

Jacqueline Foelster Amin Khairy



INSTITUTE OF INTERNATIONAL

CENTER for **FINANCIAL** INCLUSION ACCION

Leveraging Technologies to Improve the Quality and **Maximize the Productivity** of Agent Models

A JOINT REPORT FROM THE CENTER FOR FINANCIAL INCLUSION AT ACCION AND THE INSTITUTE OF INTERNATIONAL FINANCE

Part Six of the Mainstreaming Financial Inclusion: Best Practices Series

1. Introduction	3
2. The Financial Institution Perspective	4
3. The Agent Perspective	8
4. The Customer Perspective	12
5. The Ecosystem of the Future	15
6. Conclusion	16
Appendix A: List of Interviews	17
Notes	19



Leveraging Technologies to Improve the Quality and Maximize the Productivity of Agent Models

AUTHORS

JACQUELINE FOELSTER Lead Research Specialist, CFI AMIN KHAIRY Digital Regulation Policy Advisor, IIF

PROJECT DIRECTORS

ERIC NOGGLE Senior Research Director, CFI ELISABETH RHYNE Managing Director, CFI CONAN FRENCH Senior Advisor for Innovations, IIF

EDITOR

VIRGINIA MOORE Director of Communications, CFI

DESIGN

KINETIK COMMUNICATION GRAPHICS, INC.



Acknowledgements

We thank all those who participated in our research – particularly the representatives from the 23 financial institutions, fintechs and other entities who generously shared their insights. We gratefully acknowledge the following organizations: 4G Capital, Artoo, Bank Asia Limited, Bancolombia, BBVA Mexico, BTPN, CGAP, EcoBank Transnational, Inc., Eko Financial Services, FINCA Impact Finance, First Bank of Nigeria, Ltd., Grupo Financiero Banorte, ICICI Bank, International Finance Corporation, Kenya Commercial Bank, PaperSoft, Rabobank, Stanbic Bank of Uganda, Standard Chartered, The Smart Campaign, Ulana Insights, and Zoona. Please see the full list of interviewees in <u>Appendix A</u>.

This report is part of a two-year initiative, <u>Mainstreaming Financial Inclusion: Best Practices</u>, which aims to help advance efforts of financial institutions to reach customers at the base of the economic pyramid. This initiative and this report were made possible with support from MetLife Foundation. CFI is also grateful for support from its founding partner, Credit Suisse. The views and opinions expressed in this report are those of the authors and do not necessarily represent the views of the MetLife Foundation or the interviewees. All errors are our own.

Introduction

As a means of reaching underserved customers at low cost, financial institutions have designated authority and responsibility to banking agents to deliver financial products and services. Agent banking is a model for delivering financial services whereby an institution-be it a financial service provider or a mobile network operator-partners with a retail agent to extend services in remote or hard-to-reach areas. According to the body of research available, including our 2016 study, a growing number of financial service providers consider agent networks as a critical feature of their financial inclusion strategy in emerging markets.1 While a precise figure for the aggregate number of agents representing financial institutions is hard to come by, data captured for the mobile money industry can serve as a useful proxy. In 2017 alone, the number of registered mobile money agents increased by 17 percent worldwide, reaching a total of 5.3 million.²

Despite the growing volume of agents, the agent network model is rife with utilization and operational challenges. Only 55 percent of mobile money agents are active—meaning they have facilitated at least one transaction in the past month.³ Similar evidence of inactivity among banking agents operating in the financial industry is emblematic of the formidable task of managing agent networks. Complex operating environments and inefficient manual processes constitute some of the diverse challenges of agent network management.

The good news is that technology offers financial institutions an opportunity to make agent models more efficient and productive for themselves and their customers. Based on in-depth interviews with industry experts and senior bank officers (details in Appendix A), and supplemented by a review of the literature, this brief examines the role of technological innovation as a potential driver for improving the quality and maximizing the productivity of agent models.

This brief examines the role of technological innovation as a potential driver for improving the quality and maximizing the productivity of agent models.

We found it useful to study this topic across two time-horizons: the short-and long-term; and from the perspectives of the main stakeholders in the agent network triad: the financial institution, the agent, and the customer. This structure allows us to account for two key trends: 1) the diminishing role of cash as a payment form, and 2) an increasing readiness of institutions to embrace digital transformation. It also allows us to explore commonly-cited challenges with agent networks through an illustrative, hypothetical narrative lens, giving voice to each stakeholder group.ⁱ The narratives are accompanied by real-world examples of how technological integration and innovation has helped to improve and streamline processes within agent networks.

The first part of the brief presents the shortterm view, characterized by the prevalent use of cash and the availability of technologies that offer positive, albeit incremental and disparate changes in the day-to-day functions of agent networks. The second part of the brief offers a vision for the future of agent banking models. This longterm view takes into consideration the shift from cash-based to cash-lite economies, a trend that will likely usher in technologies that will redefine the role of agent networks. We provide several examples of institutions that have taken bold strides to reimagine their agent banking model.

i The narratives are framed in an Indian context in large part due to the market's high agent density. Any resemblance to actual persons or places is merely coincidental.



The Financial Institution Perspective

Consider the following hypothetical narrative, which captures the main messages we gleaned from interviews with leading financial institutions.

As Teresa Devanshi, Sahil Bank's Head of Distribution, prepares for an upcoming board meeting, she feels a healthy mix of optimism and anxiety-there is much at stake. Sahil Bank's agent network, which Ms. Devanshi leads, is at risk of being shut down after generating consistent losses since its inception four years ago. When the board first decided to pursue agent banking, their vision was to scale the bank's operations by serving previously unbanked low-income customers in India. While the bank now boasts over 20,000 agents across the country, most of which are standalone momand-pop shops, but now include some larger convenience stores and petrol stations as well, the revenue generated from the agent network has yet to cover its high operational costs.

Ms. Devanshi suspects that one of the main explanations for the weak performance is Sahil Bank's insufficient ability to engage low-income customers and convince them to use banking agents. Another factor, Ms. Devanshi suspects, is that the network's limited service offerings does not provide sufficient utility for the customer. At the moment, Sahil agents can only facilitate cash deposits and withdrawals, account-to-account transfers, balance inquiries, and bill payments. They cannot originate loans nor offer any other products and services that customers might want. Ms. Devanshi has also taken note of a spike in customer complaints about the quality of services and, alarmingly if only occasionally, reports of fraudulent behavior among agents in Sahil's network.

IN PRACTICE

Agent Network Model Innovations

Consider how these financial institutions and companies are making strides to improve agent network models.

STREAMLINING IT INFRASTRUCTURE

Banorte, a financial institution based in Mexico, has been working to streamline its data protocols. The bank traditionally had multiple protocols to connect to different agent outlets, which made data consistency and integration challenging. Having one protocol to connect to all agents allows Banorte to better monitor agent activity and performance. It also enables real-time customer cash-in/cash-out data, which is used to analyze credit worthiness.

AGENT ONBOARDING

PaperSoft, a Portugal-based company, specializes in digitizing documents and assisting financial institutions to onboard agents and customers. The company uses smart forms to rapidly and securely capture agent eligibility information and outlet conditions, among other processes aimed at facilitating onboarding and reducing operational costs. According to Dani Alves, CEO, PaperSoft, institutions wind up activating only a handful of agent candidates after carrying out the necessary due diligence that PaperSoft helps to facilitate. Alves claims that PaperSoft helps institutions achieve significant time and resources savings compared to the traditional manual vetting process.

CONTINUED ON NEXT PAGE

Ms. Devanshi believes the bank can turn agent networks into a sustainable business model by investing in technological innovations that will decrease operational costs and increase customer satisfaction and engagement. She plans to make the case that upgrading the bank's legacy data architecture will enable her team to decrease the rate of agent fraud, facilitate agent onboarding, and increase customer satisfaction. She also knows that utilizing open APIs, replacing dated point-of-service devices and other infrastructure, and allowing agents to offer payment and credit products will also help to improve performance of this channel.

As Ms. Devanshi prepares her pitch, she summarizes her main arguments:

1. Upgrading the bank's data architecture will strengthen agent monitoring and reduce fraudulent activity.

2. Modernizing the bank's legacy IT to connect to third party providers and open APIs will enable the bank to expand service offerings via the agent network.

3. Investing in data analytics will provide valuable insights that the bank can use to inform agent selection and support activities.

4. Introducing additional credit and payment products via the agent network will increase customer engagement.

IN PRACTICE CONTINUED FROM PREVIOUS PAGE

AGENT MONITORING

Optimetriks is a software solution that provides real-time analytics of agent networks. Its mobile-based dashboards analyze agent transaction and compliance activities, giving financial institutions an accurate view of what is happening on the ground. The company's field officers enter key agent data, such as transaction volume, float levels, and where marketing material is displayed. This data is then made available on live dashboards at the institutions' headquarters for monitoring.

CROSS-SELLING

Artoo, an India-based platform provider, enables financial institutions to offer credit via agents to unbanked customer segments quickly and seamlessly. An agent completes the loan application remotely using Artoo's app and a tablet computer. The platform gathers over 800 data points to analyze potential customer credit worthiness using five different data sets to determine the size of the loan, including traditional data, selfreported data, alternative data, image data, and agent clickstream data. The underwriting process takes less than 20 minutes, and a loan disbursement can be completed in less than seven days (for unsecured loans) or 14 days (for secured loans).

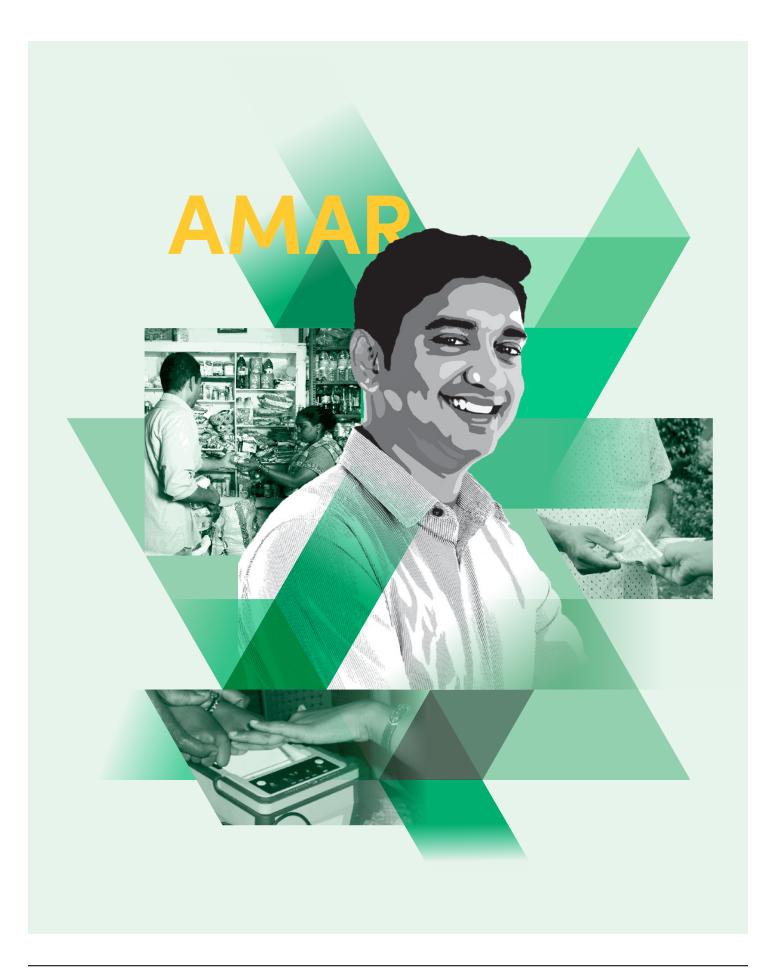
Artoo's platform has led to a 40 percent decrease in loan-processing time and a 50 percent increase in the number of loans processed per agent. By reducing the time and effort normally required to receive a loan from a bank, and by helping agents focus on loan origination, not just collection, these fintech platforms help reduce new customer acquisition costs, by up to 45 percent, according to Artoo.⁴ Innovative financial institutions are streamlining and digitizing their processes, and utilizing real-time data and analytics to increase both the efficiency and effectiveness of agent networks.

Summary of the Financial Institution Perspective

In this account, we highlighted several challenges that can bog down agent networks. Many institutions are operating with old and decentralized IT systems that require duplicative efforts to facilitate transactions. Also, the process of onboarding new agents can be an onerous one for banks, including processing mounds of paperwork, complying with central bank regulations, and identifying appropriate locations where agents can cater to the target market. In addition, monitoring the performance of agents can be overwhelming if institutions do not have in place the mechanisms to collect data and control for data quality. Finally, agents have the potential of carrying out a broader array of financial services, but are often limited to facilitating cash-in and cash-out transactions.

The financial institutions and technical providers we spoke to, including Banorte, PaperSoft, Optimetrics, and Artoo, all presented solutions that aim to respond to these challenges. The first two companies are thinking through ways to streamline IT infrastructure and digitize processes that have traditionally been done manually, such as onboarding agents. The latter two companies are leveraging data analytics to enable agents to better analyze transactions in real-time, mitigate the risk of fraud, and offer more diverse products more efficiently.

According to Christian Rodriguez, digital services specialist at the International Finance Corporation (IFC), "Integrating technology into a broader business case is key to the success of an agent banking initiative." His team at the IFC identified a direct correlation between successfully integrating technology into agent networks and the increase in transaction volume; in one case, the agent network accounted for around 74 percent of total cash transaction volume of the institution.⁵ Of course, the decision to integrate any technology should be considered only once an institution has properly assessed how the technology aligns with its business strategy and target customer segment, among other factors. As a member of Rabobank's Advisory Services team noted, setting up and maintaining an agent network requires "quite a bit of preparation, some good calculations, and a sound business case."



The Agent Perspective

We continue with our hypothetical narrative, this time from the banking agent's point of view.

It is 4:30am and Amar Hirani awakes in the one-bedroom apartment he shares with his wife and two daughters. He downs a quick breakfast before making his way downstairs and onto his moto. The traffic in Mumbai is governed by an unwritten set of rules, and as he alternately accelerates, weaves and brakes, he ponders what becoming an agent for Sahil Bank will mean for the growth of his business.

Amar runs a small produce shop on a main thoroughfare in the outskirts of Mumbai. At this hour, he normally would be headed there to raise the front grate and prepare for the morning rush of customers. But today, Amar heads toward Sahil Bank's headquarters for his induction. He looks forward to adding banking services to his selection of fruits and vegetables. He has watched foot traffic to his competitors' shops increase as they have signed on as banking agents, and he hopes that becoming an agent will draw in more passersby and provide his household with another income stream.

But Amar is also nervous, not least because his younger brother is in charge of watching the shop while he's away for the training. Becoming an agent is a significant investment of Amar's money, time, and energy. Prior to the training, Amar had to provide a security deposit to receive a point-ofsale (POS) device owned by Sahil Bank. He also had to rent a biometric scanner, which he'll use to verify customers' identities. According to the Sahil Bank field officer who recruited him, Amar should earn enough from commissions to break even on that investment in less than a year, but the bank does not guarantee that, nor does it offer many other incentives.

IN PRACTICE

Agent Network Management Innovations

Consider how these financial institutions are revising their approach to agent management.

INCENTIVIZING AGENTS

Bank Asia in Bangladesh helps manage costs by having agents make the initial capital investment: agents pay out of pocket for a laptop, fingerprint reader, and webcam. At roughly \$600, this is a significant investment. Agents earn commission on each transaction (on a broad array of products) and one-third of the net interest on deposit float. They break even in about a year.

New FirstBank Nigeria agents undergo a two-week probation period during which their activity is monitored using data analytics. If they complete a certain volume of transactions, FirstBank Nigeria rewards them with a POS device for which they are required to purchase an insurance policy. Agents are eager to have POS devices because customers prefer physical receipts. However, with spotty connectivity, agents also appreciate access to the mobile application.

In Indonesia, BTPN operates a platform called SUSAN that uses games and competition to help agents track their performance against one another. Agents can also earn rewards and receive tips about how to improve their performance. Agents who do well are incentivized to share their knowledge while less successful agents are encouraged to seek assistance from peers.

CONTINUED ON NEXT PAGE

During the first half of the training, Amar listened to Teresa Devanshi, Sahil's Head of Distribution, speak about the bank's plans to digitize many of their processes. According to Ms. Devanshi, the digitization strategy would mean a much faster onboarding process for customers, refresher trainings that can be conducted online, and additional services that would attract more customers, like mobile wallets and digital payments.

The second part of the training was designed to provide a window into the typical day of an agent. Amar and his fellow trainees went into the field to observe agents as they engaged with customers. During a brief chat with one agent, Amar realized that there would be days when the queue of customers might seem interminable, especially around the holidays when customers want more cash on hand. He wondered whether he would be able to handle so many customers.

Amar's first six months as an agent required some trial and error. One of his immediate hurdles was getting customers to understand his role as an agent and the products he offered. Most of the market-goers visiting his shop had limited education, so Amar made sure to spend a few minutes to walk them through the products. Amar was convinced that this hand-holding approach would pay off in the long run. He made use of the branding materials that Sahil Bank gave him. Amar also relied heavily on the Sahil staff, who stopped by his shop twice a week to monitor his progress and answer questions.

Maintaining the right amount of cash in his register has been Amar's biggest source of frustration, which he has found virtually impossible to overcome. On several occasions, he had to close his shop for at least 30 minutes to search for cash. Sometimes the closest agent that could provide him with a float was as far as two miles away. While he wants to be sure that he has enough money for cash-out transactions, holding excess cash makes him nervous due to the risk of theft.

IN PRACTICE CONTINUED FROM PREVIOUS PAGE

TRAINING AGENTS

FINCA uses Moodle to deliver learning and professional development solutions to FINCA employees. Moodle's mobile app ensures that all employees have access to training materials on-the-go in case they're needed on the job. According to Sergio Alguacil-Mallo, Manager of Learning Systems & Technology, the e-learning platform is supporting FINCA's strategy to reduce the opportunity cost to its core business of daylong, face-to-face job training while it expands blended and mobile learning to its employees.

INCREASING CUSTOMER AWARENESS

Stanbic Bank Uganda ("Stanbic") is one of many institutions that is capitalizing on the power of social media to build customer awareness about its agent network. Stanbic recently launched its *Digi Cashback Campaign* to reward customers for completing digital transactions by offering them a chance to win the equivalent of USD 270 every week over the course of four months. The campaign is promoted widely on Stanbic's Facebook page, which has approximately 730,000 followers.

MANAGING LIQUIDITY

Eko Financial Services Pvt. Ltd launched an app called Fundu that enables anyone to act as an ATM for those in need of cash. It matches a user who needs cash with another user who can give cash (or viceversa) and seamlessly ensures there is an electronic flow of funds to counter the physical flow of cash.

PesaKit is an artificial intelligencepowered digital assistant for mobile money agents. It helps agents manage and control their liquidity (e-float and cash) through predictive analytics by forecasting their inventory needs over a given period of time. It also assesses agent's creditworthiness and creates a score – the first of its kind – to enable agents to borrow e-float based on recommendations and insights. Agents need to feel that the financial institutions they represent are committed to keeping them profitable and relevant amid the various operational challenges they face.

Summary of the Agent Perspective

Agents operate in a complex environment full of customer education, marketing, connectivity, cash flow and liquidity challenges, as emphasized by Mike McCaffrey, financial technology advisor at Ulana Insights. Therefore, agents need to feel that the financial institutions they represent are committed to keeping them profitable and relevant. This is crucial for financial institutions, too, since agents have increasingly become their "human face." There is a need to cushion the pressures that agents face.

Our research suggests that financial institutions must ensure that their business models and technologies address the growing importance of agent loyalty. One way to achieve this is through incentives for agents to be active. For example, Bank Asia is giving out a float to its agents, in addition to a commission. FirstBank Nigeria has integrated a reward scheme to encourage agents to become more engaged and active from the start. BTPN is encouraging engagement through its agent gamification platform, SUSAN. The Smart Campaign, a global consumer protection effort that has led research on agent banking—including a study that explores responsible agent management in India—found critical gaps and mismatches between financial institution policies and agent realities.⁶ As such, the importance of a welldesigned and properly-executed agent training program cannot be underestimated.

Liquidity management continues to be the Achilles' heel of agent banking, particularly in economies that are highly-dependent on cash, especially because of high demand for cash at peak times. Moreover, agents struggle to replenish their cash balance outside normal business hours. Eko Financial Services and PesaKit are tackling the problem of float management.



The Customer Perspective

We conclude our hypothetical narrative with the customer perspective.

Manisha Aggarwal and her late husband generally managed to get by despite receiving little formal education. But, since becoming a widow a year ago, Manisha is barely able to cover her day-to-day expenses with the irregular income she earns as a seamstress. She counts on her relatives in Delhi to send her money transfers whenever she falls short on cash. But, getting the funds in hand is no simple task. A roundtrip journey to the nearest bank branch in the city center normally takes an hour and can stretch to upwards of three hours during the rainy season. And every time she transports the cash, Manisha fears being robbed.

Not long ago, Manisha's relatives heard about the possibility of sending funds through Sahil Bank, which operates an extensive agent network throughout India. Motivated by the prospect of finding an alternative to her long journeys to the city center, Manisha walked around her local market in search of Sahil agents. There were many—all bearing the blue and yellow posters that she had seen over the past couple years without really giving them much thought.

After mustering the courage to inquire about the process, Manisha stopped at the first agent she came across. He looked busy and the queue was long, which she believed signaled good customer service. But she waited nearly 20 minutes before the agent ran out of cash and redirected everyone to go elsewhere.

The second agent she visited couldn't attend to her because his POS device had run out of battery. Despite the agent's assurances, Manisha wasn't confident he could get the machine back up and running quickly enough. She decided she wouldn't risk the wait, especially with all of the garment alterations that she had promised to complete by the end of the day for her clients.

IN PRACTICE

Customer Engagement Innovations

Consider how these financial institutions are improving customer engagement.

INCREASING ACCESS POINTS

Bancolombia created a mobile application that provides real-time agent locations and working hours to help customers find the closest available agent. While this solution only works for people with a certain level of digital literacy, the technology lessens the burden on customers who are interested in making financial transactions and helps overcome a major barrier to opening a financial account.

ONBOARDING CUSTOMERS

National identification systems, such as Aadhaar in India and the Bank Verification Number in Nigeria, have improved the customer onboarding process. Many of the institutions we spoke with attest that biometric identification systems have made the customer onboarding process much easier, since the burden to prove one's identity is significantly reduced.

CROSS-SELLING

Financial institutions can increase their up-sell and cross-sell opportunities by analyzing current product usage patterns and predicting future needs. Banorte, a leading financial institution in Mexico, analyzes cashflow data to identify potential eligible borrowers and can now provide

CONTINUED ON NEXT PAGE

Slightly frustrated and nearly running out of steam, Manisha stopped by Amar's shop, where she has been buying groceries for years. To her surprise and relief, she noticed the Sahil Bank ads and felt reassured that she could talk to someone familiar about money transfers. To get Manisha on board, Amar registered her fingerprints using the biometric scanning system, explaining that her fingerprint would link to her account. He showed her how to access money transfers from her relatives through her phone. Manisha was nervous at first because she did not receive a paper receipt, something that gave her confidence about her transactions. However, Amar assured her that all records of her transaction would be sent to her via SMS.

Admittedly, it took several attempts for Manisha to truly feel comfortable with the idea of transacting anywhere outside of a bank branch. Even then, she refuses to rely on anyone other than Amar and another agent who is a family friend, which she acknowledges can be problematic, especially at times when neither one has sufficient funds to fulfill her transaction.

IN PRACTICE CONTINUED FROM PREVIOUS PAGE

credit to "thin-credit" customers. Banorte also promotes credit to customers in an innovative manner – via mobile phone push notifications, interactive voice response prompts, and pop-up screens on ATMs and/or POS devices.

CONSUMER AUTHENTICATION

Indonesia's Permata Bank has become the country's first domestic bank to implement voice-based authentication for its customers, thanks to NICE technology. The NICE real-time authentication system identifies customers through voice biometrics evident in their natural speech, providing passive and unobtrusive authentication. The integration of this technology not only helps to reduce fraud, it also improves operational efficiency substantially. Another institution using NICE technology reportedly reduced the time needed for customer authentication by an average of 22 seconds – a savings that adds up when applied to a large customer base.

Summary of the Customer Perspective

According to the 2017 Global Findex survey, 22 percent of adults without an account cited distance from a financial institution outlet as a major barrier.⁷ The IFC conducted a randomized trial in Senegal and found that individuals who were directed to agents made a higher number of deposits and withdrawals compared to those who were directed to a bank branch, further validating the notion that proximity to agents can contribute to deeper financial inclusion.⁸ Recognizing this customer need, Bancolombia developed a mobile application allowing customers to find the nearest agent, based on their location and working hours.

Smart Campaign staff stressed the importance of building consumer protection into the agent network model, especially because

the risk of fraud can be high. The Campaign's research shows that when some agents were without internet connection for several hours at a time, they continued to conduct customer transactions offline and recorded them by hand once connectivity was reestablished.9 Such scenarios leave room for error and expose customers to the risk of fraudulent behavior. Other experts we spoke with who offer advisory services on agent banking echoed these concerns. They also noted patterns in which agents split large transactions into multiple smaller ones to increase their commission. Therefore, technological innovations such as the NICE real-time authentication that Permata Bank has integrated are welcome efforts to reduce fraud and protect customer privacy.

The Ecosystem of the Future

What are the implications on the agent banking model when the role of cash as a form of payment diminishes? In Sweden, bills and coins represent just one percent of the money circulating in the economy, compared with 10 percent in Europe and eight percent in the United States.¹⁰ The trend away from cash is not just happening in high-income countries. Global Findex data reveal a decline in the use of cash for remittances, utility payments, wages, payments for agricultural products, and government payments for the majority of countries between 2014 and 2017.11 To realize a vision in which the majority of transactions are conducted digitally, we expect to see a cycle of innovation that will usher in significant changes in the role of the agent, the enabling technologies, and the wider financial ecosystem.

In the future, we expect agents to transition from transaction processors into customer touchpoints and solution providers. For instance, 4G Capital blends loans with financial education through a proprietary learning system, Devanshie, to empower micro-and small-businesses in Sub-Saharan Africa. 4G Capital agents are tasked with looking at clients' life and business stage to give them the relevant information to help them on their journey. In a partnership with VisionFund and Microfinance Opportunities in Zambia, Zoona, an agent network operator, embedded consumer education into their agents' work by having them provide client groups with refresher trainings on how to use the Zoona service. In addition, clients reported that the posters in agents' kiosks reminded them of the information that they were provided with during the onboarding process.¹²

A variety of affordable and efficient technologies such as quick response (QR) codes are also taking hold, as noted by respondents from BBVA Bancomer and Kenya Commercial Bank. Osahon Akpata, Chief Operating Officer at Ecobank Transnational's Consumer Bank Group, explained that to expand the bank's XpressTM Point agent network, they are providing each of their agents a unique The future financial services ecosystem is digital and cashless or cash-lite, with agents evolving from transaction processors to solution providers.

Masterpass QR code that customers can scan with their phone through the Ecobank Mobile app.

ICICI Bank's digital village program in India converted approximately 500 villages in India into digital ecosystems over the course of one year. In one village, ICICI analyzed the payments behavior of their customers, most of whom were dairy farmers. ICICI enabled the companies that buy milk to pay farmers in digital currency and provided all the shops in the village access to its digital platform. The dairy farmers are now able to buy local products digitally. Next, the ICICI team spent 4-5 months conducting free vocational training and educating clients on how to use the digital ecosystem. ICICI wanted to ensure that the technology would be implemented correctly to create a seamless customer experience.

Through its digital village program, ICICI is also addressing challenges associated with cash. First, the move away from cash-in/cash-out transactions eliminated the liquidity issues most agent networks face. In a digital environment, agents do not need to worry about constantly having cash to satisfy customer needs and can instead allocate time to educating customers on digital products and tending to grievances customers might have. Second, the digital ecosystem greatly reduced cash management costs incurred by financial institutions. Finally, clients and shop owners can feel more secure since they do not have to carry physical cash.

Conclusion

6

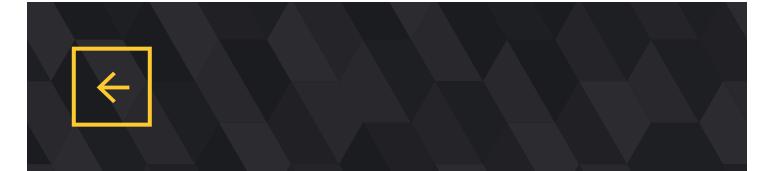
Financial institutions in different countries are beginning to employ agent networks for a wider range of functions including product sales, e-commerce and customer service. As highlighted in this brief, technological innovation can be a potential driver for improving the quality and maximizing the productivity of agent models. The growing range of innovations around agent network models, agent management and customer engagement can help institutions meet their customers' needs more efficiently, as well as grow their customer base and brand visibility.

APPENDIX A: List of Interviews



INSTITUTION/ENTITY	COUNTRY	INTERVIEWEE	TITLE
4G Capital	Kenya	Wayne Hennessy-Barrett	Chief Executive Officer
		Jordyan Corcoran	Chief Strategy Officer
Artoo	India	Sameer Segal	Founder & Chief Executive Officer
Bank Asia Limited	Bangladesh	Majidul Haque	Head, Products and Key Account Management, Agent Banking
Bancolombia*	Colombia	Pilar Cabrera Portilla	Director, Regulatory & Public Affairs
		Juan David Correa	Analyst, Financial Inclusion
		Pilar Otero	Director, Regulatory & Public Affairs
		Myriam Botero Wickmann	Head, Financial Inclusion
BBVA Mexico*	Mexico	Carlos Lopez-Moctezuma	Head, New Digital Business & Global Director for Financial Inclusion
BTPN	Indonesia	Vita Sabrina	Customer Experience Lead
CGAP	United States	Claudia McKay	Senior Financial Sector Specialist, Inclusive Markets
		Emilio Hernandez-Hernandez	Senior Financial Sector Specialist
Ecobank Transnational, Inc*	Тодо	Osahon Akpata	Chief Operating Officer, Group Consumer Bank
Eko Financial Services	India	Abhinav Sinha	Co-founder
FINCA Impact Finance	USA	Sergio Alguacil-Mallo	Manager Training Systems & Technology
First Bank of Nigeria, Ltd. (FirstBank Nigeria)	Nigeria	Oluwatosin Sam-Amoye	Manager, Agent Network, Lagos
		Amos Bankole	Manager, Agent Network, South Region

* Indicates Institute of International Finance member institution



INSTITUTION/ENTITY	COUNTRY	INTERVIEWEE	TITLE
Grupo Financiero Banorte*	Mexico	Guillermo Guemez	Head, Transformation & Innovation
ICICI Bank*	India	Avijit Saha	Retail Business Head, East and Asia Pacific
International Finance Corporation*	United States	Christian Torres	Digital Services Specialist
		Lesley Denyes	Program Manager, Partnership for Financial Inclusion
Kenya Commercial Bank	Kenya	Edwin Odhiambo Otieno	Head, Agent Banking
PaperSoft	Portugal	Daniel Alves	Chief Executive Officer
		Maria Zuzarte	Senior Officer, Business Innovation
PesaKit	Kenya	Andrew Mutua	Founder
Rabobank*	The Netherlands	Frank Nagel	Director, Advisory Services
		David Gerbrands	Global Head, Agri and Banking Advisory Services
Stanbic Bank of Uganda*	Uganda	Ronnie Muganze	Head, Agent Banking Acquisition
		Richard Jabel	Head, Agent Banking
Standard Chartered*	England	Khaldoun Hajaj	Head, Public Affairs & Sustainability, Africa & Middle East
The Smart Campaign	United States	Hema Bansal	Senior Director, South and Southeast Asia
		Tanwi Kumari	Manager, South and Southeast Asia
Ulana Insights	United States	Mike McCaffrey	Financial Technology Adviser
Zoona	Zambia	Mike Quinn	Chief Executive Officer

* Indicates Institute of International Finance member institution

Notes

1 Cheston, Susy, and Elisabeth Rhyne. "The Business of Financial Inclusion: Insights from Banks in Emerging Markets." Center for Financial Inclusion at Accion, 2016, https://www. centerforfinancialinclusion.org/thebusiness-of-financial-inclusion-insightsfrom-banks-in-emerging-markets.

2 Juma, Jacqueline and Nic Wasunna, "Distribution 2.0: The Future of Mobile Money Agent Distribution Networks." GSMA, 2018, https://www.gsma.com/ mobilefordevelopment/resources/ distribution-2-0-the-future-of-mobilemoney-agent-distribution-networks.

3 Ibid.

4 Allyse McGrath, "How Artoo Helped Ujjivan Unlock the Power of Data," Center for Financial Inclusion at Accion, September 6, 2017, https://www.centerforfinancialinclusion. org/how-artoo-helped-ujjivan-unlockthe-power-of-data. 5 Rodriguez, Christian and Julia Conrad, "Aligning Expectations: The Business Case for Digital Financial Services." International Finance Corporation, 2018, https://www.ifc.org/wps/wcm/connect/ dl4ld5c3-d754-4c28-946c-el5dl2e0d8cl/ IFC%2BMCF_Aligning+Expectations_ The+Business+Case+for+DFS. pdf?MOD=AJPERES.

6 Bansal, Hema, et al, "Protecting Clients and Building Trust: Exploring Responsible Agent Management in India," The Smart Campaign, 2016, http://www.smartcampaign.org/ tools-a-resources/1105.

7 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank, 2018, https://globalfindex. worldbank.org/sites/globalfindex/ files/2018-04/2017%20Findex%20full% 20report_0.pdf.

8 Buri, Sinja, et al. "Banking with Agents: Experimental Evidence from Senegal." World Bank and International Finance Corporation, 2016, http://pubdocs. worldbank.org/en/664571466184856841/ Cull.pdf.

9 Bensal, et al, "Protecting Clients and Building Trust: Exploring Responsible Agent Management in India." 10 Erlandsson, Frida and Gabriela Guibourg, "Economic Commentaries: Times Are Changing and So Are Payment Patterns." Sveriges Riksbank, No. 6, May 2018, https://www.riksbank. se/globalassets/media/rapporter/ ekonomiska-kommentarer/engelska/ 2018/times-are-changing-and-so-arepayment-patterns.pdf.

11 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess, "The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution." The World Bank, 2018, http://documents.worldbank.org/ curated/en/332881525873182837/ The-Global-Findex-Database-2017-Measuring-Financial-Inclusion-andthe-Fintech-Revolution.

12 Jaramillo, Maria, Julie Lee, and Elizabeth McGuinness, "Microfinance & E-Payments in Zambia: The Role of Consumer Education in Promoting Adoption." Microfinance Opportunities, January 2014, https://www.findevgateway. org/library/microfinance-e-paymentszambia-role-consumer-educationpromoting-adoption.



Mainstreaming Financial Inclusion: Best Practices is an initiative to facilitate learning and action on how mainstream financial institutions around the world can reach underserved populations with quality financial services. The project is completed in partnership with the Institute of International Finance (IIF) and the International Finance Corporation (IFC), with support from MetLife Foundation.



MetLife Foundation was created in 1976 to continue MetLife's long tradition of corporate contributions and community involvement. Since its founding through the end of 2017, MetLife Foundation has provided more than \$783 million in grants and \$70 million in program-related investments to organizations addressing issues that have a positive impact in their communities. In 2013, the Foundation committed \$200 million to financial inclusion, and our work to date has reached more than 3.5 million low-income individuals in 42 countries. To learn more about MetLife Foundation, visit metlife.org.



CENTER for FINANCIAL INCLUSION ACCION

The Center for Financial Inclusion at Accion (CFI) is an action-oriented think tank that engages and challenges the industry to better serve, protect and empower clients. We develop insights, advocate on behalf of clients and collaborate with stakeholders to achieve a comprehensive vision for financial inclusion. We are dedicated to enabling 3 billion people who are left out of—or poorly served by—the financial sector to improve their lives. For more information, visit www.centerforfinancialinclusion.org.



The Institute of International Finance (IIF) is the global association of the financial industry, with close to 500 members from 70 countries. Its mission is to support the financial industry for regulatory, financial and economic policies that are in the broad interests of its members and foster global financial stability and sustainable economic growth. IIF members include commercial and investment banks, asset managers, insurance companies, sovereign wealth funds, hedge funds, central banks and development banks. For more information, visit www.iif.com.