalizes customers who withdrawal early.

- Minimum balance requirements make accounts less practical for poor people with small and irregular incomes
- Access issues and limits on withdrawals mean cash saved is not readily available to smooth income fluctuations or cover unexpected expenses

COMMERCIAL BANKS: While 67% of participants had a bank account, three fourths of those were underbanked.* Saving accounts at banks, while regulated and more secure than cooperatives, are not well suited to the needs of the poor. Making regular small deposits and withdrawals at these institutions is time consuming and expensive. Travel to and wait time at ATMs and bank branches can be long in both urban and rural setting.** Participants also expressed fear that tellers might scoff at their small deposits, and apprehension at entering up-scale bank branches. In addition, accounts are difficult and expensive to maintain, with relatively high minimum balances, stiff penalties, and frequent account maintenance fees.

Value:

- Deposits are relatively protected from impulsive spending. One participant said, "If the money is in the bank, it is hard to take out, but if it's in the house, I will take it and spend it."
- Savings are relatively easy to withdraw depending on the distance to the nearest bank branch or ATM
- Deposits are backed by the government***
- Banks offer integrated financial services. Many ATMs provide deposits, withdrawals, transfers, and bill paying services.
- Some banks are working to expand access through the post office, branchless banking, and mobile banking applications

Pain points:

- Participants believe that savings accounts at banks are not designed to meet their needs, because they prefer to make frequent small deposits
- Administrative fees eat away at savings, especially if customers do not maintain minimum account balances
- Banks have numerous requirements to open accounts, including two forms of identification, which can present difficulties for the poor
- In rural areas, commercial bank branches and ATMs are frequently located far from home
- In urban areas, many poor people run small businesses out of their homes and cannot afford to take time off to visit a bank, which may take a long time because of traffic and queues
- There are often long queues

How the Poor Borrow

When participants need to make a purchase and can't afford it, they must weigh the costs and benefits of borrowing money. They have limited formal and informal tools from which to choose, and must consider constraints such as whether the loan needs to be collateralized, the difficulty of the application process, the interest rate and repayment schedule, the default terms, and the clarity and ease of the dispute resolution mechanisms.

* Underbanked: customers who may have access to a basic transaction account offered by a formal financial institution, but still have financial needs that are unmet or not appropriately met (Sugrue and Kim 2004)

** A round trip to the nearest bank for participants in Gambung Pangkalan took at least 2.5 hours

*** Insured under the Government-sponsored Lembaga Penjamin Simpanan (Deposit Insurance Corporation)

Across the board, participants value low interest rates and flexible terms for repayment, which allow them to repay in small irregular amounts over the course of the month. Despite the social costs, all participants expressed a preference to borrow from friends or family who usually do not charge interest and are flexible in terms of repayment. If this option is not available or the amount required is in excess of what their relations can provide, there are informal, albeit expensive and risky tools to meet this demand. Loans from banks or cooperatives are often out of reach for participants, and have rigid repayment schedules.

Borrowing Tools

FAMILY, FRIENDS, NEIGHBORS, AND WARUNG: When participants' cash reserves are stretched thin, they turn to those immediately around them for assistance. To make ends meet during tough periods, participants first ask their family, and then friends and neighbors for short term loans. Warung owners are also accustomed to providing customers goods on credit, and we encountered three shop owners that keep ledgers to track goods sold on credit.

Value:

- There usually is no interest, no fixed term for repayment, and little (financial) recourse if borrowers do not repay in full
- Loans are typically available immediately
- There is no onerous application process
- Usually there is no need to put up collateral

Pain points:

- It is difficult to raise large sums from family and friends in poor communities
- The expectation is that any generosity should be returned in-kind. If you borrow money from a close relation, there is a social obligation to help them in the future.
- Loans are often written off by the issuer, damaging their finances
- Borrowing from friends, family, and neighbors risks damaging important relationships, which can have negative effects on the quality of an individual's personal support network

BANK KELILING/BANDAR (ROVING BANK/BOOKIE): Twenty-five percent of participants reported using a Bank Keliling or Bandar, both of which are loan sharks, when unable to secure a loan from friends or family. While participants understood the costs and risks of using these services, including rigid repayment schedules and high interest rates, many did not view Bank Kelilings and Bandars as predatory lenders. Rather, they viewed these as lenders of last resort, providing an important service to the community, which banks and cooperatives were often unwilling to provide. Besides friends and family, there are few other options for small, immediate loans. These services operate within each community we sampled, and participants use them when they have no better choices.

Value:

- Loans are readily available and dispersed immediately
- Offer microloans to help smooth over fluctuating income
- Borrowers can repay in small daily installments

Pain points:

- Loans come with high interest rates and issuance fees
- Loans have rigid daily repayment requirements
- Agents come to the home every day to collect installments, which can be embarrassing
- The service is fully unregulated, and so there is no protection from theft or fraud

KOPERASIS SIMPAN PINJAM (SAVINGS AND LOAN COOPERATIVES): Cooperative members can borrow against their savings and apply for small loans. Participants complained about invasive surveys, which are a part of the slow moving application process. They were also uncomfortable collateralizing the few fixed assets they owned. While participants are frequently afraid to seek loans at cooperatives because of risk of default, those who reported using cooperatives expressed the belief that cooperatives are better designed to meet their needs than commercial banks.

Value:

- Borrowers are able to renegotiate monthly installments if they are unable to keep up with payments
- Cooperatives provide financial literacy education, helping consumers understand how their loans work
- The application process is less onerous than banks
- Loan products are designed to meet the needs of the poor

Pain points:

- Surveys are personal and often include visits to the home or business
- Application process is long
- Borrowers must save at the cooperative to obtain loans
- Borrowers must put savings and other assets up as collateral against loans
- Cooperatives have strict limits on how much members can borrow
- Poor people with small and irregular incomes have trouble setting aside enough money each day to make lump sum end-of-the-month payments

COMMERCIAL BANKS: While two of the wealthier participants have borrowed from commercial banks to purchase and renovate their homes, the rest of those sampled have never borrowed from banks. Many indicated that bank loans do not meet their needs. Participants need small loans; banks frequently do not provide loans less than 5 million IDR (409.56 USD). Additional complaints include a long and invasive application process, collateral requirements, and difficulty setting aside cash every day to make large end-of-the-month payments.

Value:

- Banks can provide large loans and specialized loans like mortgages
- Banks have clear dispute resolution mechanisms, as well as tellers and loan officers that help facilitate the application and repayment process

Pain points:

- Perception that banks and bank products are not designed for poor people with small and irregular incomes
- Bank account registration and application requirements can be onerous and time consuming
- Banks often do not provide small loans
- Loans require significant collateral, such as homes or valuable business assets
- Poor people with small and irregular incomes have trouble setting aside enough money each day to make lump sum end-of-the-month payments

How the Poor Make Payments and Transfers

Indonesia is a cash economy, and cash is the preferred method of payment for the MEs, farmers, retailers, and suppliers we encountered. In all three communities, participants prefer to keep a large share of their wealth liquid to cover reoccurring expenses and capitalize their businesses in the wake of price increases and business slowdowns.

Due to strong competition and low profit margins, small informal businesses must sell a high volume of goods to be sustainable. Inventory turnover is high and so business owners prefer liquid and widely accepted forms of payment. Cash is king.

People trust cash. Cash payments are simple, immediate, and do not necessarily require an intermediary, thus limiting the risk of a scam. All participants primarily use cash to pay for goods and services on a daily basis, and to pay bills. Ninety two percent of participants reported regularly traveling to Pos Indonesia (Post Office) or a Perusahaan Listrik Negara (National Electric Utility) branch to pay their bills in cash, despite widely available payment services via ATMs and mobile phones. In fact, only 8% of participants paid utility bills at ATMs, and none reported ever having used mobile bill payments.

The vast majority of warungs, street vendors, and traditional markets—places where most participants and many poor Indonesians conduct daily business—only accept cash payments. Modern mini-marts (e.g. 7-Eleven, Alfamart, Circle K, Indomaret) and a wide range of formal (i.e. registered) businesses accept debit, credit, and mobile payments. However, only 13% of participants had ever used debit, credit, or mobile payments , and none used them regularly. Forty two percent use banks to make transfers to their children for tuition fees or to remit money to relatives back home, and none of those sampled reported using Western Union, Money Gram, or other money transfer services. In fact, one participant went so far as to drive 1.5 hours on his motorcycle every other week to provide his son cash to pay for his school fees and living expenses.

SQUEEZING THE WALLET: REGULATORY BARRIERS TO MFS/BB PRODUCT OFFERINGS AND DISTRIBUTION CHANNELS

Across the different MFS services, there are two tiers of e-wallet accounts: unregistered and registered. Customers can sign up for most e-wallets on their phones via an SMS to the issuer of the account, but at any given time, these unregistered accounts are limited to a maximum stored value of 1 million IDR (85 USD). To increase the size of the e-wallet to 5 million IDR (425 USD), customers must register their accounts by providing government-issued identification at company-approved locations.

Financial service providers must adhere to strict Know-Your-Customer (KYC) requirements imposed as part of the Anti-Money Laundering and Counter-Terrorism Financing (AML/CTF) regime. These KYC requirements have lead to the development of a tiered system of unregistered and registered e-wallet accounts. Registration requirements are a barrier to financial inclusion because many of the underserved do not possess the requisite identification. Regulators have been more flexible with mobile-enabled accounts, requiring only 1 form of identification to fully register e-wallets as compared to the 2 required to open bank accounts.

MFS/BB's potential only will be realized when providers can offer the full suite of services available to traditional bank account customers (such as savings, loans, and insurance, in addition to P2P transfer, merchant payments, bill pay, and airtime top-up), but with products tailored to the needs of the poor.

TIMELINE RECENT HISTORY OF MFS/BB IN INDONESIA

2007	Telkomsel (MNO) launches T-Cash, the first MFS product in Indonesia
2008	Indosat (MNO) launches Dompetku
2009	Bank Indonesia (BI) releases the first regulations on electronic money (e-money). Allows banks and MNOs with money remitter licenses to cash-in (deposit) and cash-out (withdrawal) money into and out of their customer's electronic wallet (e-wallet) accounts. However, restrictions on the licensing of individual agents limit the expansion of agent networks. Banks cannot appoint agents to open new customers' accounts, and neither banks nor MNOs are able to easily appoint agents that perform cash-out services unless they acquire individual money remitter licenses directly from BI. Banks and MNOs restrict the expansion of their agent networks to large retail outlets (the 3 largest MNOs only have an average of 25 retail outlets nationwide).[28]
2011	The Secretariat Office of the Vice President and Bank Indonesia launch the National Strategy on Inclusive Finance (SNKI) at the APEC Summit in July. SNKI identifies unequal access to financial services as a barrier to inclusive growth.[29]
	By May, there are only 3.4 million users of MFS, representing only 3.8% of all mobile subscribers (this figure includes unregistered accounts and inactive users).[30]
2012	XL Axiata (MNO) launches XL Tunia
	BI issues Regulation on Funds Transfer 14/23 /PBI/2012, which eases the money remitter licensing requirements. This allows banks and MNOs to develop a more robust network of cash-in and cash-out agents, and removes a major regulatory barrier to the development of a mobile person-to-person (P2P) payments and transfers ecosystem. However, agents must be legal entities; in a country where a majority of businesses lack legal recognition, particularly in areas with a high prevalence of the financially underserved, these regulations significantly constrain the development of the MFS/BB market.

2013

In May, Telkomsel, Indosat, and XL Axiata (MNOs that collectively represent ~82% of the subscription base[31]) strike an interoperability agreement enabling customers to transfer money to subscribers across the three platforms.[32]

BI releases guidelines for a pilot that eases restrictions on bank agents to open customer accounts and perform cash-in and cash-out services. Five banks with e-money licenses participate (Bank Mandiri, Bank Rakyat Indonesia, Bank Sinar Harapan Bali, Bank Tabungan Pensiunan Nasional, and CIMB Niaga). The pilot is considered a commercial success—customer acquisition and transaction volumes exceed expectations.[33]

2014

Supervisory authority over branchless banking shifts from Bank Indonesia (BI) to the Financial Services Authority (OJK), a new agency responsible for micro-prudential oversight. OJK was established in 2011 to integrate micro-prudential supervisory authority over financial services into one agency. BI maintains authority over digital and electronic transactions.

BI releases new Digital Financial Services (DFS) regulations in April that cover the issuance of e-money. Large commercial banks [Book IV category, with core capital greater than 30 trillion IDR (2.56 billion USD), a classification limited to BCA, BNI, Mandiri and BRI[34]] are allowed to appoint individuals and informal businesses as agents that can cash-out funds.[35] Smaller commercial banks and MNOs have to continue working through companies with legal licenses to develop their agent networks.[36]

OJK is expected to release new Laku Pandai (branchless banking) regulations by year-end that will enable banks to appoint their own agents with services that include savings accounts, micro-loans, and micro-insurance. Regulations expected to apply to banks under Book II, III, and IV categories [with core capital in excess of 1 trillion IDR (82.47 million USD)].[37]

ANALYSIS

Building on the ethnographic profiles of our three sample communities, we developed three behavioral archetypes that represent frequently observed financial management behaviors. These behavioral archetypes help to place consumer demand for MFS/BB in context, and enable us to identify and describe the qualities consumers demand in their financial tools. In developing these archetypes, we paid special attention to the personal goals and aspirations of the sample, as well as their fears and apprehensions.

The sampled communities are traditional and tightly knit, so we also considered the influence of communal norms and religion on participants' financial management behaviors. For each archetype, we include a journey map, tracing an emblematic participant within the sample across a day. At each instance of financial intermediation along their journey, we explore the chosen service's unique value proposition, its associated pain points, and opportunities to innovate. Then, we derive three design principles that should guide regulators and businesses as they develop and deploy MFS/BB products.

Behavioral Archetypes

SUSTAINER

The sustainer lives day-to-day. He is focused on keeping food on the table, a roof over his family's head, and enjoying life's simple pleasures. Each day presents new challenges, which he confronts by using proven strategies to make it to tomorrow. While he is aware of the unpredictability of life, his time horizon is narrow, believing if he encounters adversity, he can rely on his family, friends, and community for support. He is risk averse, finding it easier to accept the status quo than to try new approaches to grow his business or boost his income.

Qualities

- Present minded
- Values simplicity
- Risk-averse
- Traditional
- Reliant on community

BEHAVIORAL ARCHETYPES: A way of classifying customers based on exhibited behaviors that may vary by situational context. The focus is on behavior rather than demographic indicators.

DESIGN PRINCIPLES: A method of identifying attributes that a particular product or service needs to possess for it to be a solution to identified pain points.

(Datar, S. and Lal 2014)

HOW THEY MANAGE THE BASICS: The sustainer manages his income on a day-to-day basis. He saves most of his money under his mattress because he needs to keep it liquid, yet he is weary of having too much cash on hand, because he might spend it on non-essentials. He relies on friends and family for small loans during lean times.

HOW THEY RAISE LUMP SUMS: The sustainer uses proven, community-based informal savings tools like Arisans and Bank Harians to make small, regular savings deposits. He knows and trusts these services.

HOW THEY DEAL WITH THE UNEXPECTED: The sustainer first turns to friends and family for help, and if he comes up empty handed, he liquidates assets or borrows from a Bank Keliling. He does not use banks or cooperatives because he thinks their services are complicated and meant for wealthy people.

BUILDER

The builder is methodical and disciplined, incrementally building her assets with the goal of providing her family opportunities for a better life. She believes that people should always work hard to improve their lot in life. By employing a complex financial management strategy and maintaining a mental tabulation of her financial statements, she is able to maximize her net worth, capitalize her multiple businesses, provide protection from the unexpected, and secure her retirement. She sets aside a small amount each day, and when this amount accumulates, deposits it in a bank as a rainy day fund.

Qualities

- Disciplined
- Broad time horizon
- Risk manager
- Family and community centered
- Trusted source of financial counsel and small loans

HOW THEY MANAGE THE BASICS: The builder partitions her assets, and assigns each partition to cover specific future expenditures. She allocates her cash to different short-term savings accounts at banks and cooperatives, and saves some under her mattress. She is reluctant to borrow from a Bank Keliling, because it is expensive, and would sooner turn to family and friends. Typically, though, the builder is a net lender.

HOW THEY RAISE LUMP SUMS: Before borrowing, she researches a wide range of options to meet her needs, and tries to avoid having more than one loan out at time. To save and borrow, she utilizes a mix of informal and formal tools, including Arisans and Bank Harians, as well as bank and cooperative accounts. However, she must first be confident that she can satisfy loan requirements and make the installments before taking out loan.

HOW THEY DEAL WITH THE UNEXPECTED: The builder plans for the unexpected with a dedicated rainy day savings account, as well as government-subsidized insurance. If necessary, she sells off assets, borrows from family or friends, and as a last resort, uses a Bank Keliling.

STRIVER

Like the builder, the striver wants to grow his business and create a better life for his family, but he's not methodical in his approach. Rather, he reaches for new opportunities and takes risks, both in starting new ventures and adopting new products and services. The striver runs multiple enterprises, but is somewhat undisciplined in both his operations and financial management. While tightly integrated into his community and caring deeply for his friends and family, he seeks out information and makes his own decisions. He is likely to adopt new technologies and try new services before most others in his community.

Qualities

- Open minded
- Forward looking
- Risk taker
- Impulsive
- Independent

HOW THEY MANAGE THE BASICS: The striver manages the basics much like the sustainer and builder. He primarily uses cash on hand that he pulls each day from under the mattress. While he uses banks and cooperatives, he does not manage his daily budget as carefully as the builder. As a consequence, he often suffers cash flow problems and relies on his friends and family to bail him out.

HOW THEY RAISE LUMP SUMS: The striver is an opportunist and will use any loan at his disposal so long as he thinks he'll be able to make the payments. This includes borrowing from family and friends, Bank Kelilings, cooperatives, or commercial banks. Prone to risky investments and acting impulsively to exploit opportunities, he may need to sell off assets to repay old loans.

HOW THEY DEAL WITH THE UNEXPECTED: The striver is likely to turn to family and friends to deal with the unexpected. If they cannot provide help, he will seek funds wherever available, including borrowing from a Bank Keliling or selling off assets.

PORTFOLIOS OF THE POOR TYPOLOGY

Reasons Why the Poor Financially Intermediate

- **MANAGING THE BASICS**
  "to transform irregular income flows into a dependable resource to meet daily needs"
- **COPING WITH RISK**
  to ensure that emergencies and the unexpected don't "derail families with little reserve."
- **RAISING LUMP SUMS**
  to pay for occasional "big-ticket expenses"

PAK OMAN'S JOURNEY MAP

A day in the life of a sustainer

Pak Oman lives in Slipi with his wife and five children. He is an ojek (motorcycle taxi) driver and his wife sells gorengan (fried snacks) from the family home. Together they earn about 4 million IDR (325 USD) per month, less than 20,000 IDR (1.60 USD) per person per day. Despite their low income, the family manages to save about 10,000 IDR (0.80 USD) every other day with Ibu Dewi's Bank Harian, participate in a weekly Arisan, and pay their children's schooling. Pak Oman inherited his home from his parents, and renovated it with the proceeds from the sale of family land. He bought his motorcycle five years ago through a private financing company.

GOAL: Pak Oman's goal is to earn enough money today to make sure he can provide for his family tomorrow.

1

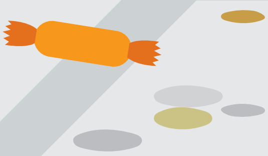
CAPITALIZING THE DAY

Pak Oman and his wife wake up at dawn, and they decide to pull 180,000 IDR (15 USD) out from under their mattress to cover the day's expenses. This is 20,000 IDR (1.60 USD) more than usual, but Pak Oman craves cigarettes and wants a new pack when he fills up on gas (20,000 IDR, 1.60 USD). His wife uses the remaining 140,000 IDR (11 USD) to buy supplies for the family's gorengan business at the local market.

3

UNABLE TO MAKE CHANGE FOR PAYMENT

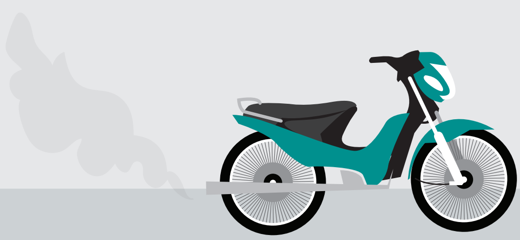
While waiting at an ojek stand, Pak Oman receives a SMS from a regular customer requesting a ride to work. Pak Oman confirms via SMS, but upon arrival, is unable to make change. The customer tells Pak Oman to credit it towards his next ride.



4

FALLING SHORT ON THE DAY'S SAVINGS OBLIGATION

Ibu Dewi visits Pak Oman to collect his Bank Harian deposit, but his household has spent more and earned less than usual this week. He regrets purchasing the pack of cigarettes, and giving his children pocket change for snacks and candy. He must decide whether to give Ibu Dewi the 10,000 IDR (0.80 USD) deposit, and have less cash on-hand to restock the warung and buy gasoline, or to forgo paying the deposit and incurring a penalty, payable in two days' time.

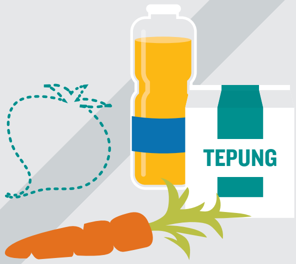


> “Basically, I believe that we need to always be grateful, we still have our health. My principal is to just live life. Sustenance is guaranteed.”

2

COMING UP SHORT ON CASH AT THE MARKET

At the traditional market, Pak Oman’s wife needs 175,000 IDR (14 USD) in supplies but only has 140,000 IDR (11 USD) in cash. She decides to buy less than she needs for the day’s business, rather than return home to get more cash or ask the vendor for the goods on credit.



TOMORROW’S FORECAST

Before retiring to bed, Pak Oman and his wife pool their cash on-hand, 225,000 IDR (18 USD), and add it to the remaining 40,000 IDR (3.30 USD) under their mattress. Tomorrow will be tight, but fortunately Pak Oman’s motorcycle has half a tank of gas. Pak Oman falls asleep craving a cigarette, but smoked his last just after dinner.

5

PAIN POINTS AND OPPORTUNITIES

1 CAPITALIZING THE DAY

- **Pain Point:** Cash saved under the mattress is easy to spend impulsively, making it difficult to save
- **Opportunity:** An accessible savings account that facilitates small end of the day deposits and protects against impulsive spending.

2 COMING UP SHORT ON CASH AT THE MARKET

- **Pain Point:** Cash saved under the mattress is not accessible outside of the home.
- **Opportunity:** Electronic payments, available anywhere, that draw on stored value.

3 UNABLE TO MAKE CHANGE FOR PAYMENT

- **Pain Point:** Pak Oman’s ojek business is cash-based, and he has to break bills and make change throughout the day.
- **Opportunity:** Simple, affordable, secure, and immediate P2P mobile transfer service as easy as sending the SMS requesting and confirming the pick-up.

4 FALLING SHORT ON THE DAYS SAVINGS OBLIGATION

- **Pain Point:** Inflexible deposit requirements restrict household consumption and constrain business investment.
- **Opportunity:** Flexible and accessible end of the day savings tool.

5 TOMORROW’S FORECAST

- **Pain Points:** Personal and business expenses are difficult to segment; Pak Oman cannot put an exact number on his daily revenue, which makes it difficult to budget more than a few days out. As such, he finds it hard to save and insure against risk.
- **Opportunity:** Accessible, flexible, and secure savings product that facilitates small end of the day deposits and allows users to allocate savings to different account partitions.

IBU SITI'S JOURNEY MAP

A day in the life of a builder

Ibu Siti is a part-time teacher at an elementary school near her home in Pasir Layung. She also operates a small warung located in the front of her house. Her husband is carpenter at a furniture factory in Bandung. He works six days a week and earns 85,000 IDR (7 USD) per day. Ibu Siti earns 500,000 IDR (41 USD) per month as a teacher. The warung is their household's main source of income, generating sales between 100,000-200,000 IDR (8-16 USD) per day. She stocks it with gorengan, beverages, cigarettes, phone credit, and assorted household staples, and keeps it open 24/7. To take advantage of their location at the intersection of two busy alleyways, Ibu Siti installed a TV, chairs, and a couch around the warung and it is now a gathering place for the community. She recently passed the civil servant exam and will be promoted to a full time teaching position, which will earn her a starting salary of 2,500,000 IDR (204 USD) per month. She is planning on scaling back the warung's hours.

GOAL: Through discipline and hard work, Ibu Siti aspires to provide her family opportunities for a better life.

1

A LONG WAIT AT THE COOPERATIVE

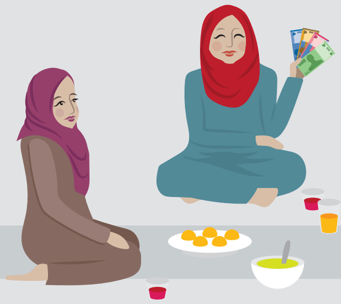
Ibu Siti wakes up at 6:00 AM to prepare for classes, which she teaches from 7 AM–Noon. On her way home, she stops by the local market to purchase supplies for the warung, but must first withdraw cash from the cooperative, which has only one branch. She waits in line for 20 minutes to withdraw from a teller.

2

SELLING A GOOD ON CREDIT

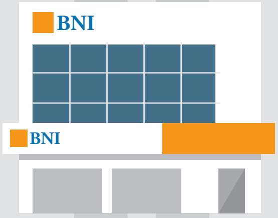
At the warung, Ibu Siti sells two kilos of rice to a neighbor on credit, knowing that she'll be lucky to see all of that money paid back. She tabulates the transaction in a ledger.

3



WITHDRAWING ARISAN WINNINGS

After her husband returns from the factory, he manages the warung as Ibu Siti heads over to her neighbor's home for the monthly Arisan potluck. Ibu Siti's wins the lottery and leaves with 1,100,000 IDR (90 USD).



5

TRANSFERRING CASH TO HER COUSIN

While at the bank, Ibu Siti transfers some money to her sister to cover her nephew's medical bill.

4

DEPOSITING ARISAN WINNINGS

Since she has yet to allocate her Arisan draw for any particular purpose, Ibu Siti walks 15 minutes to deposit the winnings into her long-term savings. The bank closes at 5:00 PM and she makes it just in time, but has to wait in a long line typical during the late afternoon.

> "I save differently for different purposes. I keep cash at home for daily use, and cash in the bank to make big purchases or for emergencies. It's hard when business fluctuates… it takes discipline."

PAIN POINTS AND OPPORTUNITIES

1 A LONG WAIT AT THE COOPERATIVE

- **Pain Point:** Withdrawing cash requires a dedicated trip to the cooperative and a long wait in line.
- **Opportunity:** Simple and quick tool to withdrawal cash at a variety of locations.

2 SELLING A GOOD ON CREDIT

- **Pain Point:** Unsure if she will be repaid in full, trade credit negatively impacts her cash flow.
- **Opportunity:** Micro-loans that can be a stopgap to help manage unpredictable incomes by smoothing consumption and business capitalization.

3 WITHDRAWING ARISAN WINNINGS

- **Pain Point:** Arisans require regular deposits for the duration of the cycle (which is often 12 months or more). This can be challenging for those with a small and irregular income. The withdrawal (winnings) is not dictated by the specific needs of the saver, and the investment is relatively illiquid.
- **Opportunity:** Product that encourages long-term savings toward a goal, and integrates Arisan's social qualities as incentives. Such a product should protect from impulsive spending, but be liquid enough to be drawn upon during emergencies without significant penalty.

4 DEPOSITING ARISAN WINNINGS

- **Pain Point:** Ibu Siti must make a time-consuming trip to the bank to transfer savings from one account (Arisan) to another (bank).
- **Opportunity:** Integrated savings service that can be partitioned by savings objective (e.g. savings for children's school fees, retirement, a new motorcycle, rainy day fund).

5 TRANSFERRING CASH TO HER COUSIN

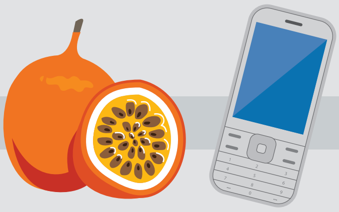
- **Pain Points:** Both parties have to make a trip to the bank for the same transfer. Her sister will incur a penalty because she does not have a bank account. Furthermore, her sister dislikes trips to the bank, concerned that her clothes are inappropriate and embarrassed that she might ask naïve questions.
- **Opportunity:** P2P transfer service designed for the poor, affordably priced and accessible at the community level.

MANG ASID'S JOURNEY MAP

A day in the life of a striver

Mang Asid lives in Gambung Pankgalan with his wife and three of his six children. He grows tomatoes on his family farm, and works as a passion fruit middleman, a business in which he seasonally employs five fruit pickers. In 2012, he convinced a Bandung-based doctor who owns a nearby villa to allow him to farm a parcel of land on his property. To finance this expansion, he borrowed 15 million IDR (1,225 USD) from a Bandar. Due to a bad tomato harvest, he has yet to pay off his debt to the Bandar, which has been rolled over to the upcoming harvest, with penalty. In 2013, he borrowed an additional 11 million IDR (899 USD) to transition his farm to organic. Once again, the first year's harvest was poor, and he is using cash from his passion fruit business to repay the total outstanding debt of 9 million IDR (735 USD) and replant his fields using conventional farming techniques.

GOAL: Mang Asid is working to improve his family's life by seeking new opportunities and taking risks.



1

CHALLENGE CONFIRMING A PAYMENT

Mang Asid wakes at 4 AM to ensure his pickers make it the forest to harvest passion fruit. He works his fields all morning until receiving a text at noon from a passion fruit buyer at the market, notifying him that he made a bank transfer to Mang Asid's account for fruit delivered yesterday.

A LONG DRIVE TO THE BANK

Mang Asid drives 45 minutes to the nearest bank to confirm receipt of the 3 million IDR (245 USD) transfer, and to withdraw the cash.

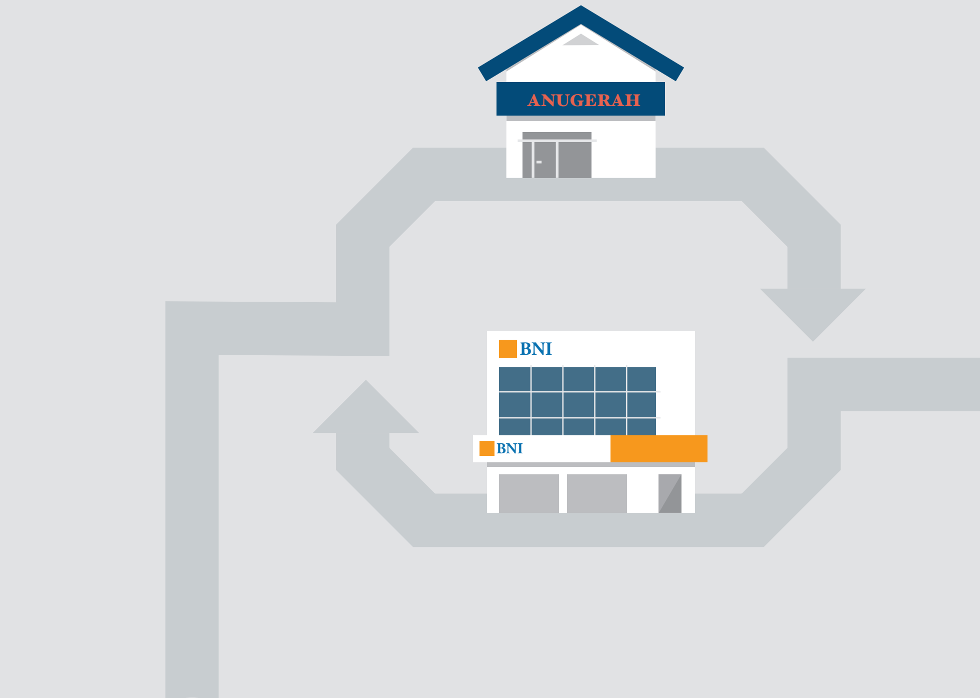
2

3

CASH IS KING

He withdraws the entire value of the transfer to pay his employees, make his loan payment to the Bandar (in lieu of paying the Bandar a share of his failed harvest), and purchase a few goods for his household.

“When a farmer can’t pay his loan, the lender shouldn’t run him out of business. Rather, he should work with him to help him bring in the next harvest so he can repay his loan.”



4 NEED FOR MULTIPLE ACCOUNTS TO MANAGE SAVINGS

On the way back home, Mang Asid stops at the local cooperative to deposit half of the remaining cash into his account. Since the Bandar is unlikely to loan to him again, he is hoping that the cooperative will be an alternative means to borrow money. Before he can borrow from the cooperative, he needs to build his savings account because any loan will be collateralized against his savings. While his bank offers both savings accounts and loans, he believes the transaction fees eat away at his savings, and the loan minimums are too large and require too much collateral to be useful. Instead, he must wait in two queues (one at the bank, the other at the cooperative) and incur two sets of fees. He would prefer to manage all of his finances at the cooperative, but it does not accept money transfers, thus necessitating the bank account.

PAIN POINTS AND OPPORTUNITIES

1 CHALLENGE CONFIRMING A PAYMENT

- **Pain Point:** Mang Asid does not own a smartphone or a computer and so cannot check online to make sure the deposit has been cleared.
- **Opportunity:** Simple and affordable means to check account balance, SMS confirmation.

2 A LONG DRIVE TO THE BANK

- **Pain Point:** Opportunity and transaction cost. It takes 1.5 hours round-trip to transit to and from the bank, consumes 25,000 IDR (2 USD) of gasoline, and the queues are long.
- **Opportunity:** Cash-in/cash-out locations closer to home, SMS confirmation.

3 CASH IS KING

- **Pain Point:** His bank account is not useful for most daily transactions because his suppliers, employees, and creditors prefer cash. Even though he only uses his bank account to transfer money, he must maintain a minimum lest he incur substantial penalties.
- **Opportunity 1:** Affordable savings account with no minimum account balance.
- **Opportunity 2:** P2P transfers with widely accessible cash-in/cash-out.
- **Opportunity 3:** Flexible loan repayments for consumers with fluctuating incomes.

4 NEED FOR MULTIPLE ACCOUNTS TO MANAGE SAVINGS

- **Pain Point:** Requires a dedicated trip to the cooperative to deposit and withdraw funds, and a long queue. The cooperative is not integrated with money transfer services, so a third party must facilitate cash transfers.
- **Opportunity:** Single platform that offers simple and affordable P2P transfers, savings, and microloans, and widely accessible cash-in/cash-out points. Such a service should be priced competitively with existing services.

Design Principles

Our analysis has generated three principles that should remain at the forefront of the decision-making process as businesses and regulators design MFS/BB services and regulations. In order to outperform incumbent financial services—a requisite for consumer adoption—MFS/BB must directly address the pain points identified in the previous section. Specifically, any service must embody the following principles, which are the fundamental qualities sampled participants indicate the poor demand in financial services.

ACCESSIBILITY

In sampled urban and rural locations alike, consumer choice is frequently driven by accessibility, as displayed in the range of informal financial tools developed and used at the community level. However, access is multi-dimensional. It not only relates to a service's physical distance, but includes psychological barriers and issues of class that have implications for MFS/BB socialization and marketing strategies. Banks are considered tools of the wealthy, with services designed for people with consistent and sizable incomes. The physical branches themselves are socially inaccessible, even in the urban locations where bank branches are within walking distance of participants' homes. Some consider bank tellers intimidating and unfriendly, and are unwilling to bear the risk of using an ATM without understanding how the system functions. Accessible financial services must be simple and intuitive, as well as approachable and convenient. An MFS/BB product or service that embodies accessibility would:

- Provide simple and intuitive service interfaces and processes supported by knowledgeable representatives
- Embed reliable agents in communities, near customers' homes and businesses
- Provide ubiquitous access so customers can use products and services across cities, provinces, and islands
- Integrate savings, loans, payments, transfers, and bill pay into one inter-operable service platform
- Encourage frequent, small transactions
- Empower customers to slowly work toward savings goal

AFFORDABILITY

Existing MFS/BB products on the market do not reflect a consistent pricing strategy. Each of the major service providers have different pricing schemes, with some service providers charging standard SMS rates for each transaction, and others charging the same price per transaction as premium banking services. Since the poor primarily use informal financial tools to intermediate, MFS/BB pricing should take into account the costs of these services, which participants continually referenced when discussing the price of both formal and mobile financial services. Currently, some of the MFS/BB products on the market are priced up to ten times lower than the amount participants indicated they were willing to pay. An MFS/BB product or service that embodies affordability would:

- Provide low costs per transaction
- Be competitively priced with other informal and formal services
- Reduce opportunity costs through improved accessibility of services
- Have transparent and logical pricing

SECURITY

MFS/BB services must be secure. Participants said the greatest risk to a secure financial future is the risk of impulsively spending easily accessible savings. To remove the threat of impulsive spending, participants seek a service where they can frequently but irregularly deposit small amounts. However, since participants' businesses are relatively capital intensive and their incomes variable, these cash reserves must be accessible without substantial withdrawal fees. MFS/BB services should allow consumers to tailor the level of liquidity of their savings to match their needs. Participants also expressed a strong desire for transparent and reliable mechanisms to protect against fraud and loss, and easy, accessible dispute resolution mechanisms. An MFS/BB product or service that embodies security would:

- Protect consumers from their tendency to impulsively spend their savings
- Provide a level of liquidity so that money saved is accessible during emergencies and business slowdowns
- Recruit, vet, and train MFS/BB agents to provide consistent service and adequate dispute resolution. As one participant noted, "Trust is less of an issue with the service provider than it is with the person with whom you're doing business."
- Include clear, well established, and easy dispute resolution mechanisms
- Structure loan repayment schemes for people without steady and predictable income streams so they are less likely to default on their loans

RECOMMENDATIONS

The imminent release of new branchless banking regulations contributes to the timeliness of our research on consumer demand for MFS/BB amongst the Indonesian poor. By exploring consumer behaviors, conducting a pain point analysis of existing financial services, and running product ideation workshops with consumers, we found that the tools available leave the Indonesians we sampled with many unmet needs that could be fulfilled by well designed MFS/BB products and services. To meet these needs and generate demand for MFS/BB, regulators must enable the development of a cohesive MFS/BB ecosystem and businesses must design products that are accessible, affordable, and secure. In order to do so, we recommend the following:

MARKET OPPORTUNITIES

We identified several clear market opportunities:

- MFS/BB can simplify the financial lives of poor consumers by providing a simple one-stop shop for a suite of savings, microloan, and electronic transfer and payment tools.
- We found the strongest demand for a savings tool that facilitates easy and cheap deposits of small, end-of-the-day cash balances. Participants understood the concept and value of mobile payments, loans, and transfers in the context of a mobile savings account. Savings is the gateway to MFS adoption.
- Poor consumers have the very limited options for borrowing, yet they have a strong need for small, immediate cash loans to smooth erratic income cycles. We also observed a clear market opportunity for a service that disperses small, immediate loans.

RECOMMENDATIONS FOR BUSINESSES

To compel poor Indonesians to adopt MFS/BB, businesses should:

- Work with customers to design products and services that embody the three design principles: accessibility, affordability, and security, and; work with regulators to develop supporting regulations.
- Expand networks of MFS/BB agents to include informal, unlicensed businesses—where the majority of Indonesians work and shop. These businesses are embedded in communities and are trusted.
- Use key influencers to socialize new products. Trying untested financial products is risky, and the poor rely on respected members of their community to vouch for new products and services. These influencers should include MFS/BB agents, who can act as brand emissaries, tailoring their messaging and marketing to local needs. A socialization or marketing campaign should familiarize consumers with the concept and utility of MFS/BB, helping otherwise technologically inexperienced consumers understand that these products were designed to meet their needs.

RECOMMENDATIONS FOR REGULATORS

To spur the nascent market, regulators should:

- Allow unlicensed businesses to act as MFS/BB agents in order to expand the cash-in (deposit)/ cash-out (withdrawal) network to the community level.
- Empower agents to register new customers away from bank branches and MNO branch offices, which are difficult to reach and inconvenient for many poor consumers.
- Empower medium-sized banks and MNOs to license agents that can both register customers and perform cash-out. Some of these organizations have more experience serving poor Indonesians, and MNOs can leverage their extensive network of phone credit agents to provide MFS/BB.
- Allow MFS/SS service provider to offer savings accounts and micro-loans in addition to payments and transfers. Poor consumers demand new savings and loans products.
- Expand e-wallet size limits so customers with registered e-wallets can maintain larger balances, thereby permitting more robust savings products.

While the case for MFS/BB in Indonesia is well documented, poor consumers have responded tepidly to product offerings thus far. Regulators, policymakers, banks, MNOs, and industry experts are optimistic that the timing is finally right for MFS/BB to take off in Indonesia. New branchless banking regulations, which are expected to be released by the end of 2014, will likely enable banks to appoint their own agents, who will be able to register customers, and offer savings accounts, micro-loans, and micro-insurance. The development of a successful MFS/BB ecosystem has the potential to transform Indonesia from one of the most underbanked populations in the world to a financially inclusive society.

Despite the optimism, success is far from guaranteed. All is for naught if stakeholders lose sight of the consumer.

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