



embracing informality

*designing financial services
for China's marginalized*

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executive summary

Despite China's meteoric economic rise, huge swaths of the population have been left behind. Before the 1978 market reforms, citizens could at least rely on the *tie fan wan* ("iron rice bowl") for jobs, rations, and retirement regardless of their economic standing. However, social support programs have steadily disintegrated in the years since, leaving many rural and poor citizens with neither jobs nor government support.

Driven by a lack of opportunity, 250 million migrant workers have left rural areas to take part in the country's manufacturing boom. Often, even when they find work, their lives are just as defined by poverty and instability as those they left behind.

Financial services are a key leverage point for individual economic mobility, yet banks are becoming scarce in rural areas. More than 30,000 branches in poor and rural regions have closed over the last few years, leaving more than 64% of these populations unbanked. Creating new, innovative access to savings accounts, loans, and other financial products could provide the opportunities and stability people need to improve their own futures.

This is not just a moral imperative, it is also a significant market opportunity. These large sections of the population could quickly transform into a growing and sustainable consumer base for savvy and forward-thinking financial service providers who can recognize the latent potential and make strides to meet their diverse needs.

this study

With the support of the Institute for Money, Technology and Financial Inclusion (IMTFI), Reboot undertook this study to develop and share a deep understanding of the daily lives of China's marginalized. Our goal is to inform the development of new financial services that can tap into this immense potential market and, in doing so, greatly increase these populations' access to economic opportunity and security.

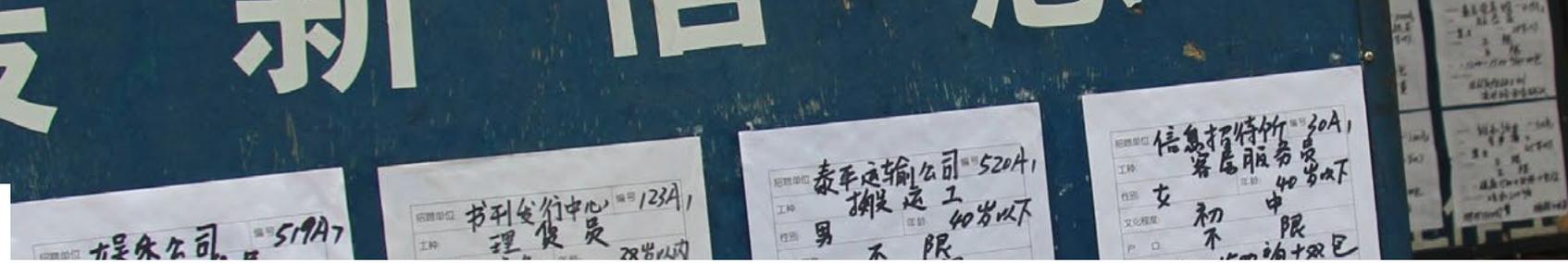
We focused on three marginalized groups of the Chinese population:

migrant workers: The engine of the manufacturing economy, 250 million people strong.

rural villagers: An aging population that survives primarily on money sent home from migrant-worker family members.

ethnic minorities: China's 55 minority ethnic groups, who face restrictive government policies and cultural marginalization.

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our findings

Based on 113 interviews and in-country field research, Reboot has uncovered three key findings for any service provider interested in serving this market:

1. Build on informal services,
2. Leverage existing social connections, and
3. Meet people's everyday needs.

Following these directives requires an empathetic understanding of users' daily lives and needs, but this modest investment of time and attention is more than repaid through the increased likelihood of rapid and successful user adoption.

1. build on informal services

Disconnected from formal financial services provided by regulated providers, such as commercial banks or insurance companies, our target populations meet their needs instead through networks of informal services facilitated by social connections. Lacking regulation, these informal services—such as rotating savings and credit associations (*hehui*), or loan sharks (*gao li dai*)—can be exploitive, overpriced, insufficient, and/or unreliable.

Yet our research shows that people often prefer informal services for several reasons:

convenience: Most informal service providers are individuals that a user already sees in his or her day-to-day life; for example, a traveling veterinarian may also loan his clients money.

ease of use: Paperwork, regulations, and fees are all opaque and intimidating to these target populations. Informal providers, where transactions are enforced by relationships not regulations, can process transactions with just a handshake.

trust: Informal services are built on powerful and longstanding social connections. People feel that their informal service providers can be trusted because their personal and family reputations are on the line.

We found that these factors can impede the adoption of new, formal financial products; people are not likely to risk their financial lives on something new and untested, especially from an unknown institution or organization.

Therefore, we recommend, first and foremost, that service providers design their products to complement—not compete with—existing informal services. By building new services into existing networks of relationships, such as by using an informal service provider as a delivery agent, formal service providers can greatly increase these populations' trust in new products and accelerate adoption.

2. leverage existing social connections

Unofficial and official mass migration has strained, although not completely severed, the traditional Chinese family structure. Migrant workers save and send money back to support their families, and few lay roots in the cities in which they work (which often change each season). China was once a network of walled cities, but is now a web of tethered networks.

Thus, traditional, geography-based definitions of markets are futile. Service providers seeking to accommodate these populations must focus on the human networks that connect them.

These tethers are especially apparent in one particular, widespread system of informal service providers: the *laobans*, or managers, who arrange contracts with employees and take responsibility for recruiting and managing hundreds of temporary workers. Most *laboans* are connected to their workers by only a few degrees of separation, some even hail from the same village. Because *laobans* control worker payments, many workers ask them to provide financial services, such as holding their savings or transporting funds home to their families. The relationship is clearly unbalanced—one worker claimed he could ask his *laoban* for his savings any time, but then confessed he felt social pressure not to ask too frequently—yet it is an arrangement that millions feel comfortable with.

A *laoban* is a prime example of an informal service provider that can be recruited to increase market awareness and trust among our target populations, and to serve as a delivery agent to increase user adoption rates.

3. focus on people's needs

For those with limited economic means, stable services are critical. Consistent, predictable service delivery enables consistent, predictable life patterns, which may alone be enough to improve livelihoods even without increases in income.

Our target populations clearly crave stability: China's 38% household savings rate, the highest in the world, reflects people doing their best to brace against economic shock. This desire is a powerful motivator that service providers should focus on when communicating about new services.

Even more importantly, providers must actually deliver the stability they promise. For people with limited economic means, and who have an outside reliance on a limited number of formal services, the risk of change is a critical one. Service providers must understand that they run the chance of deeply undermining the lives of those already most marginalized. And, as word-of-mouth marketing is the fastest and most effective for such populations, failing to deliver stability can detrimentally inhibit the adoption of any new product.

the financial services landscape in China

Recent public- and private-sector investments, as well as certain conditions in the country, suggest that China is ripe for the development of inclusive financial services:

- Mobile phones have become a critical tool in developing inclusive financial services worldwide; with over 1 billion mobile phone users, China is leading the world in mobile use.
- 83% of commercial banks are partially or entirely government controlled, but the government has demonstrated an openness to banking innovation through diverse private-sector partnerships.
- State-owned China Mobile, the world's largest mobile carrier, recently purchased a 20% stake in the Shanghai Pudong Development Bank, and the two are collaborating on branchless banking products.
- China Mobile is also partnering with China UnionPay, the country's only bank card organization, to deploy SIM cards that can handle mobile payments.
- China Unicom, another state-owned telecommunications operator, is also deploying a mobile payment system in Sichuan targeting 5.5 million subscribers in the province.
- The People's Bank of China, the country's central bank, intends to launch mobile money pilots in China's rural areas. Participating service providers include the Agricultural Bank of China, the Postal Savings Bank of China, and China UnionPay, as well as all three mobile network operators.

These conditions are promising for innovation but not necessarily inclusion. Experience and inertia often encourage businesses to develop services tailored only for those high on the economic spectrum. We make the previous recommendations with the hopes that a private interest will tailor its business model to empower this large, untapped market segment.

designing a new mobile remittance service

To illustrate how our recommendations may be operationalized, we have designed a hypothetical prototype for a new financial product for China: a mobile remittance system.

The Chinese market is primed for the deployment of a national, mobile-based remittance system with potential applications for both peer-to-peer and business-to-consumer usage models. We have designed this prototype, which we call M-Fu, to inclusively reach our target populations. (*Fu* means “to pay”, “to deliver”, or “to entrust” in Mandarin.)

M-Fu offers an easy way for anyone to send and receive money. A typical user might be a migrant worker in need of a secure method of sending money home so he or she can avoid carrying money on their person. M-Fu works by leveraging existing networks of *laobans* and their workers. To build a user base, *laobans* act as agents and receive a small commission for every worker they sign up. The money is transferred through a government-regulated network that alerts the recipient of new funds via SMS. The recipient can then collect the funds at M-Fu agent locations, based out of mom-and-pop stores in rural villages nationwide.

If all goes to plan, how many users can we expect? Let's say through extensive and effective marketing, half of all 250 million migrant workers in China become aware of M-Fu; one in four of those may actually try it. Based on the strength of the service experience, imagine half of those who try M-Fu become repeat users; that represents a potential core client base of over 15 million users, with an annual transaction value nearing USD 8 billion (RMB 51.7 billion).

Additional details of the design of the service are covered in this report. We have designed this service not as an ironclad recommendation, but to demonstrate possibilities and spark discussion.

conclusion

By understanding the lives of China's poor in the rapidly changing economy, and by designing services that align with the social networks and informal services on which people currently rely, we can help lift millions of previously neglected Chinese citizens into the stability they need to improve their economic situations, and help them seize the opportunities they need to thrive. In return, the visionary service providers who do so will have a head start in building long-term relationships with this vast market segment.

foreword

Numismatists have long noted the distinctiveness of certain ancient Chinese coins. Unlike their counterparts from the eastern Mediterranean, the earliest coins from China were cast, not stamped. That is, the metal was melted and poured into a mold rather than being imprinted with a design. If we were to treat this difference as a metaphor, the results would be profoundly morally ambivalent. On the one hand, taking what exists and stamping your mark on it, reshaping it and thereby reconfiguring its value, is undoubtedly a violent act. Thus has been the history of Western civilizations and that of their colonies, the hammering of the same design onto diverse lumps of metal, onto unique social formations. On the other hand, is the melting down of a preexisting substance and the pouring of it into a mold any less violent? Any more? This innovative study of the financial livelihoods of migrants, ethnic minorities, and rural people in contemporary China brings into stark relief the fact that when the blacksmith decides to put an ingot into a smelter, not everything melts down so smoothly.

The Institute for Money, Technology and Financial Inclusion (IMTFI) at the University of California, Irvine, is devoted to supporting innovative research on the financial lives of the world's poor and marginalized, and the potential for new technologies to change the monetary ecologies in which people seek to make a life for themselves and their communities. Academia, philanthropy, policy, and business all tend to think money is one thing and works the same way everywhere and for everyone: it is a standard of value and a means of exchange lubricating trade and providing a mechanism for safe and secure wealth storage. But for billions of the world's population, money itself is a marker of their subordination—living subsistence-oriented lives, they must nevertheless earn state-issued currency in order to pay their taxes, or bribes to patrons or bosses, or prices of the manufactured goods they need or desire. And money, even once they acquire some, poses obstacles to their livelihoods because of its material form: they have to worry about where to keep it in the short

term, how to store it over the long term, how to transport it to others, and how to manage the vulnerabilities of its visibility.

The success of M-Pesa in Kenya and other mobile phone-enabled financial platforms has demonstrated the potential of mobile money for financial inclusion, as well as for overcoming the infrastructural constraints built into paper currencies and plastic cards. Emerging digital platforms for money offer benefits for many of the world's poor, if those platforms are provided in such a way that they do not become another exploitative relationship (through exorbitant fees, for example, or monopoly providers). IMTFI supports research that investigates the pros and cons of digital platforms for payment and savings, and tries to show how the experiences and philosophies of the “target” populations of development initiatives themselves provide invaluable guidance for how to design and implement systems and policies that will actually benefit those they are intended to serve.

The authors of this report are deeply sensitive to the historical and cultural particularities of the forms of money, its various uses, and its circulation through extended informal networks among China's marginalized communities. The design proposal they present builds on existing social infrastructures rather than

trying to remold them into something else. The report that follows presents profiles of distinct types of consumers of financial products—consumers virtually ignored by banks and mobile network operators, marketing firms, and governments—in order to challenge service providers to think more creatively and critically on how to widen the net of financial inclusion to better serve those that have been further marginalized in the new economy (often through their very participation in it). The report also provides insight into the lives of those missing from the headlines about China's economic successes. Mobile financial services have not taken off in China the way they have in parts of East Africa and elsewhere, yet, simply by the numbers, the opportunity is huge. And as it has in those other regions, mobile money may provide everyday people, the marginalized and excluded, a way to break the mold.

Bill Maurer,
November 2012

Bill Maurer is the Director of the Institute for Money, Technology and Financial Inclusion at the University of California, Irvine, where he is also Professor of Anthropology and Law. He would like to thank Jenny Fan, Smoki Musaraj, and Ivan Small for comments on this preface.

Introduction

China has experienced remarkable economic growth since Deng Xiaoping introduced market reforms in 1978. But a vast number of China's citizens have not shared in their country's meteoric rise.



growth and inequality in modern China

In the 30 years since market reforms began, China's GDP has increased more than tenfold.¹ In 2010, the country became both the world's second largest economy and the largest exporter.² Today, the number of millionaires in China is growing faster than anywhere else; at 1.4 million,³ it is currently more than double the number from 2009.

All of these economic superlatives are well known, as the world has carefully watched China's growth. Yet remarkably little attention has been paid to how the country's poorest citizens have weathered the changing socioeconomic tides.

The privatization of the economy and the retreat of the central government from economic life has undermined the stability and security of wide swaths of the Chinese population, leaving an array of unmet service needs across China, particularly amongst marginalized groups. Service delivery models designed for distinct geographic cohorts—largely based on the agricultural collectives of the Mao Zedong era—have not kept up with an increasingly mobile population. Policies that have encouraged urbanization and industrialization have further contributed to the widening income gap.



China's immense diversity—in terrain, ethnicity, local customs, dialect—greatly diminishes the efficacy of top-down, one-size-fits-all approaches to social service provision.

Three marginalized groups lie at the bottom of this gap: Minority populations, from the ethnic Mongols of the northern plains to the 25 different groups inhabiting southwest Yunnan Province, conduct prohibited economic activity in secret because they lack viable alternatives to maintain their livelihoods. Rural citizens, seeing opportunities diminish in their villages, increasingly rely on money sent home from family members who work in urban centers.⁴ Migrant workers as well have been marginalized, excluded from the benefits of the economic growth they drive.

These three groups—ethnic minorities, rural villagers, and migrant workers—are alike in one vital way: all lack access to basic financial products, such as savings accounts, loans, and insurance. Many don't realize the critical role that these financial services play in creating secure and productive livelihoods, but this service gap excludes many of the world's poorest from realizing their economic potential. Furthermore, financial exclusion leaves these groups even more vulnerable to natural disaster, illness, and other human challenges.

For one, savings accounts allow for decreased risk in using cash. Loans allow these low-income groups to make the most of their existing assets, and get temporary support to help realize new opportunities. Insurance protects these populations against economic shocks: when a flood or a thief can take away one's entire life savings in one stroke, economic stability seems impossible and poverty much more difficult to escape.

With the support of the Institute for Money, Technology and Financial Inclusion, Reboot undertook this study to develop a deep understanding of the daily lives of China's marginalized. We focused our work through the lens of financial inclusion, with the goal of informing the development of new financial services that will vastly increase these populations' access to economic opportunity and security.

This report is based on observations, research, and in-depth interviews with over 100 Chinese citizens from the aforementioned demographics. We feature many of their stories in the pages to follow to paint a nuanced portrait of their day-to-day lives, and to encourage an empathetic connection between these people and the service providers who seek to improve their lives.



Improving financial inclusion in China—the birthplace of paper money—can teach important lessons for designing inclusive banking worldwide.

Approximately 40% of the world’s population—2.7 billion people⁵—are unbanked. There have been widespread efforts to bring banking to these billions, and the development of new technology has created second-generation banking services, like the oft-cited success of mobile payment platform M-PESA in Kenya. Yet, many other new financial products have found uneven success, especially among marginalized populations who need them most.

Failures can be avoided through judicious design. Too often, service providers create new offerings with a narrow focus on feature set, cost, or market opportunity. These factors are important, but perhaps the most critical—and often neglected—consideration is that adoption requires people to change their habits, their attitudes, and sometimes their lifestyles.

The opportunities to develop innovative, inclusive financial services are as vast as they are diverse. However, to succeed, service providers must adequately identify and address the needs of the populations they seek to serve.

China is a powerful case study of the challenges inherent in designing financial products for unbanked populations. The country’s immense diversity—in terrain, ethnicity, local customs, and dialect—means that one-size-fits-all approaches

to service design and delivery have little chance of success, especially those imported from other contexts.

Further, there is already an existing structure of informal financial services operating within the present market gap. With a lack of formal services to meet their needs, individuals have created informal service relationships mostly through existing community connections. For example, migrant workers rely on *laobans*, or labor bosses, to find work, keep their wages safe, and send money home.

Asking any group to change how they protect, send, and save their hard-earned money is a tall order. New financial products must take current practices—as well as the motivations behind them—into careful consideration.

The good news is that the market-based considerations of functionality, cost, and opportunity are not at odds with human-centered design; in terms of opportunity, there is massive potential. New services that recognize and complement existing, informal ones can improve livelihoods and help realize our collective vision of a just world. What’s more, as businesses surely want to know, this inclusive and equitable future can be achieved profitably and sustainably.





methodology

Reboot is pioneering a human-centered approach to the development of policies and services to improve livelihoods and societies.

Working at the intersection of anthropology, design, technology, and international development, we develop products, services, and systems that effectively and efficiently meet human needs. Our approach is grounded in the discipline of applied ethnography, and relies on a deep understanding of all stakeholders—including end-users, policymakers, and other actors along the chain of service delivery.

The research team spent three weeks in China conducting 113 face-to-face interviews across Beijing, the Inner Mongolia Autonomous Region, Yunnan Province, and Guizhou Province. Using purposive and snowball sampling, focused on respondents in our target populations of rural villagers, migrant workers, and ethnic minorities. In the regions where we worked, our respondents included village leaders, farmers,

formal businessmen and grey market street hustlers, street vendors, bank workers, mobile shop owners, professors, students, farmers, construction bosses, employment agents, sex workers, and doctors.

Research spanned 10 locations in urban, rural, and remote environments, in order to understand both sides of the rural/urban divide. Some interviews were scheduled, while others were ad hoc interviews or service intercepts—the latter were conducted while a respondent was engaged in the activity of interest in order to gain an accurate, in-the-moment understanding of their experiences. We also conducted organic group interviews in places where people naturally gathered.

The four-person research team included two international (one Taiwanese-Canadian and one American) and two locally-based Chinese researchers. All spoke Mandarin Chinese; the local team also spoke different regional dialects.

Training for the local team was conducted in-country and included research theory, methods, and ethics. Interviews were conducted in both Mandarin and local dialects.

Reboot employs a rigorous data synthesis process, with roots in design and systems thinking, to draw insights from field data. The research teams conducted nightly synthesis exercises through the field research period to engage with the data, draw out key patterns and “big stories” and build upon emerging themes. The exercises are generative, and allowed for the distillation of large amounts of data into manageable, forward-looking, constructive design guidelines. Final data synthesis, analysis, and content production began in Dali, China, and was completed in New York City, U.S.A., with additional field support from our China-based team.

We have refined our user-centered research and design processes through projects in more than 25 countries across a variety of sectors,

including health, education, humanitarian relief, government accountability, and, of course, financial inclusion. While our process is resource-intensive, it helps ensure resulting solutions are responsive to the needs of real people. We are excited to see these findings have an impact on the deployment of future services in China, a context rich in opportunity.

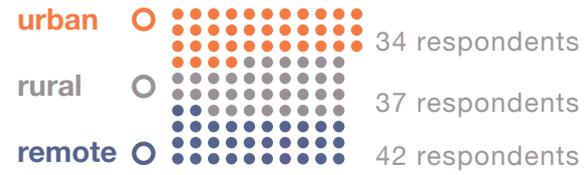
currency note

The financial figures used throughout this book are in Renminbi (RMB), the official currency of China. We have also listed the United States Dollar (USD) equivalent using the average conversion rate during our primary field research, RMB 6.46 to USD 1.

where we went & who we met

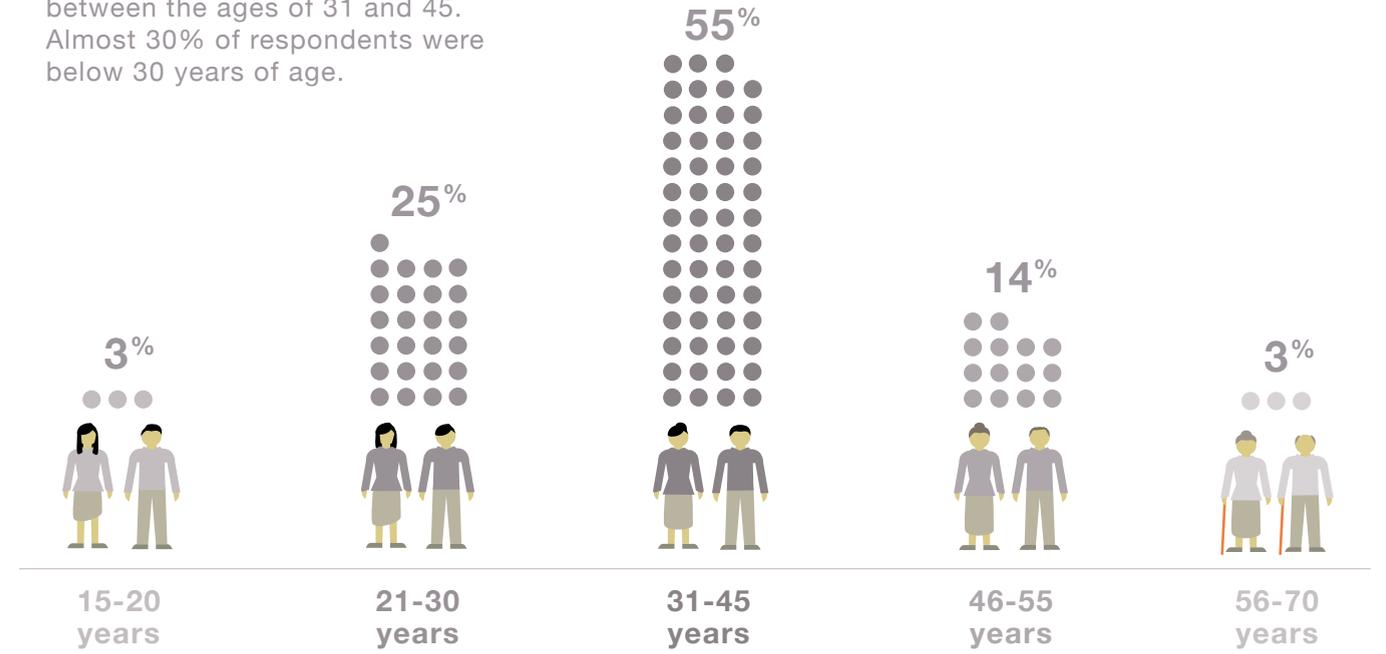
While in China, the research team interviewed 113 respondents across 10 locations in Beijing, the Inner Môngolia Autonomous Region, Yunnan Province, and Guizhou Province. Snowball sampling, a non-probability technique, was used to identify respondents from the target populations: rural villagers, migrant workers, and ethnic minorities. This section illustrates the range of environments and individuals that have informed this report.

locations



age

Over half of the respondents were between the ages of 31 and 45. Almost 30% of respondents were below 30 years of age.



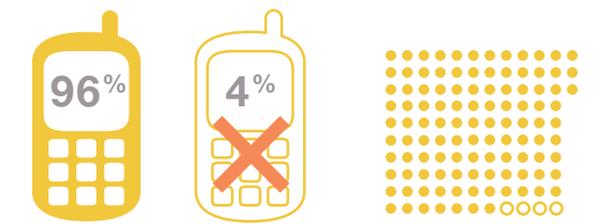
gender

Almost 60% of respondents were male.



mobile use

Almost all respondents used a mobile phone.



professions

Just over half of the total respondents were migrant workers. While one might assume that construction is the most common profession for migrant workers, the team found that migrant workers held occupations that spanned a variety of professions.

57 migrant workers

55 non-migrant workers

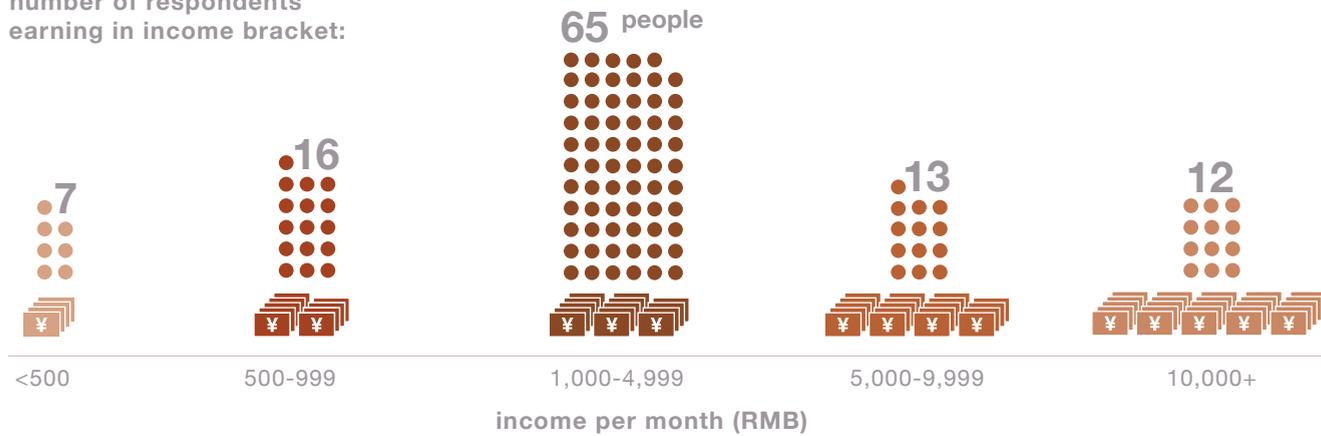


From sex workers to salespeople, the team met migrant workers holding occupations that spanned a variety of professions.

income

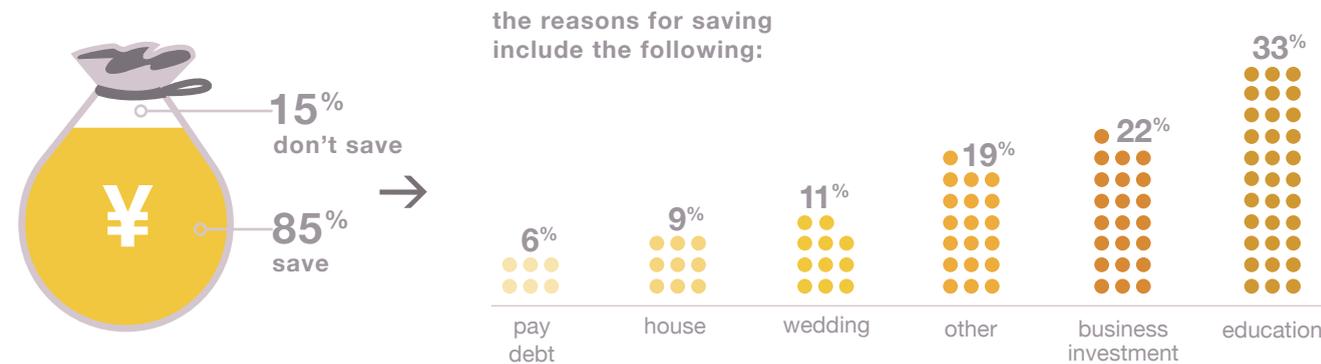
78% of respondents earn less than RMB 5,000 (USD 776) per month.

number of respondents earning in income bracket:



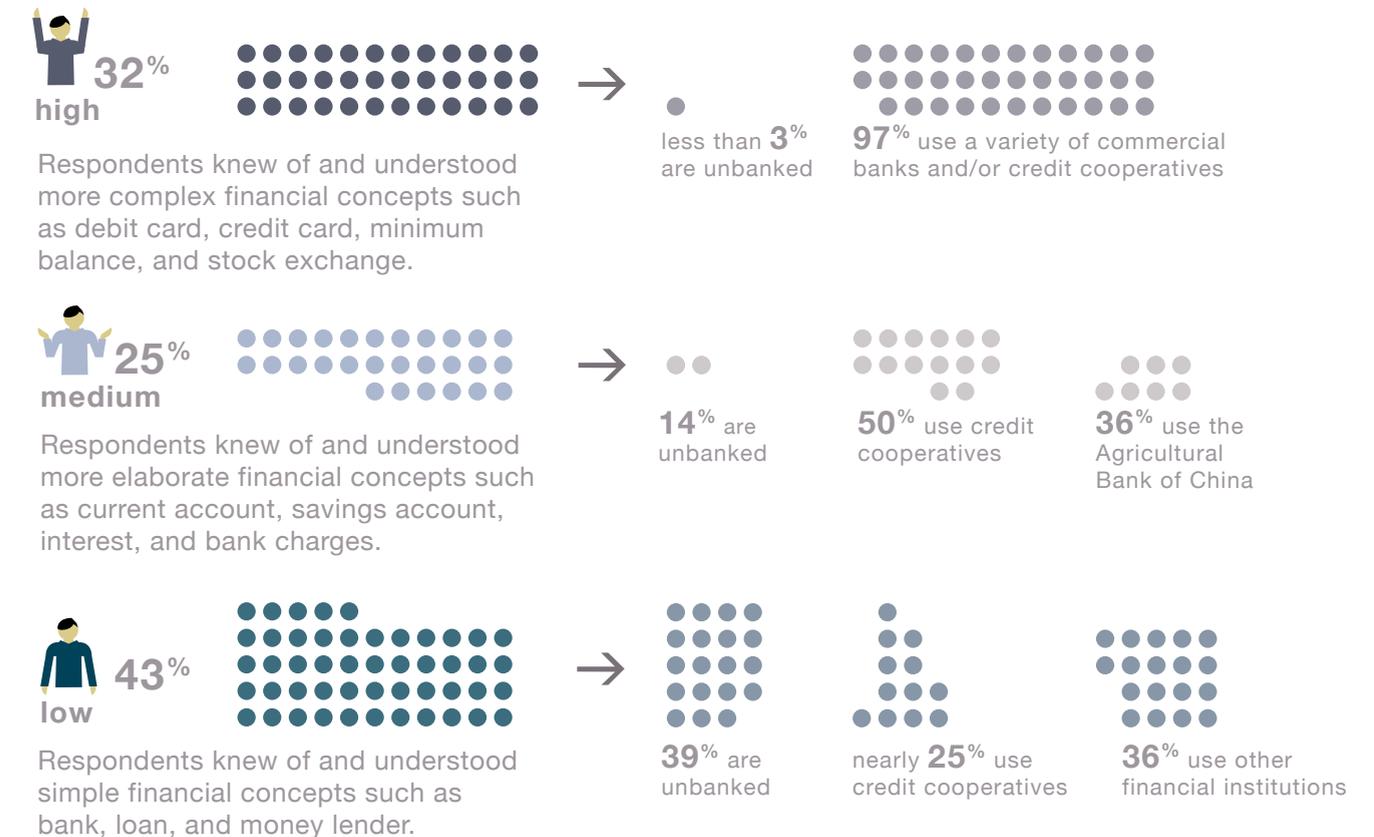
savings

Education and business investments represent over half of respondents' stated purposes for saving money.



financial literacy

The majority of respondents showed low levels of financial literacy. The team found that the lower the rate of financial literacy, the higher the chance of the respondent being unbanked.



key terms

design terminology

user

Any individual that is likely to use a service described in this publication. In this context, a user is a member of our target populations (migrant workers, rural villagers, or ethnic minorities).

user story

A typical user experience that illustrates key insights into the user's needs, abilities, motivations, limitations, and/or other factors. These experiences are constructed through composites of experiences based on real individuals, rather than abstract conceptions of how target populations may act.

service journey

A prototypical interaction that follows a user through his or her experience of a service, including the detailed steps the user may follow and the features the service must support.

financial service delivery

agent

The entity that operates the cash service point where the customer does cash-in and cash-out transactions. The agent also often registers new customers.

service provider

The entity that provides financial services to customers. Depending on the service, the service provider can also play one or many of the following roles:

account provider

The entity that manages customer accounts. In a bank-based implementation, each customer has an account in a financial institution. In a non bank-based implementation, such as an electronic wallet service, customers have an account managed on a technology platform owned and operated by a non-bank company.

transaction provider

The entity that owns and operates the technology channel used by customers and agents to make transactions. If the technology used is mobile-based, the transaction provider is likely to be a mobile network operator that owns and operates the mobile telephone system in which the transaction technology operates.

third-party operator(s)

An entity that provides additional services to the service provider. For example, in China, a non-financial institution engaging in payment services is required to deposit all of the account balances into a commercial bank, which then provides a global account management service.

branchless banking

The delivery of financial services outside conventional bank branches, often using agents and/or relying on information and communications technologies to relay transaction details; typically, card-reading point-of-sale terminals or mobile phones.

remittance

Transfer of money from one user to another user at a distance.

geographic location

urban*

Refers to cities such as Kunming, which has an area of 21,582km² and a population of 4.1 million.

rural*

Refers to towns such as Suoga, which has an area of 56.7km² and a population of 17,650.

remote*

Refers to villages such as Changjiao, which has an area of 5.12km² and a population of 1,096.

** Definitions of 'urban', 'rural', and 'remote', vary according to the source. Here, we have provided representative definitions based on our research locations and to provide context for the findings.*

Chinese terminology

laoban

Boss. Used frequently in Chinese language to refer to one's own boss/manager, or the proprietor of a shop. In this publication, *laoban* is often used to refer to those that own and/or work as managers in construction companies and that manage crews of migrant workers.

hukou

A household registration record that officially identifies a Chinese citizen as a resident of an area, which includes identifying information such as name, parents, spouse, and date of birth. This record also restricts social service delivery to the citizen's place of residence, which is often his or her place of birth. Very few have the means to alter their *hukou* to an alternate place of registration. (See page 40)

gao li dai

An unregulated, high-interest loan from an individual. Can also be used to describe the person ("loan shark") who offers such a loan.

guomai fuwu

The practice of government contracting out public social services such as education or health care to private firms or civil society groups as a response to insufficient and inequitable public service provision.

dibao

Social assistance payments. (Literally: "Minimum Livelihood Guarantee") Intended to supplement a household's income up to a government determined regional standard.

at a glance: China's financial landscape

This report focuses on financial realities on the individual level. But it is important to also understand the large-scale forces at work in China. The following is a snapshot of nationwide trends, opportunities, and constraints.

why inclusive financial services are needed

closure of rural banks is unfavorable to rural populations

64% of rural populations are unbanked⁶ largely because there are no banks anymore. Succumbing to market pressure and increasingly focusing on high-margin, low-risk populations, China's "Big Four" banks have closed a combined 30,000 branches in poor and rural regions over the last five years.⁷ Rural residents have 0.36 banking outlets per 10,000 people, far below the national average of 1.34.⁸

weakening of social safety net increases citizens' vulnerability

Retirement benefits, which were formerly provided by the state, have declined to a point where many need to supplement them with personal income. Workers who suddenly lose their jobs have a difficult time seeking social subsistence payments. There's a great need for financial services to fill in some of the gaps left by the retreat of government from financial support, which is not likely to be reversed.⁹

high savings rate prevents domestic economic growth

At 38%—nearly 10 times that of the US—China's high personal savings rate is another superlative often admired from abroad.¹⁰ Yet many lack secure savings vehicles, let alone ones which provide returns on their investments. Given the importance of savings in minimizing their risk to shocks, it is important that all citizens are able to store their money safely.

why China could "get it right"

China has familiar precedents for success

Several factors in China—including high mobile penetration rates, extensive agent networks, and an intensive reliance on remittance payments in rural areas—mirror many of the characteristics that analysts believe have led to mobile money success stories like Tigo Cash in Paraguay and GCash in the Philippines. (While there's no such thing as a one-size-fits-all solution for financial inclusion, lessons from other contexts can be valuable.)

China has widespread mobile coverage and use

Mobile technology is often seen as the most promising development for inclusive banking. With more than 1 billion accounts among the three mobile operators (China Mobile, China Unicom, and China Telecom), China leads the world in mobile phone users.¹¹ Many predict that the transition from feature phones to smart phones will occur rapidly, with most phones projected to be capable of web-based mobile banking, e-commerce, and mobile payments as early as 2015. Most mobile users in China have leapfrogged traditional land-line telephony, saving telecoms from significant expenditures in infrastructure spending. Likewise, these users can leapfrog expensive legacy infrastructure like branches and ATMs while still accessing services.

government open to innovative public-private models

China Mobile, the country's largest mobile carrier, recently purchased a 20% stake (for USD 5.8 billion, RMB 37.5 billion) in the Shanghai Pudong Development Bank, a regulated financial institution.¹² The two are now collaborating to develop branchless banking products. The fact that both are heavily government-influenced makes China an especially interesting case study, as it lacks the competing incentives between government and industry that so often inhibits branchless banking progress in other contexts. Although Beijing has a heavy hand in the banking sector—83% of commercial banks are partially or entirely government controlled¹³—the government has demonstrated an openness towards diverse private-sector partnerships to bolster its expertise and to spur banking innovation.

new technologies are being quickly embraced

China Mobile is also partnering with China Union-Pay, China's only bank card organization, to deploy Near Field Communication (NFC) SIM cards that can handle mobile payments.¹⁴ While we can't assume that new services will be deployed inclusively (or successfully), the potential of this opportunity should not be underestimated. Union-Pay has an advanced, widespread financial services network and a recognizable household name. Without offering traditional banking services, it has still managed to establish itself as the leader in cashless transactions throughout China.

banking landscape

China's financial institutions are heavily regulated by the central authorities, specifically the People's Bank of China (PBC) and the China Banking Regulatory Commission (CBRC). The banking system includes, but is not limited to:

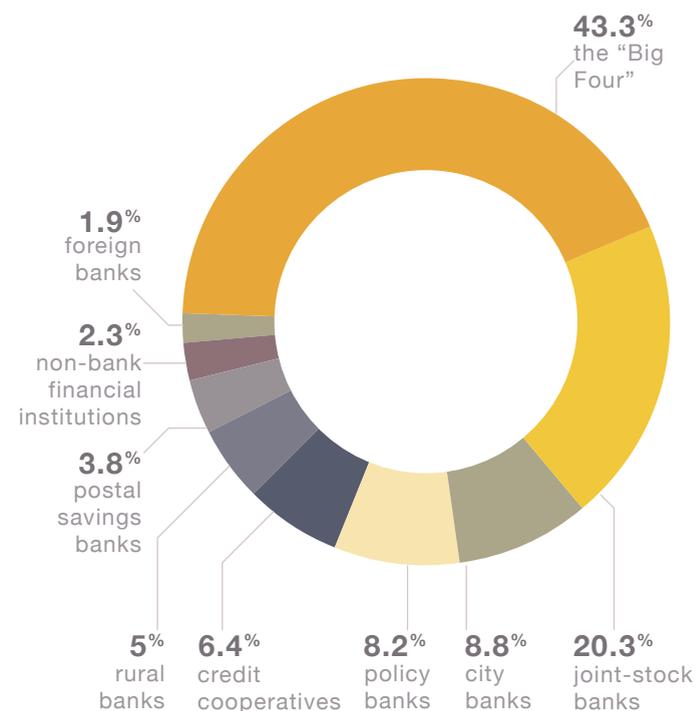
China's "Big Four" state-owned commercial banks, namely: Bank of China, China Construction Bank, the Industrial and Commercial Bank of China, and the Agricultural Bank of China. These banks are the biggest players though their dominance is in gradual decline. In 2011, the "Big Four" accounted for 43% of China's total banking assets.¹⁵

13 Joint-Stock Commercial Banks, including Bank of Communications and China Merchants Bank. These are the most dynamic institutions with assets growing at a pace double that of the "Big Four". By 2011, their market share had increased to 20% from 14% at the end of 2003.¹⁶

100+ City Commercial Banks in China (formerly able to operate only within the city from which they originated, but since 2004, allowed by CBRC to expand outside their home area). Some of the smaller city banks are increasingly merging to remain competitive.¹⁷



percentage of total assets



total assets

the "big four"	<i>49 trillion RMB (USD 7.6 trillion)</i>
joint-stock banks	<i>23 trillion RMB (USD 3.6 trillion)</i>
city banks	<i>10 trillion RMB (USD 1.5 trillion)</i>

serving rural China

In addition to the rural footprint of commercial banks such as the Agricultural Bank of China or the Postal Savings Bank of China, the country's rural cooperative system is comprised of a network of locally-embedded financial institutions. This includes 85 rural commercial banks, 349 village and township banks, 223 rural cooperative banks, and 2,683 rural credit cooperatives and rural mutual credit cooperatives.¹⁸

other financial service providers

nonbank actors

In China, there is a significant number of nonbank actors that provide financial services, especially loans. These actors include trust companies, licensed financial leasing companies, credit guarantee companies, and microcredit companies, to name a few. It is estimated that nonbank providers have a total outstanding loan volume of over RMB 10.2 trillion¹⁹ (USD 1.6 trillion).

electronic and digital payments

There are at least 20 different online payment platforms in China: among these, Alipay, Tenpay, and 99Bill dominate the electronic payments market.²⁰

formal vs. informal

This publication discusses formal and informal services extensively, and what the former can learn from the latter when it comes to serving China's marginalized populations. To help frame the conversation, this table highlights the differences between formal and informal financial services in China, as well as how a migrant worker or a rural villager might evaluate these options.

formal financial services

what they are

Credit, savings, insurance, or payment products from regulated financial services providers such as commercial banks, state development banks, insurance companies, or money transfer firms.

who they serve

People deemed solvent (or "solvent-enough") customers by the above institutions. Possible criteria: earns above-subsistence income and able to save or invest; located in adequately populated areas for cost-effective service provision; possesses good credit history.

how they are regulated

Activities overseen by government institutions (eg. China Banking Regulatory Commission), with laws to regulate the industry and to protect consumers.

where people access them

Via brick-and-mortar locations in adequately populated cities and towns, or online via the internet or mobile web.

how much they charge

Variable. Fees for each service can differ by service provider, but they are generally fixed, publicly communicated, and legally regulated.

informal financial services

Credit, savings, insurance, or payment products from unregulated service providers, such as family and friends, rotating savings and credit associations (*hehui*), money houses (*qian zhuang*), pawnshops, or loan sharks (*gao li dai*).

People deemed insolvent customers by formal financial institutions. Possible reasons: earns too little money, located in hard-to-reach areas, or lacks required documentation. Informal services typically serve those who are in the regional, occupational, or social networks of their providers.

No official oversight. Governed by social relationships and moral obligations, with no formal resolution mechanisms when challenges arise.

Via community members, who double as service providers, with strong knowledge of local context and of their consumers.

Variable. Fees for each service can differ by service provider, and providers are free to adjust at their discretion. Fees are not publicly communicated and are not regulated.

For rural, migrant, and minority populations...

informal services are more convenient.

While urban dwellers can access banks' fixed branches, such branches are sparse or nonexistent in less populated areas. Rural citizens and migrant workers (who are transient and usually live on the outskirts of the cities/towns where they work) often have to travel long distances in order to access a formal bank.

Informal services are thus more convenient, as the service providers are often individuals that these populations already see in their day-to-day lives, or are mobile and can travel to their client as necessary. An example might be a rural teacher that drops young children off at home daily, and who also happens to lend money to the children's parents.

informal services are easier to use.

The paperwork required by formal financial institutions prevents many in the target population from being able to use their services. Informal service providers, on the other hand, process transactions with minimal documentation, often just with a handshake. Flexible rules, which are adjusted based on personal relationships, make informal services accessible.

informal services are believed to be more secure.

Many in the target population don't understand the regulations of formal financial service providers, and thus see risk in using them. Further, they often believe that the rules are structured to disadvantage poor and uneducated people, which may or may not be true; sometimes, there is simply confusion about how fees are structured.

As informal service providers are typically members of the communities in which they operate, members of the target population believe that they handle their business dealings fairly so as to not risk their reputations and those of their families. Thus, transactions are generally deemed to be safe.



meet the users

Real people are the heart of this study. Their daily lives and stories drive its recommendations. By way of introduction, here are three profiles of individuals living on the margins of China's economy.

three marginalized groups in today's China



ethnic minority

diverse, dwindling groups, cut off from economic activity

Largely a forgotten part of China's economic growth story, 55 minority ethnic groups are clustered in autonomous regions that make up 64% of the country's total landmass.²¹ But while they occupy vast areas, their economic opportunity is extremely limited, and their populations are shrinking. While each group's needs differ, most are dependent on government subsidies, which have been minimal. Further, many believe that the government's policies are designed to eliminate their livelihoods and culture.

These profiles are composites of real people who shared their stories with us. Though the profiles take pieces from different individuals' lives, the goal was to develop individual stories that are representative of a broader group. For respondent privacy, all names have been changed. Further, the photographs throughout this publication are representative of, but do not necessarily match, the stories they accompany.



rural villager

left behind in hard-to-reach areas in every province

As China has focused investment on urban areas to support export-driven growth, rural areas have seen incomes slow to a trickle. Most families now survive on money sent home from children who have left to join the migrant workforce in the cities. Government services are unreliable, and private services—including banks—are almost non-existent as these populations are not seen as profitable markets.



migrant worker

the engine behind China's boom

Often treated as another low-cost asset in China's manufacturing ecosystem, the population of migrant workers in China doubled between 2003 and 2009.²² These 250 million²³ citizens are excluded from nearly all formal services. The government's strict controls on population movement mean they have no legal status in the cities where they work, even though economic opportunities are concentrated in the urban areas.



Age: 56

Location: Xiao Hai Zhou, Inner Mongolia

Occupation: Former Herdsman

an ethnic minority

ni lar, *like her mother and grandmother, used to breed and sell cows and sheep in the grasslands of Inner Mongolia. In the past decade, the Chinese government has put pressure on Mongols to cease raising livestock, ostensibly to preserve the grasslands for tourism.*

Failure to comply can result in steep fines. Ni Lar remembers grand promises to ease the transition by helping Mongols like her seize the new tourism opportunities while supplementing their income in the process.

Ni Lar now lives on government payments of about RMB 7,000 (USD 1,085) each year. Called *dibao*, these transfers were introduced in the early 1990s and designed to address poverty by increasing individuals' income to a Minimum Livelihood Guarantee, set by the government.

There is tourism in Inner Mongolia, but Ni Lar and her neighbors never see it. Tourists are all

directed to government-designed tourist parks, far from the villages, and the hefty fees they pay go straight to Beijing.

Support for the Mongols has been variable, despite official policy. Ni Lar's husband passed away five years ago, and her children, who are not eligible for support payments, have left to find work in Hohhot. Her *dibao* payments have been fluctuating for the past few years, but she has no idea why. She worries they will disappear completely. She has just enough to feed herself, and any extra expense, whether it's a sudden illness or the marriage of a village youth (which requires a gift of money), leaves her at a loss of what to do.

old peng *has lived in the same 90-person section in this small village his entire life. The nearest town with a bank is an hour away by motorbike and four hours by foot. He shares his small, mud-brick home with his wife, his 34-year-old son and daughter-in-law, and their 8-year-old son.*

Every morning, the entire family hikes up to the fields above their village to tend their small vegetable plot. This plot represents their livelihood—they sell the vegetables it produces and eat its weeds and what they can't sell. Once a week, his wife hitches a ride on a flatbed truck to the weekly market, where she hopes to earn enough to buy some pork so her grandson can eat some meat.

Old Peng keeps a passbook for his bank account in his pocket at all times. He still keeps careful track of his balance, but says that the anxiety of being so far from his bank and pressure to stay on top of his finances is slightly relieved; now, he can use his son's mobile phone to call the bank and check his balance, instead of making a four-hour trek on foot.

The country government sends dibao payments directly to Old Peng's account. However, his primary point of contact for accessing services is his village leader. For example, the family can buy cook stoves at a discounted rate through a government subsidy; the village leader brings it to their home in exchange for RMB 120 (USD 19). But the Pengs can't be sure if that amount is correct; they've heard the charge is only RMB 90 (USD 14) in another village, but there's no way for them to verify. Old Peng is afraid to challenge the village leader, or to ask the government officials what the rate should be—the fact that he asked would indubitably get back to the village leader, who could cut them off from future services entirely.



a rural villager

Age: 67

Location: *Changjiao Village, near Liuzhi, Guizhou Province*

Occupation: *Farmer*

Age: 27

Location: Kunming,
Yunnan Province

Occupation: Laborer

a migrant worker

Ten years ago, when he was 17, **wang jun** packed a small bag, left his village in northeastern Hebei Province, and boarded a 40-hour train to bustling Kunming in China's southwest.

He left behind his parents and grandparents, all of whom worked as subsistence farmers on the family's meager plot, and traveled to a big city.

Through a friend from his hometown, Wang Jun met a *laoban* (a labor boss and middleman, described in detail on page 44) and got a job on the construction site of a five-star hotel. Working six days a week in 12-hour shifts, he earns RMB 1,000 (USD 155) each month. He owns a simple mobile phone for keeping in touch with his family, but rarely uses it because those calls are always filled with pressure to find a wife. All of his possessions fit into a small suitcase he carries home every year for Spring Festival. He lives in a shared dormitory, with 12 bunk beds to a room, no walls, and no secure place to store his belongings. His room is one in a series of low-slung, non-insulated buildings that house hundreds of workers on the site.

More than anything, Wang Jun wants to find a wife. In order to be considered a viable suitor, he needs to first buy a home; but at the rate things are going, Wang Jun worries he will be an old man before he can afford such a purchase. He's heard of training courses that would qualify him

to work in skilled mechanical trades to earn a higher wage, but the cost of such courses would deplete his meager savings, putting him further from what he needs for a house. He can't decide what is riskier: staying at his current, low-paying job with the hope of one day becoming a *laoban* himself or making a huge investment in training that may—or may not—pay off in a few years.

With no basic financial literacy, Wang Jun doesn't trust or participate in the modern banking system, but with his communal living situation, he has nowhere to store his earnings. Instead, his *laoban* holds his wages for safekeeping, an arrangement that reduces the risk of theft but keeps him locked in the working relationship. He gets paid twice a year. If he needs money before his biannual payday, his *laoban* will give him an advance as long as he has worked the days to cover it.

The arrangement is mutually beneficial but also lopsided. While Wang Jun avoids the temptation to spend his earnings and his *laoban* maintains control over his workers, Wang Jun remains indebted to his *laoban*, working without a contract because his boss holds his money.



Outside the railway station in Kunming, the capital of Yunnan Province, a bustling scene unfolds day after day: Hundreds of migrant and minority workers arrive and depart, carrying little more than a plastic bag of clothes, a small wad of cash, and a mobile phone.

key findings

China's modern economy was built on the backs of more than 250 million workers like these, whose move in search of economic opportunity has created a dramatic demographic shift, transforming a country of walled cities into one of tethered, transient networks.

With an unreliable social safety net, few dependable private-sector services, and a constant (but largely unfruitful) search for economic stability, both these workers and the families they have left behind in ethnic and rural villages live a precarious existence, unable to plan for their futures.

This uncertainty—which we'll call *turbulence*—is the defining fact of economic life for our three target populations. Massive migration is just one contributing factor; rapid changes in government policy, in socioeconomic growth and change, and in employment have all contributed to a powerful sense amongst poor Chinese that not only has the rug been pulled out from under them, the floor below it may collapse any day.

Having access to stable, inclusive financial products and services can reduce this turbulence, or provide a buffer against it. Ultimately, it can improve individuals' economic situations and increase society's resilience.

But to be successful, new services must take into account the financial ecosystem in which these millions of people currently live. Our research uncovered three major trends that characterize the lives of most Chinese migrant workers, rural villagers, and ethnic minorities. From these trends, we've identified specific findings that can inform the design of effective financial services to assist individuals in overcoming the turbulence of their financial lives.

This is the cycle in which marginalized communities are currently trapped:



1. seeking stability This is the driving motivation for our target populations. Fluctuating government services, disappearing opportunities, and lack of information has left people with little chance to improve their economic situation. Our target populations make only enough income to scrape by, and lack the tools necessary to plan for the future. More than anything, they seek certainty and stability in their lives.

2. migrating towards opportunities To improve their lots, millions of migrant workers leave their rural homes. At the mercy of low-paying, temporary, transient jobs, these workers live for years under constant threat of illness or injury and with no clear path to getting ahead. Their families, ethnic minorities or rural villagers left behind, rely almost entirely on them for support.

3. filling the gaps While migrant workers may find jobs, they and their families still lack the services to protect them from disaster and policy changes, or to give them the stability necessary to improve their economic condition. Instead, they turn to alternatives within their social networks: asking a trusted neighbor to carry money home to one's family or buying health insurance through a friend that knows someone who knows the actual insurance broker. But these services can be exploitative, overpriced, or insufficient—and when they fail, the consequences are deeply destabilizing.

The desire for stability drives this cycle, but because of the lack of formal, regulated services, people struggle to achieve it. They get by, but just barely.

In the following three sections, we explore broad trends that relate to each step of this cycle, but that also impact the cycle as whole.

section 1: mobility and transience examines how the pursuit of stability has actually led to greater mobility among many Chinese citizens. It also details the impacts of this new transience among populations who are migrating toward opportunities and those they leave behind.

section 2: building trust explores how—in spite of, or perhaps because of—newly turbulent lives, people seek to build relationships with those who can help them meet their basic needs. It looks at how individuals come to rely on different service providers, and the role of trust in informal service transactions.

section 3: seeking stability returns to the driving motivation for our target populations—the desire for stability—and discusses how it impacts their life choices. It concludes by discussing how service providers can help these users realize their ambitions for secure livelihoods.

User stories, taken from our field interviews, add clarity and nuance to each theme, drawing out the human struggles embedded in each and showing how they interact.

Each section concludes with a specific recommendation, which we hope service providers will take into careful consideration as they construct new financial products. We have separated these three themes for clarity and to examine each in detail, as they are deeply intertwined in the real world, embedded into the fabric of millions of people's lives. For a new solution to work, it must take their entire experience into account.

1. mobility and transience

The largest human migration in history has taken place in China over the past 30 years and migrant workers now represent 18.5% of the country's total population.

The 2008 global economic crisis did not stem the tide. While China's economic slowdown eliminated many jobs in the developed zones along the Eastern seaboard and in the Yangtze River Delta, migrant workers continued to seek jobs in factory towns, as new ones sprang up throughout the southeast and interior. No matter where the opportunities move, it seems that workers are willing to follow, tirelessly chasing increasingly elusive jobs across China's sprawling rail network—even as the ratio of jobs-to-workers is dropping.

These workers have limited legal status as China requires all residents to participate in a national household registration system, the *hukou*. Set up under the old economy to control the population and its movements, this system remains in effect today, even while Beijing has strongly encouraged job creation away from rural areas. Thus, anyone who leaves his or her hometown relinquishes access to services like education, pensions, and health care.

Cities, anxious to develop as quickly as possible, have turned a blind eye to the rural workers who are facilitating their brisk modernization.

Transience is also a defining factor of life for those who are left behind. With dwindling opportunities in their home regions, minority and rural populations have watched their children travel to far-away cities in pursuit of better futures. In the sparse grasslands outside Hohhot in Inner Mongolia, there are all-but-abandoned villages, inhabited by only aging Mongolians whose children have left their traditional, "dead-end" ways of life for more lucrative opportunities.

This emigration from rural areas too often justifies the evaporation of formal social services in these areas. As lack of opportunities and support make the prospect of remaining in one's village less and less feasible, this in turn begets additional migration.



living without an urban hukou

Set up in 1958 as a communist control mechanism to stem rural-to-city migration and maintain social stability, the *hukou* system limits people's access to government services to the place where they are born. A *hukou* from a rural town is essentially worthless, since so few services are available in rural areas. (There are, however, some rural populations such as ethnic minorities, who receive special services such as social subsidies through their *hukou*.) But a *hukou* from a city is like gold, and only available to a privileged minority.



The following chart shows how life differs for two Chinese citizens in Shanghai—one of which had the good fortune of being born in the city—and the other who has gone there to work:

	<i>Shanghai-born resident</i>	<i>Shanghai-dwelling migrant</i>
Place of <i>hukou</i> registration (inherited from mother)	Shanghai.	Longjia Village, Anhui Province.
Resident status in Shanghai	Legally Registered.	Illegal or temporary.
<i>Hukou</i> transferable?	Yes, if approved by new municipality and sponsored by employer.	Unlikely, as it requires employer sponsorship. Counterfeit <i>hukou</i> can be bought for RMB 150,000 (USD 23,215) on the black market.
Eligibility for Shanghai public benefits	Yes.	No.
Eligibility for government employment in Shanghai	Yes.	No, though limited slots are available for temporary workers on state-sponsored projects.
Eligibility for permanent employment at a private company in Shanghai	Yes.	No, must seek temporary or informal employment.
Access to primary education in Shanghai	Free, and compulsory for the first nine years.	Private schools for children of migrants start at RMB 1,100 per year (USD 170). Given the cost, children of migrants often remain in the countryside.
Access to higher education in Shanghai	Can take the entrance exam in Shanghai, and likely to be accepted, as admittance quotas for Shanghai <i>hukou</i> holders are substantial.	Must take the National Higher Education Entrance Exam in place of <i>hukou</i> registration. There are few university spots available for rural <i>hukou</i> holders.
Access to health care in Shanghai	Formal employers are legally required to provide basic health insurance, making top-quality hospitals affordable and accessible.	Few employers offer health insurance, and hospital fees are prohibitively expensive. The best option is traveling to a hometown clinic, where a local <i>hukou</i> registration subsidizes health care.

a brief history of transience

1970

Since the late 1970s, the state-sanctioned withdrawal of social support programs and simultaneous disintegration of collectives designed to support rural communities created a severe lack of economic opportunities across the Chinese countryside. With few jobs available outside of agriculture, there was a massive labor pool ready when...

1980s and 1990s

...rapid industrialization created jobs for the masses, and China's growth soared. As manufacturing centers grew, powerful local governments in cities along China's eastern seaboard modernized rapidly. The development of the private sector and massive domestic infrastructure and real estate investments has contributed to...

2000s

...record-breaking growth. Between 2003 and 2009, the number of migrant workers on the official census nearly doubled, from 120 million to more than 220 million. The populations of urban cities have grown by about 440 million people since 1979,²⁴ and more than 300 million more are expected to follow over the next decade,²⁵ even as...

today

...trends seem to be shifting again. As China gradually moves away from a manufacturing-based economy and as wages rise, the expense of doing business in the already-bustling urban centers is driving some manufacturing plants farther inland. This gives workers the option of working closer to home, with the trade-off of lower wages. This may be an early sign of improving economic stability for interior regions, but the larger trend of transience is still record-breaking.



transient, but rooted at home

Mass migration, both official and unofficial, has strained—but not severed—the traditional Chinese family structure. Although migrant workers travel far and wide in search of work, their earnings constantly flow back to the rural villages and ethnic enclaves from which they hail. These domestic remittances, which are significantly greater than the income potential in most rural economies, support a worker's family while maintaining the link to home.

Although the majority return to their hometown only once a year, migrant workers have little chance of laying down roots elsewhere. Unable to work officially or access social services without a *hukou*,²⁶ they depend on informal labor agreements, often lacking protections against injury or job loss. Most live in shared housing, spend the lion's share of their waking hours at work, and save the majority of their earnings for their annual Spring Festival pilgrimage home (estimated to be the largest annual human migration in the world). They thus bind themselves financially and socially to their hometowns.

This takes a significant toll on both workers and their families. With no young people left, rural villages are as heavy as ghost towns, and parents are deeply worried about not having children to help them in their old age, as is Chinese tradition. Workers, with the expectation of one annual trip home, are under a great deal of stress to maximize savings throughout the year while also finding time to seek out a suitable mate to present to their parents.

This also highlights the importance of this cross-section of the population for the larger economy, as well as for potential private-sector opportunities: the money generated by this group is kept out of the formal financial sector, and largely spent on basic necessities or in the black market. These trends create an important challenge to China's efforts to increase domestic consumer spending, as it limits the money spent in the urban economy as well as in developing rural economies.

laoban: bridge between home and employment

The foundation of most migrant workers' livelihoods is their relationship with a *laoban*, a manager or middleman who arranges contracts with employers and takes responsibility for recruiting and managing hundreds of temporary workers.

The *laoban*-worker network is based on existing social networks. Most *laobans* are connected to their workers by only a few degrees of separation; often, they hail from the same village. Migrant workers are often given the number of a locally-known *laoban* when they first leave to find work, and when they find a *laoban* they can trust, they will often follow him for years as he travels from place to place in pursuit of new jobs.



Meet Xu Hanping & Zhang Yibing

We met Xu Hanping and Zhang Yibing in Beijing, outside the low-slung dormitory building where they share a room with eight other men. Originally from the same small village in Sichuan Province, the two young men left their hometown together last year in search of work.

They went first to Tianjin, having heard from a friend that a *laoban* there, originally from their hometown, would be a connection to construction jobs. But, when Hanping and Yibing arrived in the industrial metropolis, they were too late: their prospective *laoban* had already left to set up a construction project in Beijing. Lacking the money to keep moving, they stayed in Tianjin where they worked odd jobs at low wages, earning far less than other workers at the same site every day who were informally contracted with other *laobans*.

After a month of work, Hanping and Yibing saved up enough to resume their search. They traveled to Beijing and found the man their friend had recommended who, upon hearing where they

were from and who had referred them, quickly gave them jobs.

Hanping and Yibing moved onto the worksite and met other workers who had worked with this *laoban* for three years, following him through three provinces. It was a happy affair as most of the men were also from Sichuan; two were even from Hanping and Yibing's village. The men were eager to hear gossip from home and the group easily fell into an easy rhythm speaking in their native dialect. The newcomers were elated to hear that two of the men's wives were traveling with the group. Dinners, they soon discovered, were just as spicy as the regional specialties from home they'd been missing.

Several months later, with the project almost complete, their *laoban* is preparing to move to the next contract—possibly in the adjacent Hebei province. But it doesn't really matter where he goes: As long as he'll give them steady work, Hanping and Yibing are ready to follow him.

shared needs, new communities

Networks and communities often form around common attributes, such as simple physical location. One of the most prevalent, and the most tenuous, community structures found in urban centers is that comprising of migrant workers who have no relationship with a *laoban*.

For China's migrants, it is nearly impossible to go it alone. Moving populations are forced to enter into whatever network they can, to find tips and job leads to plan for the future. Groups of migrants from the same hometown often arrive in cities with little more than the name and phone number of a *laoban* who may ultimately provide them with food, shelter, and work for the next several years.

Those who do not form a relationship with a regular boss are at the bottom of the totem pole. Forced to seek employ-

ment day by day, they are at the mercy of the temporary middlemen who hire them for work.

With jobs being scarce, these migrant workers congregate at job pick-up sites, stretches of road at large intersections just outside city center. They each carry the tools of their trade as advertisements: a construction laborer will carry a hammer, a chef will wear his chef's hat.

These congregations are not close-knit groups. The competition for jobs is steep, and they do not share the hometown bonds which are core to Chinese social life. But they do share grievances, information, and occasionally other resources. For many, these networks are their sole source of support.



Meet the Day Laborers

The drivers don't even need to honk. As the boxy, well-worn Mitsubishi Delica vans arrive, the workers we've been interviewing hightail it to the curb of the sprawling, six-lane highway outside the Guiyang labor market. Doors slide open and brusque bosses pop their heads out, shouting day rates and specific jobs as men jockey to get in their vans. A minute later, the vans are gone. Most of the workers remain, disappointed. They continue to mill about, but as the clock ticks, they grow increasingly worried about their ability to earn a wage that day.

Nearby, a labor headhunter sits beside a placard of job listings, offering to refer any worker to a paying job—for a small fee. One man tells us he's been burned too many times by shady *laobans* to trust agents like this. He describes being driven out to a far-off work site, working a full day without food, and then being sent away without pay. With no official labor agreement, he had no recourse.

Another man tells us the labor agent is just as bad as the *laobans*, claiming that he charges to provide a phone number that is a lead to a job, but that when the buyer of the number calls, all the jobs are always taken. Yet another chimes in, saying that he's been duped by agents in the past. He's called the numbers given and been directed to a job site, only to arrive and find no one there and the number he paid for since disconnected.

Resources for these men are scant. Some say the time they spend looking for work, and hounding managers for the pay that they are owed, outweighs that which they spend actually working and earning wages. Even legitimate companies can be risky: "We don't like working for construction companies because it is very difficult to receive your wages from them. Either the accountant is not available or the manager is nowhere to be found. And you can't put up too much of a fight—you never know what kind of black society [gangs] they have backing them up."

Design services to support the transient, tethered networks that span the country.

key takeaway: embrace transience

Migrant workers are concentrated in economic hubs throughout China, but physical geography is no longer a sufficient demographic marker. More important are the networks, tethered between home villages and urban workplaces and strung along chains of human connections, on which these workers rely. Thus, traditional, geography-based definitions of markets are futile. Service providers seeking to accommodate these populations must focus on the human networks that connect them.

On the individual level, there are two important relationships to consider when designing services for transient users:

1. Their commitment to family and how that commitment manifests in behaviors, and
2. Their reliance on social connections for informal services and for information about opportunities.

If the urbanization of China continues at the current pace, financial products that can keep up with the needs of these increasingly mobile groups will become an even more important aspect of the economy.

This will mean a change in financial behavior for a significant proportion of China's population—not just migrant workers, but the rural populations who rely on the money they bring home. Thus, effective remittance systems are a primary

need for all three of the target groups; accessible, secure, and cost-efficient means of sending and receiving money must be available to both sides of the transaction.

2. building trust

*Hu Gaoyan is happy that his daughter has found a husband, but he's also anxious about the cost of her wedding. With little savings and no access to credit, Gaoyan turns to the local loan shark for a *gao li dai*: a high interest loan.*

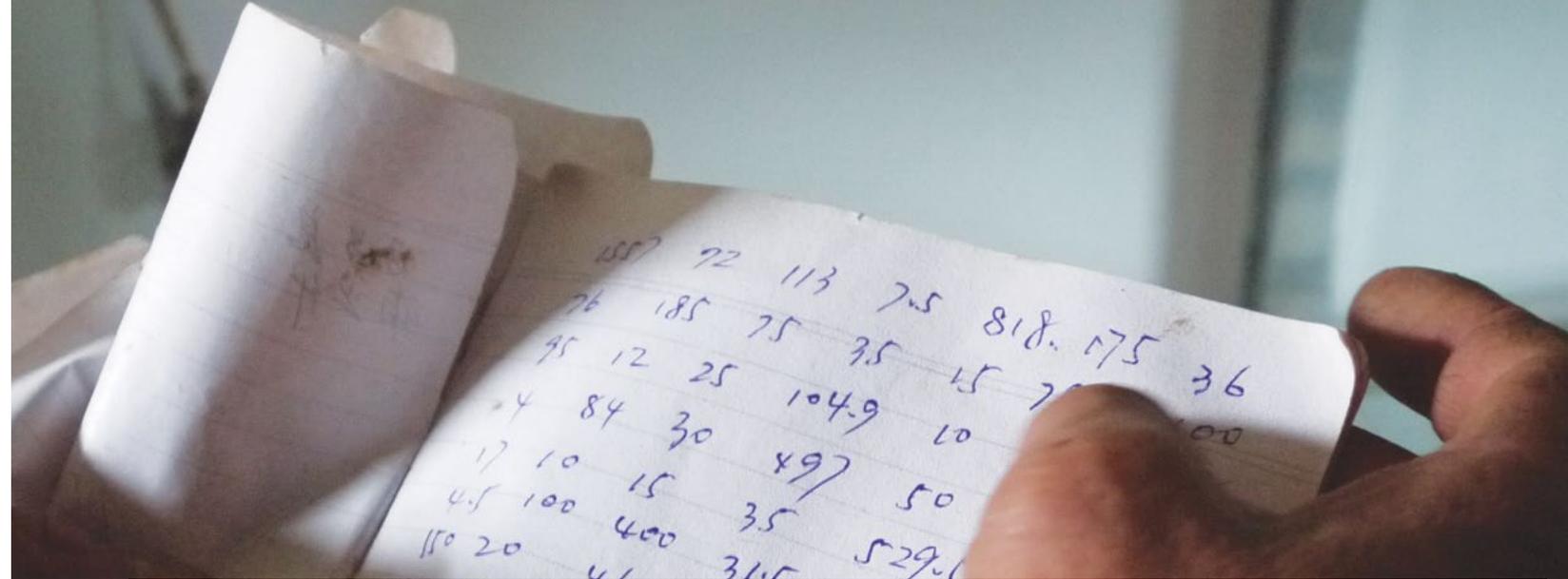
Gaoyan's lender is the village veterinarian. With most of the villagers spread out across mountainous terrain, the vet makes house calls, traveling by motorbike to care for their livestock and, if they so desire, to bringing loans to their doors. He earns more money than many of his neighbors—mostly farmers and small shop owners—and thus can afford to make loans. Gaoyan's family background and his job also make him a natural fit for the role of *gao li dai*: his family has been in the village for six generations (as have most villagers), so it would be deeply shameful for him or his borrowers to default. Further, as he performs a critical function for his customers—taking care of their livestock—he can ensure timely repayments, since clients wouldn't dare risking the health of their prized assets.

Gao li dai are prevalent in China; while the official lending rate in China is 6%, these informal loans can reach rates as high as 40%. Still, the term doesn't carry the negative connotations of "loan shark".

With no formal loans available, these informal loans—based on reputation rather than physical collateral—are a natural alternative for many unbanked. High interest rates are seen as fair compensation for peer lenders that don't necessarily have much cash to spare.

Loans are just one of countless informal services that exist all over the world, in the gaps where neither private nor public options are available. Wherever credit, health, security, or other needs aren't met, alternative service providers step in. These informal services are often built on deep understandings of their users and existing social networks, where trust is longstanding.

Informal services have proliferated in China, as formerly government-guaranteed options have all but dwindled out of the lives of rural and migrant citizens. Unfortunately, these informal services are frequently exploitative, insufficient, or overpriced (or all three).



Those we spoke to gave dozens of examples: Rural villagers told of paying exorbitant fees to informal middlemen for access to government benefits. Residents of Inner Mongolia told us of purchasing land in order to move their *hukou* to their adopted hometown, only to be told later that the area had reached its residency "limit." Street hustlers in Beijing offered to sell us counterfeit identification and certifications to qualify for any urban job—a thriving black market is a vital element of the alternative service economy.

Citizens with few resources have little choice but to accept these meager offerings. When challenges with informal services arrive, there is no reliable channel for redress; frequently, users don't even know that the service they are using is overpriced.

This dynamic is especially visible in

the financial services available to rural and migrant citizens. In the wake of privatization, China's state-owned banks have been encouraged to modernize and operate on more market-based incentives. As a result, unprofitable rural bank branches have closed—more than 30,000 branches in poor and rural regions over the last few years—leaving over 64% of today's rural population unbanked.

Even for those who have access to banking services, weaknesses in the sector undermine all consumers, both current and potential; the lack of profitable, stable investment options is the most pressing. Due to an oligopoly from the "Big Four" banks, standard savings account interest yields stay remarkably low. The domestic stock market is highly volatile, and foreign investment is out of reach. With the nation's retirement benefits and jobless benefits waning away,²⁷ secure

savings vehicles are an urgent need for the entire country, not just the most vulnerable strata.

To design better solutions, it is important to understand how the current, informal solutions function. The following three sections will explain how these services form along alliances of trust, how they meet the unique needs of vulnerable populations, both banked and unbanked, and why they have trumped formal alternatives in the past. Understanding these dynamics is essential to designing services to replace them, and to better service China's poor.

new services, old relationships

Alternative services in China nearly always form along the lines of existing relationship networks. They arise both out of necessity as well as habit, the latter of which strengthens their prevalence. Often, even when a formal service becomes available or accessible, users will stick to what they already know and trust. For example, though they were introduced to China in the late 1980s, credit cards have not been widely adopted until the past few years. For most Chinese, who prefer to deal in cash, credit cards are vehicles of convenience rather than lending. This vastly shrinks profits derived from credit products, further reducing incentives for providers to offer them in the first place.

Family relationships are at the heart of the strongest trust networks, as their tethers transcend both physical distance and regulatory barriers. Second-order connections through one's hometown are almost equally as strong.

Authority is also a customary source of trust, especially in rural areas. In places where government services are routed through village authorities, this trust has begun to wane, if only slightly, as these services become more sporadic or dwindle away. Yet in many rural villages, authority figures remain the sole source of information about the outside world and trust arises by default.

In these locally-based, foundational trust networks, community members have a strong sense of the reputation and social capital of others, and can enter into service relationships with somewhat predictable consequences.

Most successful service relationships—whether informal or formal—are built upon these networks, and introductions become critical to outside service providers making inroads into a community.

services are relationships with purpose

All services, formal and informal, are relationships. Both sides rely on the other; relationships are based on trust and evolve over time.

The marketing and sales industries hold dear this insight and evidence can be found in one of its most prized tools: the Customer Relationship Management system. It's also a vital realization for anyone designing effective services that users are willing to adopt.

Traditional to a New Service

The Postal Savings Bank of China has an established history of expanding service offerings. Originally part of China Post, the country's official postal network, simple banking services were added as an innovative means to extending financial services through existing infrastructure and brand presence. The bank now operates as a separate entity, though its 37,000 branches make use of the postal system's widespread network.²⁸ While it is substantially smaller than any of the "Big Four" banks, its rural presence is wide-reaching, second only to the Agricultural Bank of China.



Meet a Miao Farming Family

This Miao minority family of farmers lives in a remote village in rural Guizhou Province, high on a mountain, an hour-and-a-half walk to the nearest town. The family relies entirely on their village leader—and to some extent their television—to relay information from the outside world, which includes information on the government agencies who more or less control their livelihoods. Occasionally, local officials will visit, but their village leader is always glued to their sides, leaving no opportunities for private communication. As a result, the family is forced to rely on him to coordinate with official bodies and can only trust that he is representing their interests to the outside world.

This is not to say that the Miao trust outside officials. There has traditionally been tension between the Han Chinese and the Miao, as

with many ethnic groups. This Miao family did report some positive outreach; for example, a few years ago the government built new homes for the families in the village (but not the Han families), a significant investment and boost. But many in the village are also suspicious: they suspect the government did so in order to prevent them from migrating to better lands, believing Beijing prefers to save these places for the Han majority.

The family's most recent contact with the government had been a sham vote. Officials told them to vote on a policy change and posted a voting box in the village for 10 days. The family could no longer remember what the policy change entailed—results had never been announced.

trust based on relationships

Many expect informal services to be less effective than formal services, or outright exploitative—and they can be. But among our respondents, many valued the accessibility and ease of use of the informal services they used. Built on mutual reliance and born of a vacuum of competitive alternatives, both service provider and user need the other to some degree; thus, these service relationships are often long-lasting. The reliance and value exchange can, however, be asymmetrical.

One example of such services are informal loans. Ranging from community loan circles to *gao li dai* to a salary advance, unregulated loans are widespread in China's informal economy. Using two examples below, we demonstrate how informal loans leverage trust relationships to operate and the resulting vulnerabilities they present for users.

Type of Informal Loan

Rotating Savings and Credit Association

In these informal community loan circles, members regularly contribute to a shared financial pool that they can each draw upon at a fixed frequency. Members, often neighboring villagers or family members, use it to save money, to prevent temptation to spend cash, and to borrow money. The desire to save face among peers regulates group behavior, ensuring members contribute when asked and withdraw money when it is their turn.

Online Peer-to-peer Lending

New online peer-to-peer (P2P) microloan platforms like Qifang.cn and Pandai.cn are connecting private lenders with borrowers. Affordable, accessible financing for post-secondary education doesn't exist in China, and tuition is often out-of-reach for low-income populations. Qifang connects companies and private donors willing to fund youth that want to go to school. Potential borrowers are required to provide details about their school and hometown and to submit their parents' names and copies of their national ID cards in addition to their own.²⁹

Role of Trust

Operates on communal trust: People join because of existing relationships among members, and fear of losing face within their community compels members to not miss payments.

Borrowers are ranked by credit ratings and histories based on their personal and social details leveraging social capital as a means of building trust. The social pressure to honor one's obligations (and to preserve one's family name) in a public forum ensures a very low default rate on loans. Money is paid directly to educational institutions and cannot be used for other purposes.

Resulting Vulnerabilities

Obligations to the circle aren't legally binding and there is no official means for recourse if a member leaves with the money. Members are bound to the lending circle's cycle and may not be able to collect cash when an urgent need arises.

Dynamic interest rates fluctuate depending on the determined "trust" level of the borrower. Inability to pay back can cause loss of face for the borrower and his or her entire family.

While both models require a significant investment of social capital to succeed, they differ in their time commitments. Community loan circles require at least one full-cycle (each member contributes and withdraws once) to be useful for all members. The larger the circle, the longer the cycle. P2P microloans can be paid back based on negotiable schedules and with variable interest rates; thus, different types of informal loans satisfy different user needs.

the underground service economy

The retreat of state monopolies, specific government policies, and loose enforcement of regulation have enabled an underground grey market for services, with a particular impact on the lives of those at the tail end of the economic spectrum.

In Inner Mongolia, for example, where traditional livelihoods through livestock have been prohibited, ethnic Mongols participate in illegal consumption-smoothing activities—such as raising an animal in secret—as insurance against emergency; they can slaughter or sell the animal to raise quick capital.

In urban areas, an underground economy has developed around *fapiao*, the receipts that are the backbone of official financial transactions. Merchants are legally required to pay taxes based on the *fapiao*s they issue, so many will offer

small discounts on products sold or gifts in lieu of *fapiao*. Both the customer and the merchant are happy—it's a win-win for them—and the lack of a paper (or digital) trail makes this small tax evasion difficult to catch. Even for customers that do request a *fapiao*—if, for example, it's required for a corporate purchase—merchants can buy fake ones on the black market. Even regular citizens buy fake *fapiao*; for a certain class of white-collar workers, they're handy for fabricating and claiming reimbursements from employers.

While formal service providers shouldn't attempt to engage directly with illegal activities, it's important to understand their mechanics when designing alternatives. Service providers would have to create genuinely better alternatives, marked by predictability and reliability, in order to prompt users to switch.



Meet Huang Weiming

Huang Weiming hovers near an intersection across from the Kunming railway station, looking for a taxi. But he doesn't want a ride; when he spots a group of tourists in the backseat, he'll pop his head in the window, hand over a flyer, and deliver his five-second sales pitch offering a deal at a local hotel. The railway staff won't let him get too close to the official taxi line anymore, so he's searching for open windows at the stop light.

Weiming considers himself a travel agent, one of many in a new network of entrepreneurs benefiting from the trend toward independent travel in China. The creation of a Chinese middle class has sparked a dramatic shift in the desire to explore and experience culture. For the first time, Chinese citizens are independently researching and booking trips to domestic and international destinations.

But for anyone who arrives in a tourist hotspot without a reservation, "just in time" services fill the gap. Unregistered roaming agents like Weiming pitch taxi drivers on local hotels with favorable rates. If a driver delivers tourists to an in-network hotel, both the driver and the agent receive a commission. And the tourist feels he's gotten a deal, too.

Weiming enjoys being an entrepreneur and devours the Chinese editions of books from American capitalists such as Warren Buffet. But he has no desire to build a legitimate business, as doing so would impose restrictions on his autonomy and profit. For one thing, he'll need to pay taxes—why would he bother, he asks, when legitimate businesses get around taxes through fake *fapiao*?



Formal services should complement, rather than compete with, existing informal services.

key takeaway:

respect informality

In rapidly developing societies, citizens often adapt to shifts in cultural and market dynamics faster than the governing bodies that legislate and regulate those markets. Modern China is a prime example of how established cultural tendencies, market inefficiencies, entrepreneurial spirit, and loose regulation in the public sphere foster the development of innovative business models.

This environment is ripe for the creation of new, more inclusive financial services that build on these new paradigms. For service providers, the opportunities are enormous. But providers must recognize the existing competition in these markets is non-traditional and not always obvious.

A widespread economy of informal services is currently providing many people with financial products, including loans, insurance, and savings mechanisms. As a result, people get by; these services may be exploitative or otherwise insufficient, but they are woven into the fabric of social relationships and habit and will be difficult to supplant.

That is not to say that these informal services should not be replaced. Informal service arrangements and relationships provide stability only to the extent that they are known, accessible, and can offer meager improvement over current living situations. The informal economy has

grown out of the lack of viable alternatives. Market forces that would encourage cost-savings, efficiency, or honesty are lacking; it is thus an economy of last resort.

Yet, flawed as these services may be, they are better than many alternatives that have been offered to China's marginalized. Formal services, where they have been offered, have failed them more frequently than those informal services provided by people they know and trust. Future service providers must understand that new services, in the eyes of users, may be automatically discredited and must work hard to prove themselves.

Wherever possible, this hurdle may be overcome by building new services onto the existing networks of relationships, for example, by using existing alternative service providers as delivery agents. Even the most basic links to existing trust networks can help; the challenge is greater in deployment than in design, and service providers will need to find and incentivize appropriate focal points to help introduce them to various networks.

3. the search for stability

“When Mao was in charge, things were bad. But at least we knew we were poor and that we would continue to be poor. That’s better than not knowing where we’ll be tomorrow.”

— elderly woman,
rural yunnan

The Chinese place strong value on stability, perhaps a response to the turbulence of the past 30 years. The desire for stability is evidenced by the nationwide household savings rate: at 38%, it’s the highest in the world. But before economic reform, it was only 5%.

Prior to 1978, the state had a virtual monopoly on the administration of social services nationwide. As a result, the growth of private formal service providers was essentially nonexistent. Back then, citizens relied on the symbolic *tie fan wan*, or iron rice bowl, for cradle-to-grave jobs, rations, and social security benefits from the government.

With the opening of the market economy, state-owned enterprises found themselves struggling to compete and were, for the first time, allowed

to fail. Without guaranteed jobs, the government could no longer sustainably support the increasing numbers of unemployed citizens. This gradual disintegration of social support programs without private replacement has left rural and poor populations increasingly vulnerable to economic shocks.

For those with limited economic means, stable services are critical: They reduce uncertainty, mitigate risk, and provide solid economic and social foundations upon which people can build improved lives. Consistent, predictable service delivery enables consistent, predictable life patterns, which may by itself be enough to constitute an improvement in livelihood even without an increase in income.

Informal service relationships are a

makeshift social scaffolding, providing a modicum of consistency and predictability. While these services are dramatically insufficient, they are still a buffer against the turbulence that defines most people’s lives.

Asking populations that rely by default on informal services to try formal ones can be a heavy lift; change requires users to take a risk on an “unknown unknown”. The previous two sections suggest ways to integrate new services into existing solutions, laying formal structures onto the foundations of informal but ingrained service networks, to increase their chances of success.

This section will discuss a third strategy to increase adoption: using the desire for stability as a powerful motivator and—even more importantly—effectively delivering stability to demonstrate the value of services to China’s marginalized.



minimizing risk

Informal services are often a last resort, but they are also paths of least resistance. Built on established relationships, these services are known quantities. Even when results are negative, they are within the realm of expected risk.

For any user, trying any new service presents a greater risk than that of a trusted service falling short. Thus, while the promised benefits of a formal service may represent a marked improvement over the status quo, one can't be sure that these benefits will come to fruition. This lack of trust, as discussed in the previous section, is the largest barrier that service providers must overcome in introducing a new product.

For migrant workers, rural villagers, and ethnic minorities in China, three factors create additional barriers to trying a new service. First, such populations often lack service literacy, most having dealt exclusively with informal services or with formal services that have failed them. Learning the mechanics of a formal service—such as filling out forms for a bank account, or entering a secure PIN to withdraw money—requires a steep investment of time and energy.

Second, the lack of redress mechanisms available to these populations increases the risks associated with failed services. If a worker buys health insurance from an unauthorized agent and later discovers that it was a scam, it is unlikely that he will seek police assistance or attempt to take the offender to court. A lack of understanding of individual rights and potential financial burdens to seeking justice, may mean that money is just lost.

Finally, with limited economic means, our target populations cannot afford inconsistencies in quality or delivery; thus, the risk of trying a new service is high. If it falls short, they may not have the means to try an alternative.

Service providers must understand these barriers if they are to convince users to try new offerings. Further, these barriers underscore the importance of delivering reliable service once a user has signed on: service failures spread by word of mouth can destroy chances of future adoption.

But, more importantly, failing those who take the risk of trying new services can undermine already precarious livelihoods. Thus, service providers must understand their responsibility to follow through on promises.



Meet an Elderly Couple

In Xuanwei, Yunnan, an elderly couple invites us into their living room. Wistfully, they show us the shrine in their home, dedicated to Chairman Mao. Those were better times, they tell us. Even though things were difficult, they were stable. “At least we knew we were poor and that we would continue to be poor,” the woman said. They got by, and the state helped them with the bare necessities.

Now, every day brings new challenges. The couple worries about their ailing health, about what to do in case of an emergency, about the little they have to leave for their children and grandchildren when they pass away. They fear that their grandchildren will be even less well-off than they themselves are today. What's worse, they feel ashamed that there is nothing they can do to help.

The couple has considered taking out an insurance policy and recently visited the office of an insurance agent in a town an hour away.

They had heard that insurance companies were like banks but with better interest rates. But they found the agent pushy, and sensed he was trying to sell them policies they didn't need. He chided them for wanting the most basic plan, citing their old age and the large family that they had. They were responsible, he insisted, for ensuring the health and wealth of future generations.

This may have been true, the couple thought, but they just didn't see how the more expensive policy would benefit them more. Confused, they went home empty-handed. They continue to worry about their health and their family's future.

The television news often crows about China's progress, the couple says, saying it is developing faster than any other country. “But the China we live in is a far cry from what we see on TV.”

95588 短信银行 — 新功能 新体验 新飞跃

短信在手 便捷无忧

转账汇款
余额变动提醒

账户明细查询
查询余额



a new market, a new language

The difficulty of getting these target populations to try a new service, and communicating the stability that it provides, is further compounded by formal service providers' illiteracy in communicating with them.

Marketing—communicating the existence and benefits of new services—will be a key component of any new product for marginalized groups in China. But both the tone and the medium of these communications will have to be tailored to their unique circumstances.

Take for example this web ad for a mobile banking remittance product.³⁰ The ad implicitly promises “new progress” through the use of mobile banking on a smart phone similar to an Apple iPhone.

The well-dressed man in the image is far outside of the sphere of experience of rural and low-income populations.

Many of today's marketing campaigns rely on aspirational messages to sell products and services. Ads promise additional wealth or leisure time, or financial freedom, all of which work well when communicating with upper-middle-class markets. But for marginalized groups, these promises are ludicrous. A believable promise of stability, grounded in their daily lives, is a much more powerful motivator.

Communications design must take into account the same deep understanding of users' lives and contexts that product and service design do.

Translation: “95588 SMS Banking—New function, New experience, New progress. Convenient SMS in your hand. Bank transfers and remittance, Account detail inquiry, Balance change reminder, Balance inquiry.”



Meet Bayarmaa

Bayarmaa, a former herder from Inner Mongolia, fears she is losing her culture. She recalls the Nadamu Festival, an annual Mongol tradition of community celebration. It was like Christmas in the West, with a large banquet for the community along with Mongolian traditional activities: dancing, horse-racing, and wrestling. It was also an important part of the community identity and a valuable opportunity to share practices and tips on farming or raising cattle with Mongols from nearby communities who would come to partake in the celebrations.

In recent years, Bayarmaa feels much of that has been lost. The government has taken over throwing these festivals, giving cash prizes for the winners of various games and competitions. First prize is worth as much as RMB 100,000 (USD 15,500).

Bayarmaa has mixed feelings about the “updated” festival. She likes the idea of winning money, but longs for her traditional way of life. Beijing has made it difficult to raise livestock, claiming that it wants to protect the grasslands to encourage tourism, but tourism has barely materialized. Bayarmaa’s husband takes tourists on horseback riding trips and can make as much as RMB 300 (USD 47) during the high season, but most of the year, business is slow. The government gives them RMB 6,600 (USD 1,020) a year as compensation for taking away their livelihoods, but it’s barely enough to make ends meet. Food is expensive in Inner Mongolia, since the harsh climate means that food can’t be grown close by. Bayarmaa also spends RMB 400 (USD 62) per year on mobile credit, which she uses to call her daughters on her basic Nokia phone. With no jobs in the area, most of the young people have moved away, which has deepened Bayarmaa’s sense that her culture is slipping away.

of safety nets and springboards

There is a compelling moral argument for creating new services for previously under-served populations, but there is also a compelling business case.

Services act as safety nets that protect people from a myriad of disasters. Rural Chinese that can earn cash often save an outsize portion of their income; those who don’t try to keep extra valuables—livestock or jewelry—on-hand “just in case”. But it is impossible to save enough to mitigate all forms of possible emergencies, especially on a subsistence income. When disaster destroys one’s savings, there is no back-up safety net.

Some services can create simultaneous safety nets against many types of disaster. For example, keeping money in a bank account instead of under a bed can prevent risk of either a robbery or a flood depleting all of one’s assets. Insurance can help people get by in the face of serious illness or, for farmers, a bad season.

With the stability of a true safety net, formal services enable people to take the economic risks necessary to rapidly

improve their livelihoods. Thus, services are also springboards, enabling upward mobility on top of security. For example, a simple financial planning service can empower users to more effectively save for a home or decide whether a career training course is worth the cost and time away from work. The creation of accessible lending services could bring the career training course within reach.

Services like these have the potential to spark spending and economic growth, not just for individuals, but throughout rural China.

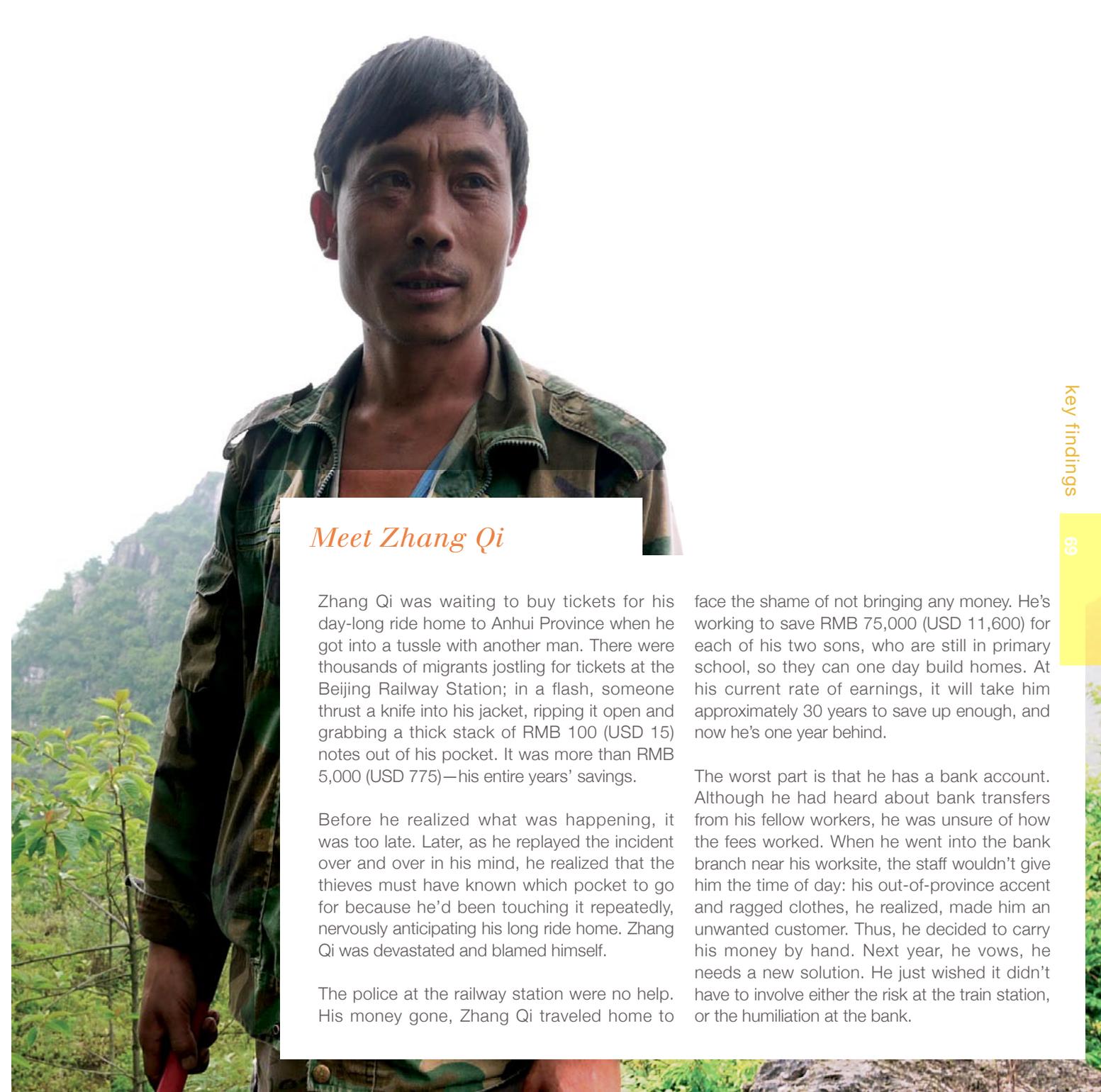
This is a serious market opportunity. Having stable access to services that produce valuable gains leads to a positive reliance on those services. It also builds trust in the service provider, creating long-term market opportunities.

Providing stable services will require significant investment. And because the stakes of trying a new service are so high for marginalized populations, the first generation of financial products to reach them will likely be loss leaders.

But those who successfully introduce products valued by these communities will have a captive audience, and over time, the trust of millions of people who are newly upwardly mobile. Done right, service delivery can both improve the economic situation of millions of people and create an opportunity to serve them in the long term, offering continuous profit and social growth.

The time is also right. Since opening up to the world economy, service providers in China have taken advantage of the

retreat of the state to experiment with innovative offerings. China increasingly relies on *goumai fuwu*, the contracting of public services out to private firms or civil society groups. By allowing these groups to experiment with new models of public-goods provision, Beijing incentivizes the creation of disruptive service delivery models. This is ultimately a positive step; facilitating market competition ensures a healthy array of options for diverse users with diverse needs.



Meet Zhang Qi

Zhang Qi was waiting to buy tickets for his day-long ride home to Anhui Province when he got into a tussle with another man. There were thousands of migrants jostling for tickets at the Beijing Railway Station; in a flash, someone thrust a knife into his jacket, ripping it open and grabbing a thick stack of RMB 100 (USD 15) notes out of his pocket. It was more than RMB 5,000 (USD 775)—his entire years' savings.

Before he realized what was happening, it was too late. Later, as he replayed the incident over and over in his mind, he realized that the thieves must have known which pocket to go for because he'd been touching it repeatedly, nervously anticipating his long ride home. Zhang Qi was devastated and blamed himself.

The police at the railway station were no help. His money gone, Zhang Qi traveled home to

face the shame of not bringing any money. He's working to save RMB 75,000 (USD 11,600) for each of his two sons, who are still in primary school, so they can one day build homes. At his current rate of earnings, it will take him approximately 30 years to save up enough, and now he's one year behind.

The worst part is that he has a bank account. Although he had heard about bank transfers from his fellow workers, he was unsure of how the fees worked. When he went into the bank branch near his worksite, the staff wouldn't give him the time of day: his out-of-province accent and ragged clothes, he realized, made him an unwanted customer. Thus, he decided to carry his money by hand. Next year, he vows, he needs a new solution. He just wished it didn't have to involve either the risk at the train station, or the humiliation at the bank.

To gain and keep customers,
meet them where they are.

key takeaway:

communicate and deliver stability

Many companies, governments, or other formal service providers claim that their services are effective because they are designed by “experts” and because they comply with the entities’ own goals.

But for the users of their services—especially in a context like China, where an informal economy is thick with services that operate based on deep trust and personal relationships—the value of a formal service is not so obvious.

To ensure long-term adoption and satisfaction, service providers must reorient their services around the human goals that it helps people to

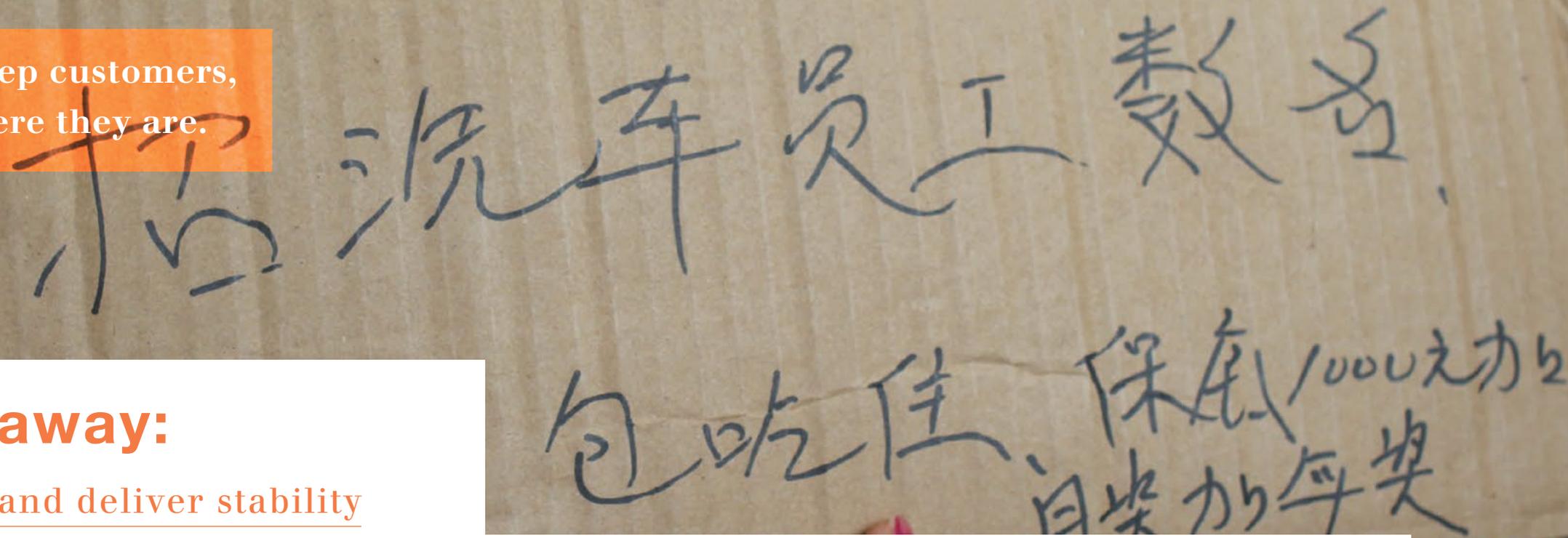
reach. These goals can be surprisingly simple—“send money home” or “save to buy property”—but communicating those goals in equally simple terms is vital.

Communication is particularly critical when introducing services to those who are unaccustomed to formal services, and therefore have distorted or incomplete expectations about what a service will provide. In many cases, word-of-mouth marketing via users’ own trusted networks may trump traditional communications in effectiveness.

Most importantly, communication efforts can not be empty promises. For people with limited economic means, who have an outside reliance on a small number of formal services, the risk of change is a critical one. Service providers must follow through on their promises of stability, or will risk deeply undermining the lives of those already most marginalized.

Photo:

Woman seeking workers outside of a formal job fair. Sign translation: “Looking for several car wash workers. Housing and meals included. RMB 1000 monthly base salary plus monthly bonus and annual bonus.”



designing the future

We firmly believe in the potential of new, inclusive financial products to improve the lives of China's marginalized populations. To realize their potential, however, these new offerings must be designed from a deep understanding of users' lives and needs. What would that look like? Read on.



a new financial service for China

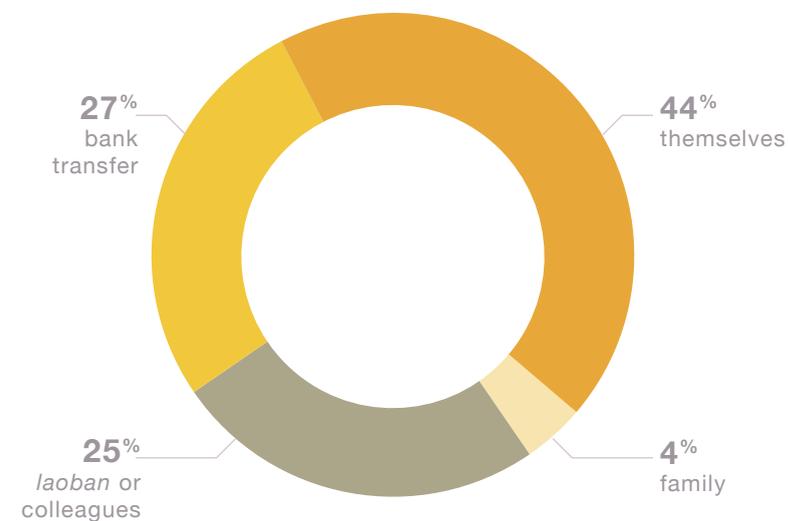
Building a new platform is a major investment for any service provider, but by implementing a service designed to formalize and add value to existing behaviors, providers can quickly and efficiently reach an enormous user base.

Through our research, one pervasive need amongst our target groups became very clear: with rural populations depending so heavily on money sent home from their children who have left to join the migrant workforce, a safe and inexpensive way to

send that money would greatly improve their security. For migrant workers as well, a secure remittance system would reduce the opportunities for exploitation by their temporary employers and facilitate their savings and security—no more pickpockets, for example, on the train home.

A standardized, secure, and mobile-friendly remittance system presents a huge opportunity to provide real benefit to millions of people.

Of our respondents, 40% remit money. The ways they do it:



<i>Remittance Channel</i>	<i>Percentage of Respondents</i>	<i>Cost</i>	<i>Typical User Profile</i>
Via Laoban or Colleagues	25%	Social / Security	Migrant workers in rural areas earning between RMB 2,000 (USD 309.59) to RMB 5,000 (USD 773.99) annually.
Bank Transfer	27%	Financial	Salespeople or shop owners working in urban or rural areas earning more than RMB 4,000 (USD 619.19) annually.
Themselves (Physically transporting on their person)	44%	Security	Salespeople, migrant workers, and farmers living mostly in rural or remote areas, the majority earning less than RMB 3,500 (USD 541.79) annually.
Family	4%	Social / Security	Various (Sample size too small)

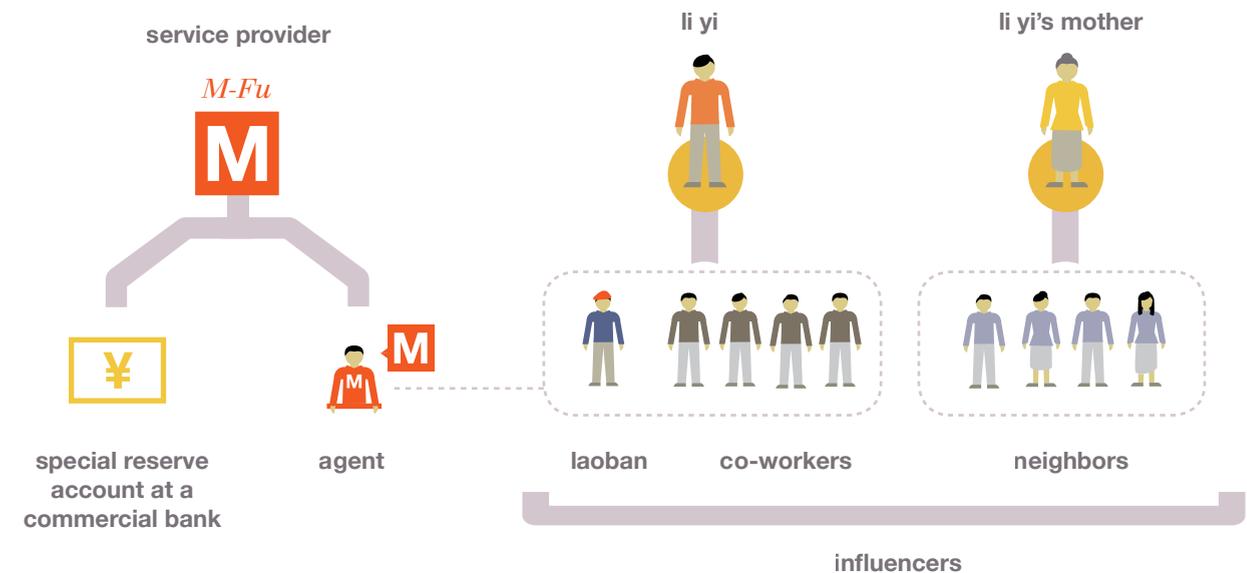
a new service

M-Fu (M-付): a mobile remittance system

The Chinese market is primed for the deployment of a national, mobile-based remittance system with potential applications for both peer-to-peer and business-to-consumer usage models. The opportunities for formal service providers, from telecoms to traditional banks are diverse, as are those for informal service providers who can act as nodes throughout geographically dispersed human networks.

This section examines both formal and informal networks upon which a remittance system could be developed and deployed, with recommendations for specific market entry points. It also explores how a service provider can drive market adoption and usage post-launch. Finally, it identifies key capabilities and potential business opportunities for a service provider willing to offer M-Fu. (Fu means “to pay”, “to deliver”, or “to entrust” in Mandarin.)

meet the actors



Who can be a service provider?

- Any regulated financial institution in China.
- Non-financial institutions that meet these three key criteria:³¹
 - 1 Is a registered limited liability company or joint stock company legally established in China.
 - 2 Has registered capital of RMB 100 million (USD 15.48 million) for a national roll-out, or RMB 30 million (USD 4.64 million) for a roll-out within a certain province.
 - 3 Can process all cash through a commercial bank dedicated reserve deposit account.

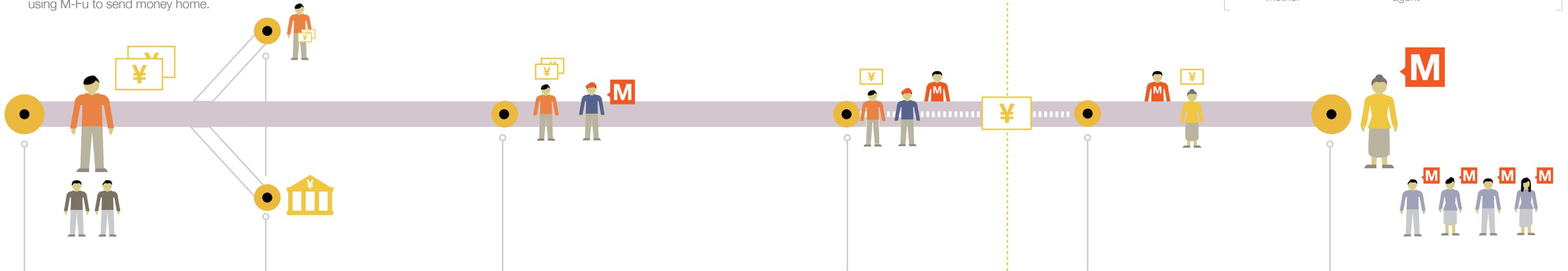
How to leverage laobans

- Use agents located near migrant workers sites to approach and incentivize *laobans* through a referral system.
- *Laobans* could be used as a communications channel, to tell potential customers about the service, but also to make the first service experience easier and less intimidating. For example, they can help workers fill out their forms and/or take the money to the agent.
- Communications campaigns to encourage migrant workers to go to their *laobans*—a trusted source—for more information about the service.

* As agent and e-money regulations are constantly evolving in China, service providers need to ensure compliance with the latest regulations before proceeding with service design and deployment plans.

the M-Fu service journey

The experience of a migrant worker using M-Fu to send money home.



1 recognize need

Li Yi, a 32-year old migrant worker from northwest Shaanxi Province, receives his annual salary from his *laoban* at a construction site in southeast Guangdong.

With one month to go before his journey home for Spring Festival and no secure place to store his earnings, Li Yi worries about how to keep his money safe. His family relies on his annual construction earnings to survive and to secure his sons' ability to be educated beyond primary school—they will be the first ones in Li Yi's family to claim this achievement. Beyond physical safety, he also wants to avoid the temptation to spend his cash, but Li Yi doesn't trust himself—in recent weeks, many of his colleagues have been treating themselves to admittedly well-earned nights out on the town.

2 explore options

Li Yi asks other workers how they are keeping and transporting their cash.

He considers keeping it on his person and carrying his cash home himself. He knows this option is extremely unsafe but also low-hassle, and is what he's always done. As he doesn't have a bank account—and has heard that the banks charge high fees for no reason—he rules out a bank transfer. Besides, he's not sure which banks have branches both in his hometown and in the urban-fringe development zone where he is now.

3 assess options

Li Yi's *laoban* tells him about a new remittance service: M-Fu.

The *laoban* himself learned of the service by a M-Fu representative who had come to his job site to recruit him three weeks ago. Li Yi learns that the agent can send his money back to his home village for a small fee. His *laoban* tells him that this service, available to all Chinese citizens, doesn't require a local *hukou* or a bank account, a key selling point for him. Like Li Yi, the *laoban* is also from Shaanxi Province and doesn't have access to basic services in Guangdong. He had just tried the service himself two weeks ago—admittedly, for free as part of an introductory offer—and appreciated the convenience.

4 try solution

Li Yi decides to use M-Fu to send part of his salary home, "just to see how it works".

His *laoban* helps him fill out the registration form and accompanies him to the local M-Fu agent—a small shopowner that the *laoban* had used. Li Yi brings his National ID card, and the name and National ID card number of his mother. The *laoban* explains to Li Yi how the process works and helps him set up a private PIN, the first time Li Yi has ever had one. (At the end of each month, the *laoban* collects his aggregate referral fees from his visiting M-Fu representative.)

Li Yi hands over his money to the agent who enters the amount of cash and Li Yi's mother's phone number into his mobile M-Fu application.

5 evaluate service

An M-Fu agent in Li Yi's home village receives the money immediately, and both he and Li Yi's mother receive an SMS message to alert them of the transaction.

Li Yi's mother walks to her local agent—a local fertilizer distributor, Xiao Feng, who she has been going to for over 10 years—to collect the cash. The entire village knows that Xiao Feng is now working with M-Fu, as his previously dilapidated storefront has been painted over in M-Fu colors. To do so, she presents the SMS she received, her National ID card, and the PIN code that Li Yi told her over the phone. She receives the money, less the agent's commission, and brings it home. She feels this is a much easier way to get money than waiting for Li Yi. She calls her son, and both agree that M-Fu has served them well.

6 word-of-mouth spreads

Li Yi's mother reflects on M-Fu's value-for-money, and shares her experience with both her son and neighbors.

She decides that ultimately, the agent's commission was worth it to be able to get the money in advance of Spring Festival so she can plan a better celebration, and so Li Yi can travel back home for the holidays in peace, without hesitating to fall asleep on the train for fear someone would take his money. Her neighbor calls her own son, also a migrant worker, and suggests he try it.

the market opportunity

Millions of Chinese citizens leave their homes each year in search of better wages in larger cities. While many do find jobs—primarily as construction workers, but also in other types of day-labor arrangements—they also face a challenge in making sure that the money they earn arrives safely when sent back to family in their hometowns.

This mobile remittance service addresses this challenge by providing a safe, reliable, and affordable way to send money home. The goal of this service is to allow migrant workers to send money home to their families using a mobile phone and a system of agents—active in both the cities where they work and in the countryside where their families live—who can facilitate basic financial transactions, such as cash deposits and withdrawals.

market potential

250 million
customers
132 billion
USD each year
(RMB 853 billion)

Unsurprisingly, in terms of scale and market potential, the opportunity for this service in China is enormous. Currently, an estimated 250 million migrant workers in China send over USD 132 billion (RMB 853 billion) across the country each year. While total remittances were last measured in 2005, when they stood at USD 63.5 billion³²(RMB 410 billion), the migrant worker population has more than doubled over the last seven years as the economy expands. Migrant populations are concentrated in a few industries, with the majority working in manufacturing or construction and 75% of all migrants working in manufacturing, construction, social services, hospitality, and commerce.³³

who currently provides remittance services in China?

Below is an overview of existing remittance products in China and their relative convenience, defined here as: accessibility for customers without bank accounts; amount of time required for a transfer; transaction processing

alerts provided to users; and geographic coverage. In designing M-Fu, we set out to address some of the service delivery gaps in these same categories with our target populations in mind.

Comparison of existing remittance products by service providers in China:³⁴

	<i>Post Offices</i>	<i>Commercial Banks</i>	<i>Rural Credit Cooperatives</i>	<i>China Unicom (SmartPay)*</i>
Bank Account Required	No (for the majority of services)	Yes (for the majority of services)	Yes	Yes ³⁵
Time for Transfer	1-5 days	Real-time to 24 hours	Over 7 days	Unknown
Inform Recipient on Arrival	Yes	No	No	Unknown
Geographical Availability	Townships	Large Townships	Townships	Major Provinces ³⁶

* While SmartPay appears to offer bill and merchant payment services, we could not confirm that they offer P2P payments.

reaching a mobile population

Any service provider seeking to enter the Chinese mobile remittance market faces a number of challenges. The first is how to reach one of the most obvious target customers: migrant workers who are inherently mobile and often dispersed. Second is which channels are most appropriate to use for outreach and functionality. While younger workers may feel completely comfortable using mobile phones and text messaging, their parents and other relatives back home may not be as comfortable using a mobile-only service, such as an e-wallet. Despite the objective value of a service, it can still be costly to acquire a significant customer base.

To overcome these challenges, pilots should be planned along existing remittance corridors with high potential adoption rates, and marketing efforts targeted at users (and influencers) that migrate together. These users will have existing trust networks rooted in shared geography along which influence can spread.

remittance corridors for migrant workers:³⁷

Where do workers come from?

The number of migrant workers from each Chinese province is largely proportional to the size of its rural population. Some provinces such as Sichuan, Henan, Anhui, Shandong—all of which have large rural populations—account for more migrant workers, compared to less populated provinces such as Qinghai. In 2004, Henan and Sichuan each had over 10 million rural migrant workers who migrated to seek employment, and the figure increases year on year.

Where do workers go?

The eastern and coastal provinces receive the most number of workers, at 70% of all rural migrants. Within these, Guangdong is the largest receiving province, with 34 million employed migrant workers. In 2008, this represented 44% of the province's total population. Jiangsu, Zhejiang, and Fujian are also important eastern destination provinces.

Services can work with *laobans* to promote the initial adoption, and incentivize them for new customer acquisition. *Lao-bans*, however, are not ideal candidates to actually serve customers. Instead, actors with high degrees of trust in the local community should serve as agents and act as key links to products and services from beyond the village. Small “mom and pop” stores in rural villages already hold a central place among communities, and would work well in these locations. Even for migrant workers on the move, such shops

are a consistent presence and resource in every location they travel to, a factor that helps engender trust. Additionally, small investments in the infrastructure of agents kiosks, such as fresh paint, can increase the perceived legitimacy of the network and provide incentives for potential agents to register. Agents will receive extensive initial training, and consistent management and support to ensure the service's continued success.

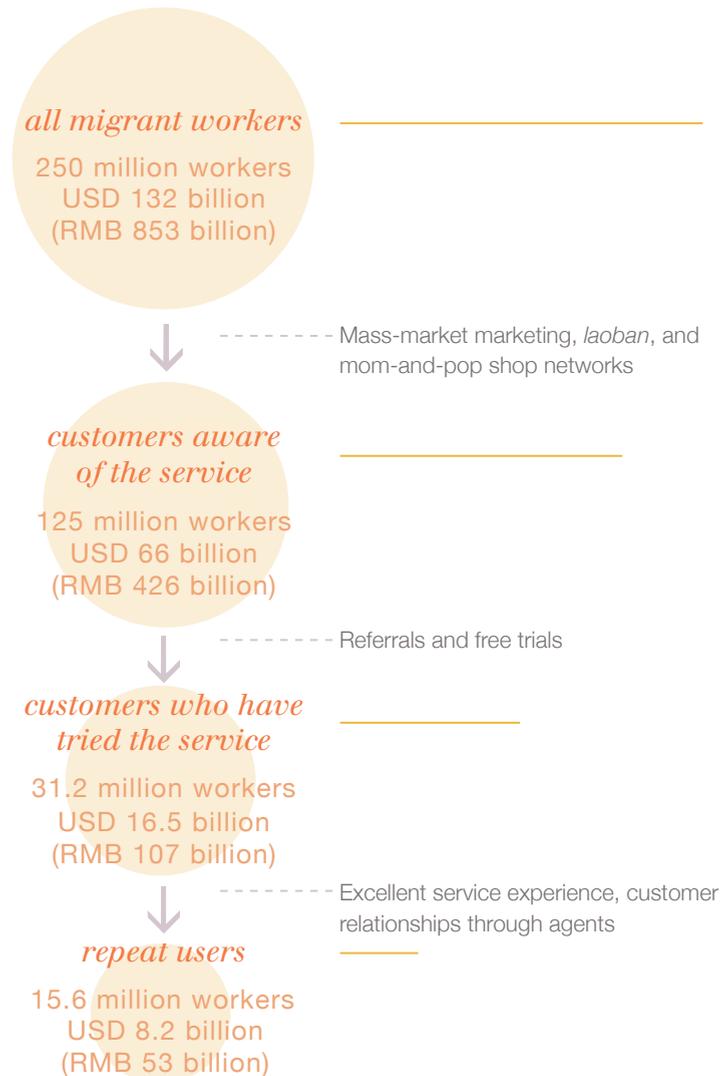
Strategic and widespread communications, both above- and below-the-line, will lead to awareness. Free trials and seasonal specials—for example, around Spring Festival, when millions of people travel and send money home—can encourage trial.

Migrant workers can initiate transactions (cash deposits, or “cash-in”) at the agent level, sending an SMS to their relatives back home who can then receive the funds (withdrawals, or “cash-out”) from another agent in their neighborhood. The sender receives an SMS alert once the money has been received, ensuring peace of mind and confidence in the remittance service. Ideally, a strong service experience will encourage these workers to become repeat users of the service. Repeat users become core customers and the network should grow with money moving in both directions as needed. Over time, as the network of users and agents grows, existing customers will recruit new ones through incentive referral bonuses in the form of discounts or waived fees.



If all goes to plan, how many users can we expect? Let's say through extensive and effective marketing, half of all migrant workers in China become aware of M-Fu; one in four of those may actually try it. Based on the strength of the service experience, imagine half of those who try M-Fu become repeat users, which is 6.25% of the initial target market. In our case, that represents a potential core client base of over 15 million users with a transaction value nearing USD 8 billion (RMB 53 billion).

* The figures below are based on a hypothetical case. For original figures, see page 80.



what does a service provider need to deploy this service?

A range of resources and capabilities are needed to deploy and run a successful remittance service. Some service providers may be better positioned to leverage existing assets, such as an agent network to reach pilot phase faster and to eventually reach scale. But the market certainly is open to other organizational profiles; they just need to be willing to invest in core infrastructure and innovate.

key capabilities for a potential service provider:

- Can create and manage an agent network
- Can manage—and service those that are managing—high volumes of transactions, even in rural areas
- Can subsidize initial launch costs
- Can use SMS or other messaging at a low cost
- Can build reliable systems and provide reactive and proactive customer service (via call centers and in-person demos)
- Can ensure compliance with KYC-CDD³⁸ and AML-CFT³⁹ regulations
- Can manage technical security and verify identities
- Can build and sustain a trusted brand, and customer relationships around that brand
- Can launch massive marketing and customer education initiatives

what is the business model?

While the list of required capabilities may seem daunting for new entrants, several existing players (such as mobile operators or large retailers) are well-positioned to leverage their current businesses to expand into mobile remittances. Like any product line expansion, market entrance will entail upfront costs, but the business case is strong once the business reaches maturity. Depending on the service provider, ancillary benefits are also possible, and include reduced churn for existing products, interest earned on money held in trust, increased foot traffic to stores, or the possibility of selling additional add-on products or services.

In terms of costs, piloting along two remittance corridors (reaching roughly 5% of the total remittance market) could entail an upfront cost of over USD 2 to 3 million (RMB 14 to 19 million).⁴⁰ Some costs associated with the pilot include management costs, initial agent selection and training, marketing, rebates for customers and promotions, incentives to reach *laobans*, and ongoing agent recruitment, training, and management.

While it is unlikely that revenues from the pilot would cover costs, the lessons learned from the experience allow the

service provider to profitably roll out the mobile remittance product nationwide. The pilot, for example, would provide key lessons around product pricing and agent incentives. Based on experiences worldwide, once the business reaches maturity, the service provider can expect to charge around 2% of total transaction volume in fees.⁴¹ While revenues would be split between the service provider and partners (such as agents and banking institutions), it holds potential to turn into a major business line once it reaches scale.⁴²

potential business opportunity at scale

8.25 billion
USD in transactions
x *2%* transaction cost

165 million
USD in gross revenue
(over RMB 1 billion)



At present, M-Fu is merely a blueprint, a design for what could be. Many of its elements are surely recognizable to those familiar with the field. It has borrowed from best practices from existing success stories and has adapted them for the unique Chinese context.

It is presented here not as an ironclad recommendation, but in the hopes that it will spark discussion and ideas.



Conclusion

After a 30-year period defined by growth—both of the economy and of inequality⁴⁵—China is on the cusp of a new era.

*toward an
inclusive tomorrow*



The global recession has intensified pressure on China to develop past an export economy, and to increase domestic consumer spending as a new engine of growth. To this end, Beijing's March 2012 "Report on the Work of the Government" included a minimum wage increase every year during the current five-year plan, and indicated that boosting consumer demand is the government's top priority.⁴⁴

These policy changes will continue the trend of industry departure from China's urban hubs. Increasing wages and the cost of doing business in these boom towns has already driven some factories further west, where migrant workers accept lower wages in exchange for staying closer to their hometowns. Other factories have moved to countries like Vietnam, Malaysia, and India, where wages are still rock-bottom or government has provided other incentives for investment.

Economists agree that if China is to sustain growth, its economy must transition; growing its skilled workforce can drive more advanced industries, such as telecommunications, chemical

engineering, and clean technology, which could in turn support higher wages and a burgeoning middle class. Moving up the industrial value chain and developing its own intellectual property, rather than producing products designed and owned by foreign giants, can further propel China's domestic economy.

This kind of development can't happen without more and better services. A workforce with the skills to build complex electronics (and to patent new ones) requires more inclusive education opportunities. These opportunities will be enabled by accessible financial products like student loans, and by an effective social services system that serves all citizens. Indeed, there exists a vital need for careful policymaking and service design to make sure China's next growth spurt benefits even its most marginalized citizens.

There's great opportunity for those who take on this challenge: providers of inclusive services will be the first to forge a strong relationship with hundreds of millions of users who have previously relied only on informal products. As these users enjoy greater



access to reliable services, their livelihoods will improve, and their appetite for services, along with their ability to pay for them, will increase. A self-sustaining domestic market can develop, and those who step in early and inclusively will lead it.

As we have stated throughout this publication, the best way to develop inclusive services is to leverage existing infrastructure. This model has worked for China before: the Postal Savings Bank of China was established in 2007 using a longstanding distribution infrastructure of 37,000 post offices. Building upon the trust in and dependencies on the national postal service, Beijing was able to introduce banking to a new group of China's previously unbanked. In three years, the Bank achieved 10% market share and today ranks fifth among China's commercial banks.⁴⁵ It is now an established player that en-

ables financial inclusion among a wide group of Chinese citizens.

Comprehensive product and business model design for a new financial service in China is beyond the scope of this publication. The service provider that accepts this challenge faces the difficult task of aligning its own goals with the nuanced needs of a diverse set of users. But the findings presented provide a strong foundation, grounded in human needs, for further design and development.

We are excited to see who takes on this challenge and the impact they will have on the future of China.

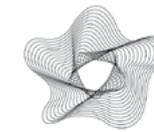
REBOOT

Reboot is a social impact firm dedicated to inclusive development and accountable governance. We help governments, foundations, and international organizations achieve their missions. We think of this as working toward a 21st century social contract.

The foundation of governing legitimacy and collective prosperity, a social contract is inclusive by definition. While the ability to access information, organize, and input has reshaped the scope of inclusivity in governance, few institutions have kept pace with these changes. Our social contract is due for renegotiation.

Reboot is working at the forefront of these transitions. We help our clients explore the origins of complex issues, design contextually appropriate interventions, bring these ideas to reality, and evaluate the results along the way. We approach the task with a set of underlying principles that cut across each engagement: immersion, collaboration, and iteration.

The possibilities for inclusive development and accountable governance—for a 21st century social contract—are growing. From supporting good governance in Nigeria to human development in Nicaragua to civic innovation in the United States and beyond, we are working to realize them.



IMTFI
INSTITUTE FOR MONEY, TECHNOLOGY
& FINANCIAL INCLUSION

Established in 2008, the Institute for Money, Technology and Financial Inclusion is housed in the School of Social Sciences at the University of California, Irvine. Its mission is to support research on money and technology among the world's poorest people. It seeks to create a community of practice and inquiry into the everyday uses and meanings of money, as well as the technological infrastructures being developed as carriers of mainstream and alternative currencies worldwide. As of 2012, IMTFI was supporting 86 research projects in 36 different countries. This includes support for over 100 researchers, the majority of whom are from the developing world.

Money costs money for people who are extremely poor and who have limited or no access to banks or credit. For many of the world's poor, fees

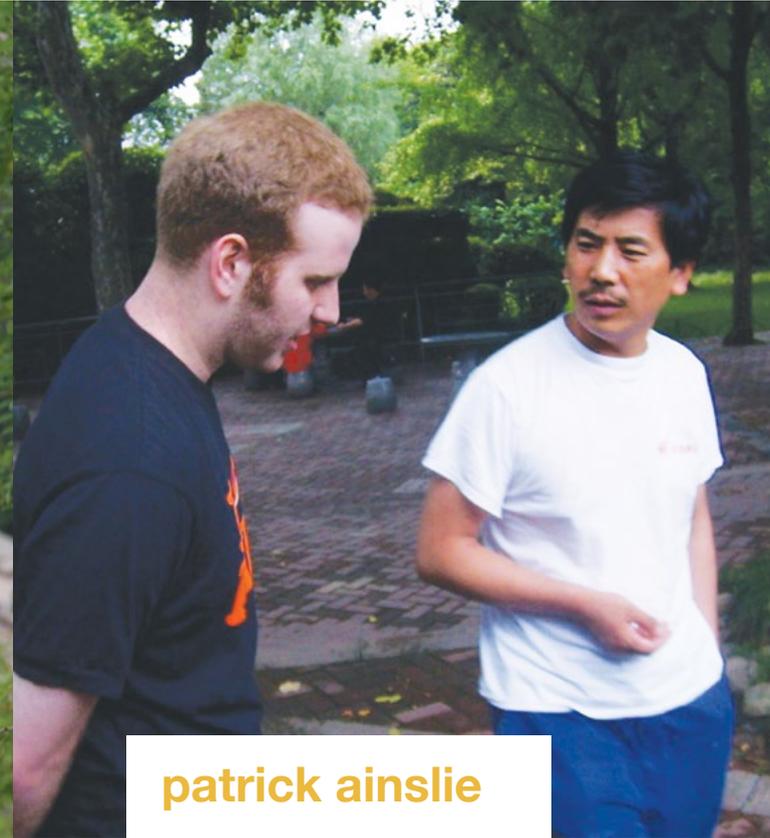
for financial services and transactions seriously limit their ability to use or share what little money they have. People have long taken whatever is ready-to-hand to serve the functions of money, from livestock to jewelry, and have used different relationships and objects to help them save, store, and transfer wealth. Today, new communications technologies are being added to this complex ecology of money. This ranges from sharing airtime minutes as an alternative currency, to using mobile phones and point-of-sale terminals for accessing banking institutions, or even as independent systems for saving, storing and transferring wealth. IMTFI encourages further research into current and potential uses of mobile technology in providing banking and financial services to the poor worldwide.

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Panthea is a recognized leader in ethnographic research, service design, and program implementation, focused on global governance and development. She has overseen complex projects in over 20 countries—including politically sensitive and conflict-affected environments—working directly with communities, civil society actors, governments, and donors. Panthea's expertise is in innovative, appropriate applications of technology in international development.



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39. Anti-Money Laundering and Combating the Financing of Terrorism
40. Mobile money pilots vary in cost, but the initial grant for M-Pesa was 2 million British Pounds (about USD 3 million) for product development and design, while both CGAP and the GSMA have more recently been able to fund additional pilots, including GCash (Philippines) and Roshan's M-Paisa (Afghanistan), for an average of about USD 500,000 in external support.
41. The most mature mobile money service, M-PESA, earns revenues equal to approximately 3% of its total transaction volume.
42. Some recent Mobile Money deployments, such as MTN's in Uganda have reached profitability in as little as 14 months, while others, such as M-PESA, have taken more than two full years.
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