ALTERNATIVE DELIVERY CHANNELS FOR FINANCIAL INCLUSION:

OPPORTUNITIES AND CHALLENGES IN AFRICAN BANKS AND MICROFINANCE INSTITUTIONS 2016

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ACRONYMS

ADC	Alternate Delivery Channels
BTCA	Better Than Cash Alliance
CapEx	Capital Expenses
CGAP	Consultative Group to Assist the Poor
CICO	Cash In/Cash Out
FSP	Financial Service Provider
GAFIS	Gateway Financial Innovations for Savings
GSMA	Global Systems Mobile Communications Association
IFC	International Finance Corporation
IT	Information Technology
KYC	Know Your Customer
MFI	Microfinance Institution
MM	Mobile Money
MNO	Mobile Network Operator
OpEx	Operating Expenses
PIN	Personal Identification Number
POS	Point of Sale
ROI	Return on Investment
TSP	Technical Service Provider
UNCDF	United Nations Capital Development Fund
USSD	Unstructured Supplementary Service Data

FOREWORD

Globally, from 2011 to 2014, formal financial inclusion increased significantly, rising from 51 percent to 62 percent of all adults. During that time, an estimated 700 million adults in the world opened an account at a bank or other financial institution, or with a mobile money provider. In Africa, however, 66 percent of adults remain financially excluded. Operating expenses to deliver financial services to more people on the continent remain among the highest in the world.

The most well-known story of financial inclusion in Africa is the way in which technology and financial services have combined to accelerate the rise of mobile money. According to the 2015 Global Findex, 12% of adults in Sub-Saharan Africa have a mobile money account, with half of them having no other formal financial account. In Eastern Africa, Global Findex notes that rates are much higher. Kenya, for instance, has "the highest share of adults with a mobile money account, at 58 percent, followed by Somalia, Tanzania, and Uganda with about 35 percent … In five countries – Côte d'Ivoire, Somalia, Tanzania, Uganda, and Zimbabwe – more adults reported having a mobile money account than an account at a financial institution."

Commercial banking has yet to experience the growth in digital offerings and subsequent uptake for the mass market in most emerging markets. In many emerging markets, questions remain as to whether the commercial sector is fundamentally willing and able to take a long term view to invest in the mass market at the base of the pyramid. Rapidly growing digitization and technology developments, however, are changing the way we live in the world today, showing promise of adding value to the mass market and also disrupting business models of the past.

At The MasterCard Foundation, we believe that access to finance is a fundamental tool for people to take advantage of opportunities, smooth incomes, build assets and manage emergencies in their lives. This is why we have supported and tested a range of approaches and models to scale access significantly to financial services in Africa. It is within this context that partner banks and financial service providers have identified alternate delivery channels (ADCs) as a powerful force to reach the "last mile" customer with relevant access to finance. Our portfolio of five partners (the "ADC partners") works with 30 financial service providers in 15 countries.

While we hope that our partnerships catalyze improved conditions for low-income Africans, we also place a high value on learning and have established a robust learning agenda for our work. We are deeply committed to understanding clients, the value proposition of channels and whether the convenience and accessibility of channels have any socioeconomic impact on them. We also want to understand what drives the business case for providers to offer financial services through alternate delivery channels. Finally, we want to understand how knowledge can promote improved practices in providers, foster learning in the market, and inform stakeholders in the enabling environment.

Bankable Frontier Associates has worked with the Foundation and its partners to explore key questions about the effectiveness and impact of alternate delivery channels. This review, conducted in the first half of 2016, consolidates emerging lessons. We hope that it will generate reflection, curiosity and useful application for the benefits of consumers and financial service providers alike.

March 2017

EXECUTIVE SUMMARY

With approximately two billion unbanked and underbanked individuals globally, down from 2.5 billion just a few years ago (Global Findex 2011-2014), substantial progress has been made towards the goal of full financial inclusion, but is still far from being achieved. In particular, financial inclusion rates in Sub-Saharan Africa, where poor infrastructure, low population density and high costs have created significant barriers for financial service providers (FSPs) to serve low-income clients, have remained among the lowest globally.

Advances, however, in information and communication technology (ICT), especially mobile phones and telecommunication infrastructure, have opened opportunities beyond the traditional bank branch to reach previously unserved populations. FSPs worldwide are venturing into using alternative delivery channels (ADCs) to reduce the cost of service and drive client growth.

Banks in *developed* markets have been deploying the channels of internet banking and ATMs for several decades. Strategists and global trends suggest that future digitization will dramatically change banking as we know it. According to BCG, "rapidly evolving digital capabilities – particularly mobile, social media, big data, and cloud technologies – offer financial services companies entirely new opportunities for understanding, serving, and engaging customers. These capabilities will be powerful allies in the pursuit of greater customer-centricity."[1] Commercial banks in *developing and emerging markets* have also been deploying a range of channels. "Technology is a game changer: Every bank in [a recent study by the Institute of International Finance and the Center for Financial Inclusion] is innovating in delivery channels and other uses of technology. In order to increase convenience and encourage usage, banks are establishing a wide range of customer points of contact".[2] These trends in financial services are inevitable with the rapid advances of technology and digitization.

Globally, commercial FSPs are rapidly entering the digital age, typically through some form of partnership with MNOs or other payment service providers. The IFC has identified common success factors in such partnerships, as well as common pitfalls, drawing from existing experiments in this field. For example, Tameer Bank in Pakistan jointly scaled up payment services with its telco owner Telenor, resulting in significant growth in transaction fee income.[3] Other MFIs, such as Musoni in Kenya, are deploying digital field applications to change traditional banking business models.[4]

It is within this context that The MasterCard Foundation's financial inclusion partners have identified ADCs as having high potential to reach the "last mile" customer with relevant and accessible access to finance. As part of its multi-pronged effort to promote financial inclusion and increase economic opportunities for the underserved, the Foundation has supported testing a range of models and approaches for using ADCs to deliver financial services through a portfolio of five partners (the "ADC partners") in Sub-Saharan Africa.

The Foundation identified three levels of learning from its partner interventions and activities: clients, institutions, and the overall operating environment or ecosystem. While the Foundation directs its partnerships to catalyze improved conditions for low-income Africans, it also places a high value on learning to improve practices for its partners and the sector. It has established a robust learning agenda for its work. The Foundation is working to answer a set of fundamental questions in order to help distill emerging lessons in the field and identify gaps to be addressed in the coming years.

Clients	Institutions	Ecosystem
Do ADCs improve the value proposition and experience for low-income clients? What is the socioeconomic impact on clients' lives?	What drives the business case for providing financial services through ADCs?	How does learning and engagement influence providers and regulators?

1. Ralf Dreischmeier and Benjamin Rehlberg, *Customer-centricity in financial services goes digital*, BCG Perspectives, 2013.
2. Suzy Cheston et al., Institute of International Finance and Center for Financial Inclusion, *The Business of Financial Inclusion: Insights from Banks in Emerging Markets*, 2016.
3. Mark Flaming et al., IFC, *Partnerships in Mobile Financial Services: Factors for success*, 2013.
4. *Digital field applications: A case study*, Accion, 2015.

ALTERNATIVE DELIVERY CHANNELS

An alternative delivery channel (ADC) is any channel that is not a full service brick-and-mortar branch offering all of the FSP's services *and* staffed by the FSP's employees. ADCs include ATMs, agents, mobile phone banking, online banking, call centres, limited service branches, and roving staff such as *susu* collectors or mobile vans. ADCs increase the reach of financial services beyond traditional branches, responding to the demand for access "anytime, anywhere, anyhow". For providers, ADCs are an opportunity to serve more clients more effectively by reducing costs, driving growth, and improving service quality. For clients, ADCs bring convenience and potentially a better client experience, such as lower fees and enhanced comfort with the services. This added value should ultimately translate into greater usage, especially if the products are designed in ways that truly meet client needs.[5]

The emerging answers to these questions are summarized in key takeaways in this report. Overall, the Foundation sees promise for ADCs to help deliver good quality and relevant financial services to the underbanked in a sustainable way. While there is no "one size fits all" formula for FSPs to apply in different markets, nor guaranteed results, the potential gains are there. The reality, however, is that embarking on this transformative journey into digital channels and products is a long-term venture, requiring strong leadership and a nimble strategy in a rapidly changing environment. The MasterCard Foundation encourages its partners to lead ADC implementation strategically, take guidance from the experiences of others, and adapt to local opportunities and challenges.

KEY FINDINGS

1. *Do ADCs improve the value proposition and experience for low-income clients?*

    - **The key elements of the client value proposition of ADCs are convenience, lower costs, and enhanced comfort.** Clients value the time savings and overall convenience of being able to transact via ADCs closer to their home or work, and the cost savings derived from lower fees. In addition, the comfort and security of not having to carry cash to a branch and of interacting locally with community agents can increase clients' confidence in the service, especially if they were previously unbanked.
    - **Major barriers remain, however, to ADC uptake and usage.** User research investigating clients' preferences and reasons for inactivity highlighted common challenges: *lack of reliability* of the channels to perform transactions (network downtime, insufficient connectivity, lack of liquidity), *lack of integrity* such as fraud by agents and misuses of client data, and ADC *limitations* due to undertrained personnel and regulatory restrictions.
    - **It is too early to evaluate the socioeconomic impact of ADCs on clients.** ADCs provide incremental benefit by providing more convenience, comfort, and/or less costly services. Empirical anecdotes from clients demonstrate the value of such benefits on clients' lives. The evidence of improved economic benefits and wellbeing, however, is not yet documented in this component of the Foundation's work. Research is in progress.

2. *What drives the business case for providers to develop ADCs?*

    - **FSPs have strong faith in the expected benefits from adopting ADCs, including:** growing retail deposits, lowering the cost of funds, and lowering operating expenses (OpEx ratios.) The benefits are expected to be realized from higher intermediation income (both from a larger loan portfolio fueled by higher deposits, and better net interest margin from lower cost of funds) and better overall operating margins.

5. IFC, *Alternative Delivery Channels and Technology Handbook*, 2015.

- **There are some early indications that costs are trending in the right direction, but the promise of lower OpEx ratios from ADCs requires scale and time.** Most FSPs have not yet reached the scale necessary to realize better cost ratios.

- **Some providers are showing clear signs that ADCs can deliver targeted benefits, such as growing retail deposits.** FINCA DRC has seen accelerated growth since its agent scale-up. The cost of agent commissions, however, remains a concern. This challenge also touches questions of optimal channel pricing: for example, should transactions be free? The goal is to seek a balance between catalyzing high usage, generating revenues in addition to incurring costs, and doing so in a manner that optimizes return on investment (ROI).

3. *How does learning and engagement influence providers and regulators?*

- **Learning through the implementation process,** from the experience of others, and from knowledge generated and shared through a community of practice is a powerful means to strengthen FSP capacity.

- **A favorable enabling environment is instrumental to realize the full promise of ADCs.** Such an environment would protect clients with mandates on transparent pricing and complaint redress mechanisms, acknowledge the need for commercial viability, and identify key risks and mitigation solutions.[6]

- **Establishing dialogue with regulators can favor the development of a healthy competitive environment.** FSPs can influence policymaking by briefing regulators before launching new channels. Additionally, donors can encourage policymakers and regulators to share experiences and lessons learned across countries.

6. Simone Di Castri, GSMA, *Mobile Money: Enabling regulatory solutions*, 2013.

THE PROMISE OF ALTERNATIVE DELIVERY CHANNELS FOR FINANCIAL INCLUSION

Inclusive financial systems are crucial to achieve economic and social progress. Lack of access to financial services contributes to poverty traps and inhibits individuals from achieving their full potential.[7] Financial inclusion rates in Africa remain very low due to lack of infrastructure, low population density, and relatively high costs to serve low-income clients.[8]

Many FSPs are leveraging mobile technology and agent networks to reach clients in rural areas, thus growing their portfolios and reducing the cost of service per client. Early evidence indicates that banking through alternative delivery channels contributes to client welfare by delivering more convenient financial services at a lower cost.[9]

Source: IFC, *Alternative Delivery Channels and Technology Handbook*, 2015.

Most ADC rollouts by FSPs are relatively recent. The return on investment from ADCs and the ensuing direct benefits to clients has yet to be fully realized and proven to FSPs. Significant challenges and barriers remain which hinder ADC development and uptake. The promise to clients is often not yet fulfilled because channel reliability and integrity are often lacking. Many FSPs lack the technical knowledge, operational capacity, and strategic planning to successfully implement ADCs. Some FSPs also face regulatory constraints and competitive market environments that challenge the business viability of ADCs.

While some FSPs are seeing strong uptake and usage from their clients, others are not.[10] A key to success is to understand client life situations and design products that provide tangible benefits that cash or other informal mechanisms do not offer, such as increased security, trust, or access to additional services (payments, insurance, credit, etc.).[11]

Providers are gaining insights on the many facets of ADCs, such as the institutional changes necessary to implement ADC strategies, the required upfront investment costs, the scale required to recoup investments, the risks associated with the new channels, and the training and incentives necessary to manage agent networks.

7. Daryl Collins et al., *Portfolios of the Poor: How the world's poor live on $2 a day*, Princeton University Press, 2009.
8. Asli Demirguc-Kunt et al., The World Bank Group, *The Global Findex Database 2014: Measuring Financial Inclusion Around the World*, 2015.
9. IFC, *Breaking Free of the Branch: Microfinance Institutions and Alternate Delivery Channels in Sub-Saharan Africa*, 2016.
10. UNCDF MicroLead, *Savings Pilot Assessment Report for UGAFODE in Uganda,* Enclude, 2015.
11. IFC, *Alternative Delivery Channels and Technology Handbook*, 2015.

THE MASTERCARD FOUNDATION AND ITS PORTFOLIO OF PARTNERS

Since 2012, The MasterCard Foundation has formed partnerships with five leading organizations – UNCDF, IFC, FINCA, Opportunity International and Microcred – to scale access to financial services in Africa.

A key focus of these partnerships is to support and test the rollout of ADCs to reach the underbanked. Partnering with the Foundation, these organizations have reached more than 2.1 million clients, with an outreach target of approximately 3.6 million clients by the end of the respective programs. Under these five partnerships, the Foundation currently supports 30 FSPs in 15 countries for the development and implementation of ADC strategies (See Figure 1).

After four years, we observe early lessons emerging through these partnerships which can inform future ADC strategies and provide good insights for the sector. It is important to take stock of results to date while asking what challenges FSPs face in implementing ADC strategies, what circumstances make some strategies more successful than others, and what has been the client experience with ADCs.

While there is no single silver bullet "answer" to the key questions, or no "prescribed" pathway to implementation, lessons learned offer guidance for FSPs and other stakeholders.

Partner	Description
UNCDF Microfinance • Capital Development	UNCDF's MicroLead is a global initiative to support the development and roll-out of deposit services by regulated financial service providers. MicroLead is working with a variety of FSPs and technical service providers to reach rural markets with demand-driven, responsibly priced products offered via alternative delivery channels. Begun in 2009 as a flagship $27 million global microfinance program, MicroLead expanded in September 2011 with the support of the Foundation, via a $23.5 million, six-year program with the goal to reach 450,000 low income people in rural markets of Sub-Saharan Africa.
IFC International Finance Corporation World Bank Group	The Partnership for Financial Inclusion is a $37.4 million joint initiative of IFC and the Foundation to expand microfinance and advance digital financial services reaching 5.3 million previously unbanked people in Sub-Saharan Africa by 2017, some 800,000 through financial service providers. The seven-year program was launched in January 2012 and works with microfinance institutions, banks and mobile network operators across the African continent to develop and test innovative business models for financial inclusion.
FINCA®	FINCA and the Foundation are working together to scale up financial inclusion in Sub-Saharan Africa. By leveraging the use of technologies such as mobile payments, FINCA plans to significantly increase its outreach to 253,774 unbanked individuals, enabling low-income micro-entrepreneurs and households to improve their families' lives and have a positive impact on the economic development of their communities.
OPPORTUNITY International	Opportunity International in partnership with the Foundation launched a $22.7 million project to promote access to loans, savings programs and other critical financial products and services to help more than seven million people in six African countries. The funds are used to launch the Opportunity International Africa Growth and Innovations Initiative through its financial institutions in those countries, focusing on expanding delivery channels, with a focus on low cost branches and mobile banking to reach another 1,000,000 people.
microcred	Microcred is expanding its offering through a $12 million partnership for financial inclusion in three countries. The primary goal is to develop ADCs, combining agency or correspondent banking with mobile phone and card technology to reach 1,125,000 clients in Sub-Saharan Africa.

FIGURE 1: THE FOUNDATION ADC PORTFOLIO AT A GLANCE

Grantee	FSPs	Countries	Target Outreach	Current Outreach
UNCDF Microfinance • Capital Development MICROLEAD Partnership Launch 2011	1. ALIDE 2. Association des CVECA et CECA du Centre du Cameroun (A3C) 3. Caisse d'Eparge et de Credit du Cameroun (CEC) 4. Coopérative pour la Promotion de l'Epargne et du Credit (CPEC) 5. CRDB Bank Burundi 6. Fidelity Bank Ghana 7. Mwanga Community Bank (MCB) 8. NBS Bank 9. Reseau des caisses populaires du Burkina Faso (RCPB) 10. Sinapi Aba Savings and Loans (SASL) 11. Societe de Financement de la Petite Entreprise (SOFIPE) 12. Union des Caisses Villageoises d'Epargne et de Credit Autogerees du Grand Nord (UCCGN) 13. Ugafode Microfinance Limited 14. WOCCU Liberia, 4 greenfield Credit Unions 15. WOCCU Rwanda, 90 Umerenge SACCOs TSP partners: Women's World Banking (Malawi), MEDA (Uganda), CARE (Ghana, Tanzania), BASIX/PAMIGA (Cameroon), ALAFIA (Benin), Freedom from Hunger (Benin, Burkina Faso), OI (Ghana)	• Benin • Burkina Faso • Burundi • Cameroon • Ghana • Liberia • Malawi • Rwanda • Tanzania • Uganda	450,000	900,000 savers
IFC International Finance Corporation World Bank Group Partnership Launch 2012	1. Access Bank Tanzania 2. AccesBanque Madagascar 3. Advans Cameroon 4. Finca DRC 5. Microcred Senegal 6. Microcred Madagascar	• Cameroon • DRC • Madagascar • Tanzania • Senegal	800,000	635,000 savers *(49% have a mobile account)*
FINCA® Partnership Launch 2013	1. Finca Malawi 2. Finca Tanzania 3. Finca Zambia	• Malawi • Tanzania • Zambia	253,774	190,000 savers
OPPORTUNITY International Partnership Launch 2013	1. Opportunity International Savings and Loans (OISL) Ghana 2. Opportunity International Bank of Malawi (OIBM) 3. Urwego Opportunity Bank Rwanda 4. Opportunity International Tanzania 5. Opportunity International Uganda	• Ghana • Malawi • Rwanda • Tanzania • Uganda	1,000,000	345,000 savers *(65% have a mobile account)*
microcred Partnership Launch 2015	1. MC Côte d'Ivoire 2. MC Madagascar 3. MC Senegal	• Cote d'Ivoire • Madagascar • Senegal	1,125,000	65,000 savers
Total	**30 Financial Service Providers**	**15 countries**	**3,628,774**	**2,121,993**

WHAT WE HAVE LEARNED: INSIGHTS ON THREE CENTRAL QUESTIONS

The Foundation's work with its partners has yielded many insights about ADCs at the client, institution, and ecosystem levels. This section provides insights at each of these levels by focusing on fundamental questions for each, and by identifying additional themes for FSPs and policy makers to consider to successfully implement ADCs. There is a growing number of available publications released from the work of partners (Appendix I), and many more from other work in digital financial services (Appendix II).

1. DO ADCs IMPROVE THE VALUE PROPOSITION AND EXPERIENCE FOR LOW-INCOME CLIENTS?

1.1 What is the potential value proposition of ADCs for clients?

There are three main ways in which ADCs can benefit low-income clients: providing more convenience, offering services at a lower cost, and increasing comfort (see Figure 2).

The Foundation's partners have confirmed these lessons as they refined their approaches and services. For example, Microcred in Senegal reports that ADCs have improved the client value proposition by offering a more convenient and less expensive channel, especially for the 10-15% of clients who live more than 50 kilometers away from the nearest branch.[12] Microcred also reports higher transaction activity per client per month following the introduction of the agent channel, which intensified usage. Agents are seen as critical to catalyzing higher balances over the longer term.[13]

A UNCDF MicroLead partner saw the number of monthly transactions more than double for a deposit product relying exclusively on ADCs (doorstep collection) compared to the average of other deposit products.

Each day, hundreds of Sinapi Aba "mobile bankers" travel by foot through the marketplaces and neighborhoods of Ghana to serve customers. By opening accounts and enabling savings deposits and withdrawals in the field, Sinapi Aba helps ensure that the need for convenient and timely services is met.

In addition, a randomized control trial conducted by IFC in Senegal revealed that Microcred clients who open accounts with agents, rather than at branches, transact more and are more knowledgeable about the savings account on offer.[14] This experience, however, is in contrast to that of others, where agents acting as account originators have also witnessed higher dormancy.[15]

FIGURE 2: ELEMENTS OF THE ADC VALUE PROPOSITION FOR CLIENTS

Value Proposition Element	Description
Convenience	• Closer access • Transactions from anywhere (for mobile) • Time-savings (less travel, less waiting in line) • Longer hours of operation (nights, weekends)
Lower costs	• Lower fees compared with branch transactions • Less money spent on transport • Less time away from work, so less lost income
Comfort	• Safety (less travel with cash means less risk of loss in transit) • Community-based (local agents are familiar and give more respect, less intimidation)

12. IFC, *Breaking Free of the Branch: Microfinance Institutions and Alternate Delivery Channels in Sub-Saharan Africa*, 2016.
13. Mark Flaming, during group discussion at The MasterCard Foundation ADC Roundtable in Cape Town, November 2015.
14. The Foundation MEL Strategic Update Final Presentation: "Evaluation and Learning Strategic Overview," slide 3, November 2015.
15. Bankable Frontier Associates, *Big Banks & Small Savers: A new path to profitability*, GAFIS Project Report, 2013.

Another example comes from FINCA Tanzania. Since 2013, it has partnered with Vodacom so that clients can use Vodacom's mobile wallet platform, M-PESA, to make loan installment and savings transactions, first by making cash-in and cash-out transactions at M-PESA agents and then moving the money via mobile transfer to their FINCA account.[16] FINCA clients, especially those in locations where FINCA does not have transactional points of service, report that they value the convenience ADCs bring because they can transact directly from their e-wallet, "saving them significant travel and other transactional costs."[17] In 2014, one year into the partnership, FINCA Tanzania represented the fifth largest source of transactional volume for Vodacom in the country.

UNCDF conducted a survey in seven of its 10 MicroLead program countries to understand the satisfaction level of FSP clients.[18] In countries where ADCs functioned well, the reason for satisfaction was the "ease of access." In another of the Foundation's programs, clients in Rwanda's Urwego Opportunity Bank (UOB) view ADCs for payment collections as a way to reduce time spent collecting money and thus the "opportunity cost" of the loan.[19]

In group lending methodologies, one unintended consequence of the payment efficiencies provided by ADCs is that group meetings happen less frequently. Now that transactions can be done digitally from a member's phone and/or at a local agent, clients have fewer incentives to attend the meetings. FINCA warns that decreasing the need to attend meetings may reduce group cohesiveness, in turn impacting important group lending dynamics such as social pressure to repay or the additional benefits of such meetings, such as the provision of financial education.[20]

Pricing is another important factor in the client value proposition. Many FSPs under the Foundation/IFC Partnership for Financial Inclusion, such as FINCA DRC and Microcred, stress that offering free transactions is key to ensure usage goes "viral." Free transactions are expected to reduce barriers to regular usage.

The issue of cost to the client, however, is nuanced since many clients are willing to pay for compelling value, as we see from the mobile money space. Airtel Zambia clients, for example, as reported in a study conducted by IFC, do not mind paying for mobile money transactions if other advantages – for instance network stability, interoperability, or agent liquidity – are present.[21]

In addition, others observe that appropriate nudges can be quite effective at changing transactional behavior. For example, Juntos Finanzas provides a "real time SMS conversation platform", catalyzing two-way SMS communications (not just passive one-way messaging), enabling partner FSPs to engage with their clients. Juntos partners with several commercial banks focused on low-income clients. With one bank, Juntos targeted the bank's clients immediately after account opening. Three months after the initial SMS, the active account ratio was 33% higher and average balances were 50% higher compared to the control group. Juntos believes this shows clients have "more trust and confidence" in using a product that deploys such thoughtful two-way engagement.[22] An International Labour Organization study based on just two months of use showed a five percent increase in knowledge retention following daily reminders, as compared to a seven percent decrease without daily reminders.[23]

In another study, YouthSave conducted an experiment in financial education using text SMS messages to nudge youth into specific behavioral directions. Transactional data over 12 months showed that the increase in net account balances, compared to account holders who did not receive SMS or received only financial education SMS messages, was chiefly due to fewer withdrawals from their accounts.[24]

16. FINCA, *Expanding Access to Finance through Mobile Payments*, 2015.
17. Ibid, 1.
18. MLE Midterm Evaluation, Chapter 6 "Effectiveness of MLE Programme".
19. IFC, *Breaking Free of the Branch: Microfinance Institutions and Alternate Delivery Channels in Sub-Saharan Africa*, 2016.
20. FINCA, *Expanding Access to Finance through Mobile Payments*, 2015.
21. IFC, *Airtel Zambia Mobile Money Inactivity Partnership Note*, 2015.
22. Myra Valenzuela, Nina Holle, Wameek Noor, CGAP, *Juntos Finanzas, A Case Study*, 2015.
23. Hannah Sherman, Arifu: Digital Delivery of Nudges and Information in Kenya, CFI Blog, 2016.
24. New America et al., *The Youthsave Program: Key Findings For Youth Development Policy Makers*, The MasterCard Foundation, New America, Save the Children, CGAP, Washington University in St. Louis, 2015.

SPOTLIGHT 1

HOW TO DRIVE CLIENT USAGE OF FINANCIAL SERVICES ON ADCs

FSPs can drive usage of ADCs by clients for the benefit of both parties.

For example, MicroLead[25] has learned to:

- Focus on the first 100 days following account opening. To prevent dormancy and catalyze active usage, several contacts between FSP and client are critical during this window. A leading South African bank implemented a choreographed series of SMS reminders in the weeks following account opening. It saw a decrease in "never activated" dormancy rates from 33% to 21%.
- Use key influencers (those that have already adopted) as champions for the product and to promote the channel
- Offer financial education to clients directly
- Train agents and staff appropriately on client engagement
- Waive fees for first transactions to encourage adoption
- Keep client costs and other information transparent

FINCA Tanzania learned it had to minimize (and ideally eliminate) disruptions with technology:

- It saw increased usage of ADCs immediately following its successful efforts to decrease the percentage of failed transactions (*discussed more in Section 2*).

FINCA DRC learned that it had to aim for a wide agent network and availability:

- It saw increased usage (more clients and transactions) following its rapid rollout of a proprietary agent network (*discussed more in Section 2*).

All organizations became more aware of the importance of training staff for excellent service quality across the whole organization.

Many of the efforts above may be difficult to implement, in part because they are costly. Considerations around creating value for clients must intertwine with business case considerations. For example, is there a measurable ROI for these interventions, and can we rank them accordingly? The relationship between the business case and client-centric design is critical for creating sustainability and scalability.

25. UNCDF MicroLead Accra annual learning event, Accra, Ghana, March 2016.

1.2 What are the ADC-specific barriers preventing clients from using channels?

There are many barriers to uptake and usage of formal financial services. Clients' low financial capability and lack of trust persist as barriers to usage. While ADCs can help tackle some of these, such as inconvenience, high costs, and discomfort entering formal banking halls, there are other barriers inherent to ADCs that limit client uptake and usage.

Three consistent themes emerge as barriers to ADC usage: (1) lack of channel reliability, (2) lack of integrity, and (3) functional limitations. These barriers lead to low client trust and confidence in adopting and using channels on a regular basis. (see Figure 3).

(1) Lack of channel reliability. While ADCs can benefit clients if they work well, they can cause their own set of headaches when they function sub-optimally. ADCs can be a reason for client dissatisfaction, for instance lack of network connectivity, absence of agents and illiquidity.[26] NBS Malawi notes that, for their low balance mobile deposit account ("Pafupi"), the key to good customer service is ensuring that agents are properly monitored and effective.[27] Bad client experiences with agents, such as lack of connectivity or lack of float, can pose a reputational risk to the FSP and hinder client usage.

In early 2015, FINCA Tanzania was experiencing high levels of failed transactions in its ADCs (mobile and agency banking), largely due to technical weakness in the interface between the channel and the core banking system. In response, it designed and implemented a detailed regular report that identified the specific reasons for failure. This enabled FINCA to attack the problems in a timely and targeted way. Over the course of 2015, failed transactions decreased from just under 20% to 1%, while transactions grew from around 35% to around 60%. The dramatic increase in the share of transactions occurring through ADCs underscores the importance of reliability as part of the client value proposition.

FIGURE 3: BARRIERS TO UPTAKE AND USAGE FOR LOW-INCOME CLIENTS

Barrier	Description
Lack of reliability (prevents transactions)	• Illiquidity or lack of 'float' (hinders agent cash in, cash out) • Insufficient connectivity (delays/prevents transactions) • IT malfunctions (delays/prevents transactions) • Not open/present at desired time/place
Lack of integrity (hinders trust)	• Lack of transparent pricing (rogue agent) • Fraud (impostors or rogue agent) • Lack of privacy (local agent disrespects client privacy) • Misuse of PIN because trust misplaced
Channel limitations (obstacle to full functionality benefits)	• Not authorized/capable to process all transaction types • Channel unable to explain product details, either self-service or agent lacks knowledge

26. UNCDF/MLE Midterm Evaluation, Chapter 6 "Effectiveness of MLE Programme".
27. MicroLead Webinar #6, Partners Sharing Experiences, Building a Foundation for Growth: Practical Tools for Managing Agents, UNCDF MicroLead.

(2) Lack of integrity. The SMART Campaign has compiled a list of the main risks that clients face when using digital financial services (DFS) (see Figure 4). Lack of integrity is a significant risk, taking form as fraud, data privacy breaches, lack of transparency including poor disclosure of information, and insufficient recourse mechanisms.[28]

Such risks have direct consequences on usage rates. For example, nearly 50% of clients who signed up for UGAFODE's savings pilot never conducted a transaction.[29] The issue of dormancy is often also attributed to FSPs not properly understanding client dynamics such as group behavior, seasonality, or the inter-lending cycle.[30]

(3) Functional limitations. Other barriers also hinder client uptake and the usage of channels and products. These include client discomfort with the USSD interface, lack of transparency around pricing (unclear bank fees erode trust in the institution), and limited human touch points with clients (important to create comfort and demonstrate integrity). Clients' lack of technical or financial literacy, capability, and confidence limit the effective use of channels as well.

In summary, the barriers that clients face to adopt and use ADCs contribute to low trust and confidence. Addressing these operational challenges through careful planning, implementation, and monitoring will also address the trust factor.

MNO experiences with mobile money offer insights for FSPs to improve value propositions. Some lessons learned may be equally applicable to FSPs as MNOs, while others may point to opportunities for FSPs to positively differentiate themselves. Many MNO clients are unaware of any compelling reasons to use mobile money accounts instead of cash. Significant barriers include: 1) clients feel that mobile money is not 'relevant' to them because of their low incomes, and 2) clients feel that the charges are too high.[31] These are equally relevant to FSPs.

FIGURE 4: SMART CAMPAIGN DFS RISKS FOR CLIENTS

Risk Area	Mitigation Strategies
Client communications	• Clear communications to promote client understanding and trust • Take into account illiteracy • Solicit on-going client feedback
Digital channels (fees, recourse mechanisms)	• Ensure competitive, fair pricing of fees • Ensure transparency on product features and fees • Implement adequate recourse mechanisms for clients, and make sure they are easy to understand
Agent networks	• Define clear recruitment, selection, and monitoring processes for agents • Improve liquidity management • Take responsibility for agents conduct across the value chain
Data privacy and security	• Establish minimum security requirements and execute a written data privacy and security policy that governs client information and data • Keep clients' funds safe and ensure reliable and secure access to funds in digital transactional accounts

28. Better than Cash Alliance, Presentation by Sonia Arenaza at the Responsible Finance Forum VI, Antalya, September 2015.
29. UNCDF MicroLead's *Savings Pilot Assessment Report for UGAFODE in Uganda*, Enclude, 2015.
30. Ibid.
31. IFC, The MasterCard Foundation (The Partnership for Financial Inclusion), *The Mobile Banking Customer That Isn't: Drivers of Digital Financial Services Inactivity in Côte d'Ivoire*, 2015.

IFC research identifies that one way to overcome the first barrier is to make products more relevant by adding savings and loans. This suggests an opportunity for FSPs to differentiate themselves from MNOs, or perhaps to bring something to a MNO partnership negotiating table. FINCA tried to overcome the fact that the benefits of ADCs can be unclear to customers by launching a client awareness and education campaign on the benefits.[32]

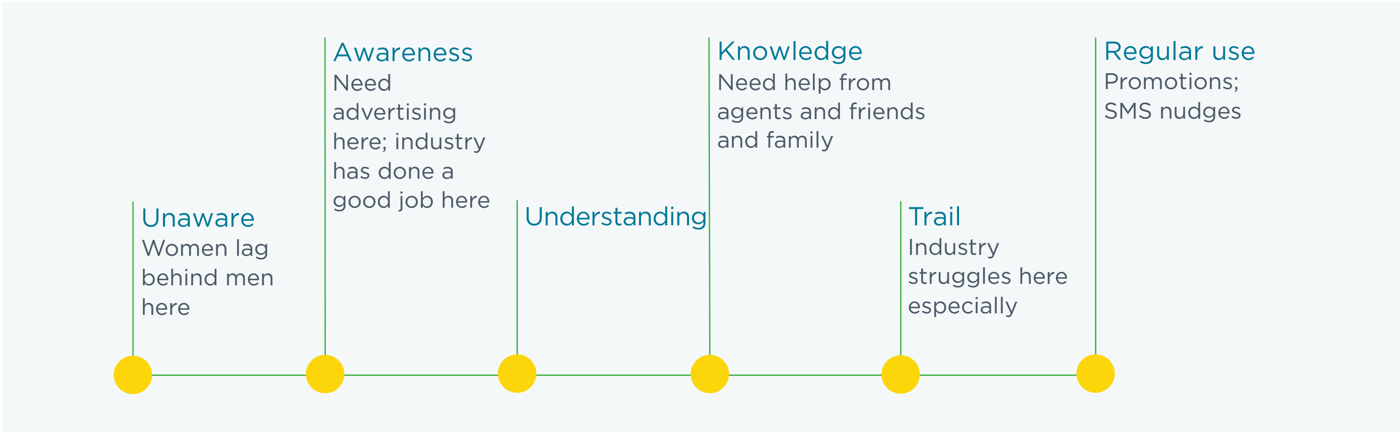
Crucially, it went beyond print because of illiteracy issues: FINCA trained any employee who was directly in contact with clients, produced materials in local languages, used live demonstrations, and invested in on-going client education. Even when FSPs have succeeded in creating awareness of ADCs and in registering customers, they still largely fail to establish successful trials (client testing of the product during first use) to convert new registered clients to regular users. GSMA outlines a "journey" for mobile financial services (see Figure 5), which can provide a useful framework for FSPs. In short, while providers may struggle to convey a compelling value proposition and generate trust, it is important to get the client value proposition right. This is still a work in progress for many of the FSPs in this portfolio.

CGAP has focused recent studies on how efficient and client-friendly recourse mechanisms can help ensure clients move from "trial" (testing the product) to regular usage. If clients are able to effectively deal with problems in a timely way, they build and maintain their trust in products and services. The SMART Campaign collected and ranked potential risks to clients by frequency of occurrence and impact on clients, and outlined potential mitigation solutions for FSPs, as shown in Figure 4.

In July 2016, BTCA developed a set of guidelines for Responsible Digital Payments primarily oriented toward FSPs. BTCA identified eight good practices for engaging with underserved clients who are sending or receiving digital payments:

1. Treat clients fairly
2. Keep client funds safe
3. Ensure product transparency
4. Design for clients' needs and capability
5. Support access and use through interoperability
6. Take responsibility for providers of client services across the value chain
7. Protect client data
8. Protect client recourse

FIGURE 5: CLIENT JOURNEY WITH MOBILE FINANCIAL SERVICES[33]



32. FINCA, *Expanding Access to Finance through Mobile Payments*, 2015.
33. Adaptation of GSMA Client Journey Illustration.

1.3 What is the socioeconomic impact of ADCs on the lives of clients?

Evidence demonstrates that formal financial services can have a positive impact on self-employment activities, household consumption, and well-being.[34] More specifically, The MasterCard Foundation has found that savings accounts help poor households manage cash flow spikes, smooth consumption, and build working capital.

We expect ADCs to enhance the general impact of providing formal financial services to underbanked customers by improving access as well as convenience, affordability, and comfort. This can be a significant improvement both to economic and social aspects of clients' daily lives.

For example, mobile money is shown to substantially improve the lives of the poor by helping households smooth consumption when experiencing negative economic shocks.[35] Here, channels enhance access to existing financial tools, making it easier to move money among social networks.

ADCs can also enable business models that would otherwise never come to life due to logistical impracticalities. GiveDirectly, for instance, gives unconditional cash transfers from donors to poor Kenyans via M-PESA. This has been shown to improve people's lives. Recipients tended to spend the monthly transfers on food, cattle, and other assets, enabled by the channel's payment logistics.[36] In such cases, the ADCs do not create the social transfer funding; they simply enable effective delivery to the last mile, which was otherwise impractical.

There is also increasing anecdotal evidence of the impact on clients' lives. For example, Jamila, a FINCA client, joined FINCA when she heard its advertisement on the radio. At the time, she lived over two hours away from the nearest branch and had to travel this long distance for every transaction. One day, when she visited the branch, Jamila was taken to a Wakala (agent) near the branch. A FINCA staff member showed her how she could deposit and withdraw money through the Wakala agent, instead of visiting the faraway branch. Since that day, Jamila only visits the branch when she has to take out a new loan or if the system at her nearby Wakala is down. She now easily performs most of her transactions through the Wakala, which gives her more time to dedicate to her business.[37]

Understanding the value of channels to clients is still a work in progress. Results from current research will emerge in the near future, even though we already know that the convenience of channels can enable more frequent usage of accounts. The next section of this paper will discuss the second question the Foundation wants to explore from its work in channel implementation: the business case for providers.

34. Cull et al., CGAP Focus Note, *Financial Inclusion and Development: Recent Impact Evidence*, April 2014.
35. William Jack and Tavneet Suri, *Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution*, MIT Press, 2014, http://www.mit.edu/-tavneet/Jack_Suri.pdf
36. Johannes Haushofer and Jeremy Shapiro, Policy Brief: Impacts of Unconditional Cash Transfers, Princeton Press, October 2013, http://web.mit.edu/joha/www/publications/Haushofer_Shapiro_Policy_Brief_UCT_2013.10.22.pdf
37. The MasterCard Foundation: Mid-Term Evaluation of FINCA's "Scaling-Up Financial Inclusion in Sub-Saharan Africa" Project, September 2016.

SPOTLIGHT 2

A FINCA EXPRESS AGENT IN THE DEMOCRATIC REPUBLIC OF CONGO

The development of agent networks, in many instances, had positive implications for retail customers and also for employment and business creation. A FINCA Express agent reported:

"I was always a businessman, and I knew that the opportunity that agency presented to me would help my small pharmacy shop to flourish, but at the same time, it would also help my customers to better manage their money. There is no bank here and the closest FINCA branch is 35 km away.

Security and connectivity might be an issue at times, but the agent business is transforming my community with many opportunities: I'm hiring more people to help me out with the master agent activity, people can deposit their savings or even their loan payment little by little – at the due date, it is automatically transferred to pay back their loan; they can withdraw their loan little by little as well, they can transfer or receive money to and from Kinshasa; and all these operations are possible even with a small amount of money. It takes less than two minutes".

As a master agent in the FINCA Express network, this entrepreneur is planning to grow his network of staff and agents. "Business is in my blood and I want to pay it forward... for my community and my four children," he said.

For a young mother, a neighborhood agent means she can very quickly withdraw some of her savings to seek treatment for a sick child. Her FINCA Express agent is open from 6:30 am to 10:30 pm, 7 days a week. In urban Kinshasa, FINCA Express seeks to offer people choice, convenience, reliability, trust, and security. And they have proved that it is possible to do that through a strong and consistent journey of agent network development.

2. WHAT DO WE KNOW ABOUT THE BUSINESS CASE FOR PROVIDING FINANCIAL SERVICES THROUGH ADCs?

To achieve a double bottom line, FSPs need to serve more clients and enable regular usage. FSPs can advance their *social* impact by serving more clients and can reach their *financial* bottom line through increased scale and a growing balance sheet.

FSPs recognize that offering clients a better value proposition is important for achieving growth. We saw in the prior section that affordable and convenient services are two crucial elements of an attractive value proposition to clients, especially in more remote rural areas where the cost to serve through traditional branch models is most prohibitive. In order to achieve more scale in a sustainable way, many FSPs see the need to fundamentally change their business model, or at least the service delivery model, such that outreach is increased, while cost ratios are significantly lowered. This has led FSPs to consider ADCs as a more efficient service delivery platform and to explore different kinds of partnerships within the value chain that would offer revenue opportunities. (See below.) In the particular context of trying to improve the financial bottom line of a core banking business, thus distinguished from the objectives of other players pursuing mobile financial services for other reasons, FSPs believe that ADCs can lower operating expense (OpEx) ratios and increase retail deposits, with the latter resulting in higher net intermediation income. The FSPs in the Foundation's ADC portfolio have faith that channels will achieve these objectives, and have therefore made significant ADC investments in recent years.

This section summarizes emerging lessons on change management, financial considerations, agent network development, and risk management – all critical when implementing channel strategies in the business.

PARTNERSHIPS IN MOBILE FINANCIAL SERVICES[38]

The IFC publication *Partnerships in Mobile Financial Services: Factors for Success* identifies four core businesses within the mobile financial services (MFS) supply chain. Each business can offer revenue opportunities and a potential distinct motivation for companies (including FSPs, MNOs and other service providers) to participate in partnerships to implement MFS. These businesses are:

1. payment services
2. banking (namely, storing funds)
3. telecommunications, and
4. agent networks (facilitating cash transactions).

Among other things, IFC notes the critical importance of partnerships to identify partners' respective comparative advantages, competitive pressures, business motivations, and roles. Partnership success or failure typically rests on how well partners identify and acknowledge these and structure roles, responsibilities and compensation accordingly.

FSPs tend to be focused on the banking business, in particular the intermediation business (growing balance sheet to grow intermediation income and spreads/margins, and lowering OpEx margins). For example, several FSPs that have rolled out proprietary agent networks (e.g., Access Bank Tanzania or Microcred Senegal and Madagascar) see payments as a means to enhance the sustainability (for agents and the FSP) of the network by layering on additional value-added services. These generate fees/commissions to support the agent business model. In one example (FINCA DRC), rare because of the unique first-mover advantage it developed in the agent network space, the FSP is considering whether it can charge other FSPs a fee for processing CICO transactions on their behalf. Some may have secondary aspirations on payments and/or agent networks, but we do not see that as a primary motivator. Tameer Bank in Pakistan is an exception; it pursued fee income as a primary motivation, influenced by its MNO partner and majority shareholder (Telenor).

38. Mark Flaming et al., IFC, *Partnerships in Mobile Financial Services: Factors for Success*, 2013.

5 RULES OF THUMB FOR EFFECTIVE CHANGE MANAGEMENT[39]

1	2	3	4	5
Involve department heads from the beginning to enhance buy in and avoid internal resistance	Outline viability through a robust financial model and sound business plan	Update policies and procedures expeditiously to reflect the change	Organize staff training and clearly define roles to avoid confusion and unnecessary duplication of efforts	Provide staff incentives for adoption and sustained usage

2.1 Change Management

Launching ADCs often requires that existing institutional support structures within FSPs change. Program evaluations of Foundation partners have all highlighted the critical nature of managing change in the implementation of a channel strategy. It is transformative to the traditional banking business model, the organizational structure, and service delivery orientation.

A common mistake among FSPs is to underestimate the time, effort, cost, and change required to make ADC strategies work. To get maximum benefit from ADCs, a FSP should be ready to consider business process reengineering as part of the implementation process. For example, how will branch roles evolve as ADCs offload many functions that were previously core to the branch? Pilot projects may be warranted in early days. If ADCs are expected to have significant institutional impact, however, an ADC strategy should be integrated with the core business strategy and processes at the outset.

The GAFIS program report also offers instances of how institutional commitment to change led to successful rollout of ADCs. For example, Standard Bank of South Africa demonstrated its willingness to change (and to institutionalize innovation in the ADC space) by bringing into the bank as part of its core business what was originally an experimental fringe approach to serving low-income clients with agents. Another example is Equity Bank, which had CEO commitment to agency banking and, in turn, substantial resource allocation to it (establishing a new, multi-person department at head office with a manager in direct communication with the CEO, catalyzing all-important branch buy-in, and ensuing staff support, bolstered by corresponding KPIs). Equity enjoyed very strong uptake and usage of the agent channel, thanks not only to this institutional commitment, but also to a conducive environment, such as its existing strong brand and large client base, as well as Kenya's entrenched mobile money mindset.[40]

To effectively achieve such change, FSPs should plan to optimize the comparative advantages of the various channels, developing an effective coordinated channel mix strategy that can deliver value, at scale, in a sustainable way, thus yielding a positive ROI and mitigating risks.

Key users and decision makers need to be involved in the redesign process and buy into the need to change the *status quo*. ADC success requires not only sound business models and well-functioning IT systems, but also effective internal change management. Among the Foundation's partners in its ADC portfolio, both FINCA and Microcred note that the development of ADCs required a major shift in the way they organized themselves within the respective banks, which they have done in several of their African subsidiaries. Such changes sometimes also came with unexpected costs, as illustrated in Spotlight 3 on FINCA.

FSPs note the challenge of finding effective human resource capacity to implement ADCs. Most markets have very limited labour pools with experience and expertise in ADC development or management, and in IT and digital solutions more generally, which are integral to ADC deployments. Lack of skills causes delays in some ADC deployments, or adds to expenses because the required skills come at higher cost. Some partners have sought to "upskill," by focusing on internal training efforts, but this also can slow the pace of rollout. Solid planning and commitment to the change pays off, and we see some of the more advanced FSPs getting clear benefits from well thought-out ADC strategies.

39. IFC, *Alternative Delivery Channels and Technology Handbook*, 2015.
40. Bankable Frontier Associates, *Big Banks & Small Savers: A new path to profitability*, GAFIS Project Report, 2013.

SPOTLIGHT 3

FINCA TANZANIA'S EXPERIENCE WITH COSTS FOLLOWING INTRODUCTION OF AGENT CHANNEL[41]

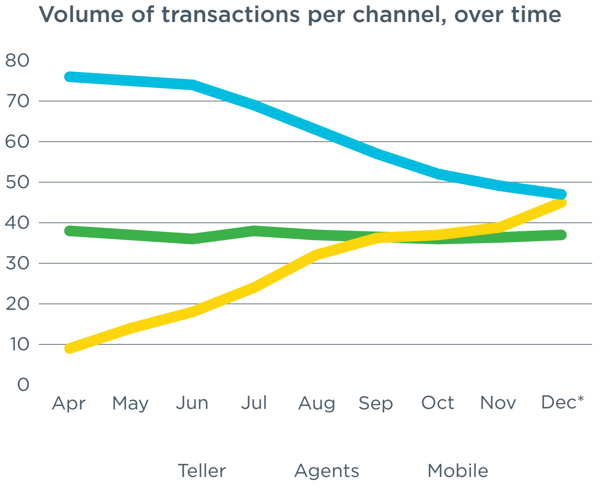
Like many FSPs, FINCA Tanzania wanted to introduce ADCs in an effort to lower its operating costs. It first introduced mobile banking (essentially relying on non-proprietary agents for cash-in/cash-out, run by MNOs). It then later rolled out its own proprietary agents.

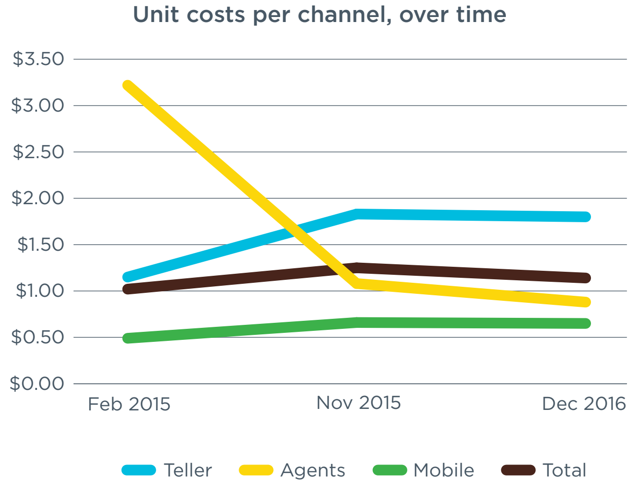
In early 2015, after it achieved significant scale with its mobile banking channel, and while it had only a relatively small agent network (around 10 agents), monthly transactions were spread as follows: branches 62%, mobile banking channel 33%, and agents 5%. At this stage, mobile transactions cost less than branches, and branches less than agents. Due to the significant pre-scale investment (both CapEx and OpEx) required to launch the agent channel, the unit cost was triple that of branches, not what FINCA was aiming for when launching the agent channel.

At the end of 2015, however, when the agent network had grown to around 50 agents, the distribution of transactions across channels shifted: branches 39%, agents 31%, and mobile banking 29%. As a result, the agent unit cost decreased below that of the branch (orange line in right-side figure below). Nevertheless, because the overall volume of transactions (across all channels) remains the same, agents had essentially cannibalized transactions from branches (illustrated in the left-side figure below, blue line decreases as yellow line increases), thereby decreasing branch transaction volume and increasing the branch *unit* cost (blue line in right-side figure below). While the channel distribution percentages presented an intuitively encouraging trend, the shift of transaction activity to agents resulted in an *increase* in branch unit cost, as well as an increase in the overall weighted average unit cost per transaction, because the cost structure of the branches had not decreased at all. (Note, the December 2016 data is a forecast.)

FINCA noted the following key takeaways:

- Traditional MFIs (with existing branch infrastructure) should realize that the cost efficiencies from adding ADCs are not immediate.
- The agent channel has lower unit costs (than branches) only if/when it achieves scale.
- For MFIs that are not trying to grow very quickly, a strategic shift of transaction activity to ADCs should be accompanied by a robust plan to lower the cost structure of tellers or refocus branch activity on higher income sales and transactions.





41. Helen Lin, FINCA, *FINCA Tanzania cost per transaction findings*, 2015.

2.2 Financial Considerations

Pricing strategy is important to both the business case dynamics and the value proposition to the client. When it comes to core deposit-taking business, FSPs have tested two main pricing models: a complete "freemium" model, where all basic transactions are free to the client, and a fee-based pricing model, where all or some transactions (deposits and/or withdrawals) are charged.

> "Thanks to ADCs, we do not need to open so many branches to enable growth of the business (mainly portfolio growth). Branch infrastructure cost is too large to enable profitability in remote areas."
> **– Microcred**

Further, FSPs have also launched channels with a "freemium" model and then adjusted over time as adoption and usage increases Changing to a pricing structure for transactions, however, is necessary to generate revenue from the channel and build the business case for the strategy.

The rationale for offering free transactions is that cross-subsidization will occur. Either some transactions with fees (e.g., withdrawals) will subsidize others (e.g., deposits), or other revenue sources at the FSP (e.g., intermediation) will subsidize all transactions. Such business models reflect a belief that any charge for basic transactions, especially deposits, will discourage overall usage. At minimum, the client incentive to use the account is higher, leading to more transactions, ultimately higher account balances, and a larger balance sheet for the FSP. Microcred adopted a "freemium" model, which is key to their business model to acquire active clients. It is also a key differentiator with MNOs who depend on transaction fees as their primary source of revenue. Please refer to Spotlight 4 to understand Microcred's initial "freemium" approach that has since been modified.

An alternative approach is when an FSP focuses on the payment business itself (one of the four business lines identified by IFC as available from mobile financial services) as a core motivator for implementing ADCs, in which case fee income is a key business model driver.[42] The case of Tameer Bank's Easypaisa product provides a good example, Tameer Bank partnered with its majority owner MNO (Telenor) to roll out a payment service, charging fees for the most popular transactions (money transfers, airtime top-up, other bill payments). Mobilizing deposits and lowering the cost of funds were secondary objectives and did not drive the pricing model (though deposits to the e-wallet were free).[43]

FINCA's experience with its pricing model offers other insight into clients' behavior. Low-income clients are sensitive to pricing. FINCA Tanzania observed a significant shift in transaction activity across different ADCs, driven in large part by pricing differences. Specifically, while it had first seen strong growth in transactions in the mobile banking channel (33% of all transactions as of early 2015), this percentage declined to 29% by the end of 2015. This appears to be due to two factors, suggesting that price matters: 1) the MNOs started charging the client a fee for moving money into the FINCA account (1% of amount) and 2) FINCA's own agent network (where all transactions are free) grew, and the percentage of all transactions occurring at agents grew from 5% to 31%.[44]

In addition, important financial considerations include two types of costs that FSPs aim to lower via ADCs: operating expenses and cost of funds. The case of FINCA Tanzania in Spotlight 3 exemplifies challenges with the OpEx dynamic, common across FSPs implementing ADCs.

42. Mark Flaming et al., IFC, *Partnerships in Mobile Financial Services: Factors for success*, 2013.
43. Aiaze Mithe, IFC, "Mobile Financial Services and MFIs: Case Study of Easypaisa and Tameer in Pakistan", found within the IFC Mobile Money Toolkit.
44. It is worth noting is that it is likely that the strong growth of the agent channel in this period was concurrent with significant improvement in technical "uptime" at the agents, which had been a problem in the first half of 2015 (failed transactions decreased from 16% to 1% in that period).

SPOTLIGHT 4

MICROCRED: EVOLUTION OF A PRICING MODEL

Microcred had expressed a vision where significant scale would come as a result of expanding its reach in number of clients with proprietary agents, and attracting high usage with free transactions and quality products. It expected profitability to grow as a result of the dual benefits of this path to scale: more intermediation income from a larger balance sheet driven by higher retail deposits, and improved operating costs from the ADCs and economies of scale.

Thanks to the collection of zero-interest savings through the ADCs, Microcred expected to decrease its cost of financing. The share of Microcred's overall funding mix made up of such zero-interest savings did increase. Branches remain relevant, but should be leveraged by ADCs: For example, if a branch (without agents) handles 1,000 loan clients for a loan portfolio of $2 million, after 5 years and with 30-40 agents per branch, that same branch should be able to manage twice as many loan clients with more than double the portfolio size.

As it sought to grow deposits, Microcred hypothesized that low-income clients could not afford to use formal financial instruments if they must pay fees for basic deposit, withdrawal, and small value P2P payments. In an interview with BFA, Microcred said:

"Free transactions are key to our pricing model because it enables adoption [namely, a higher number of very active clients], and presents the offer as a true alternative to informal savings that feels free. It is also a key differentiator with MNOs' mobile money who depend on transaction fees as their primary source of revenue. As a provider of a complete suite of financial services, we aim at making the ADC profitable by reducing operating cost [ratios], reducing cost of raising savings, and selling value-add products, such as loans.

All clients were entitled to a certain volume of transactions without fees, in which the specific amount depended on the client s loyalty and behavior. Pricing incentives allowed Microcred to drive desirable client behavior: avoiding abuse, driving longer-term savings, encouraging P2P and P2B, promoting credit and building loyalty. Microcred saw solid growth from this business approach. It had concerns, however, about the sustainability of the agent model, due to agent compensation structures. It felt that compensation (commissions) based purely on volume of transactions was unsustainable, in part because this fails to perfectly align agent and FSP incentives.

As a result of deep analysis of costs, Microcred introduced a fee-based structure. Although transaction patterns have changed significantly, Microcred is monitoring trends closely to identify the optimal approach that will bring value to its clients and also build the business case.

2.3 Agent Network Strategy

A key question for FSPs lies in whether to pursue a proprietary or non-proprietary agent network strategy. A "proprietary" agent network is a network the FSP recruits, equips, manages, and brands itself. A "non-proprietary" agent network is a network that is owned, equipped, managed, and branded by a third-party, such as an MNO or other payment network. For the latter, the "mobile/digital" piece is critical because the key for the FSP is, literally, to connect to that third-party's network via e-wallet-to-FSP mobile/digital transfers.

Many of the larger and medium-sized FSPs are pursuing proprietary agent networks, often in parallel with enabling non-proprietary networks (i.e., linking to MNO m-wallets) as well, but most focus on the proprietary.

> "The channel strategy is informed by and is meant to contribute to the general business objectives of the FSP...A channel strategy does not imply choice of a single channel, but could result in an integrated, multi-channel strategy that combines several channels and technologies to achieve the overall business objectives." (IFC, *Alternative Delivery Channels and Technology Handbook*, 2015)

There are tradeoffs between the two approaches (see Figure 6 below, comparing agent strategies on key ADC objectives), though it is not necessarily a binary decision for the FSPs as they may implement both (hybrid model) in parallel or in stages. As a practical matter, it seems that most FSPs will, sooner or later, tap into the non-proprietary dynamic since enabling a link to a mobile money scheme is relatively simple and straightforward as long as the scheme is part of the formal payment system, and there is no apparent detriment to the FSP. The real question for FSPs is whether to actively promote this channel to clients. This depends on whether the FSP wants to rely on this non-proprietary channel as the primary (or even exclusive) *non-branch* channel for its clients to move cash in and out of the FSP.

The size of the FSP may influence this critical decision. First, size matters when it comes to market position and "power" in the local market to negotiate pricing or other deal terms with potential partners. Second, size matters when the FSP considers how much scale it can realistically achieve to justify the investment it would take to develop and manage its own proprietary network. Both of these dynamics tend to work against smaller FSPs. A smaller FSP will probably not have the market power to negotiate favorable terms with MNOs, and may not have the scale to justify developing its own proprietary network. In this case, it may still choose to link up with the non-proprietary network, or it can search for other innovative partnerships and strategies.

FIGURE 6: TRADEOFFS OF AGENT STRATEGIES

Tradeoffs on key ADC objectives	Proprietary	Non-proprietary
Combined cost to FSP/client	Depends on scale: likely cheaper if high transaction volume enabling economies of scale.	Depends, and may be different for client than FSP. For FSP, may be cheaper (unit cost) if low volume but more expensive with high volume.
Outreach	Less outreach because lower number of service points.	More widespread and dense coverage, nationwide.
Control of client experience	FSP has more control, but also total responsibility.	No control (for FSP) and no real responsibility. Vulnerable to whims of third-party agent network owner (MNO).
Client "ownership" (branding), and market differentiation	FSP has primary ownership, easier to differentiate some value add to clients (and to achieve relationship stickiness).	No ownership (for FSP), harder to differentiate FSP's value add to clients (relationship stickiness may be elusive).

Of course, another model is the use of non-exclusive agents, which may have branding and contractual relationships directly with the FSP, at least partially, which makes them "proprietary". The lack of exclusivity, however, limits the proprietary nature to that extent. Recent evidence from UNCDF research in Senegal indicates that non-exclusive agents are more profitable, which builds a case for sustainability of the agent model.[45] The business model implications for the FSP's business, however, are not yet clear: on the one hand, the burden of enabling the agent to sustainably operate as an agent is shared with other FSPs, but the benefit of offering convenience as a competitive edge versus other FSPs is naturally limited to this extent. Under such circumstances, the FSP must "win" on not only convenience but also other favorable aspects of the proposition, such as product design, marketing, or other service quality.

SPOTLIGHT 5

UGAFODE AND ITS USE OF NON-PROPRIETARY AGENTS

UGAFODE, a Ugandan MFI licensed to take deposits, is part of the Foundation-supported UNCDF MicroLead program. As of late 2015, Ugandan regulators had not allowed FSPs to develop proprietary agent networks (a recent bill reversed this restriction). In an effort to expand savings sustainably, UGAFODE has pursued a non-proprietary agent strategy. It leverages the existing agent networks of two MNOs (so UGAFODE's clients can do cash in/out through such networks), and links to them electronically via mobile money, either via its own mobile banking platform, accessed via USSD short code, or indirectly from the MNOs' menus.

According to Nathan Barigye, UGAFODE's Business Growth and Development Manager: *Agents help us to grow the deposit portfolio, solving the access issue. People were not trusting formal financial institutions and UGAFODE because of our lack of physical presence in their areas. MNO agents make it cheaper for clients to save, compared to traveling to a branch. Limited access typically leads to dormant accounts, and these dormant accounts get eaten away by service charges.*

45. UNCDF's Mobile Money for the Poor (MM4P), *Building on agents' optimism to advance digital financial services in Senegal*, ANA Research Senegal Country Report, 2016.

SPOTLIGHT 6

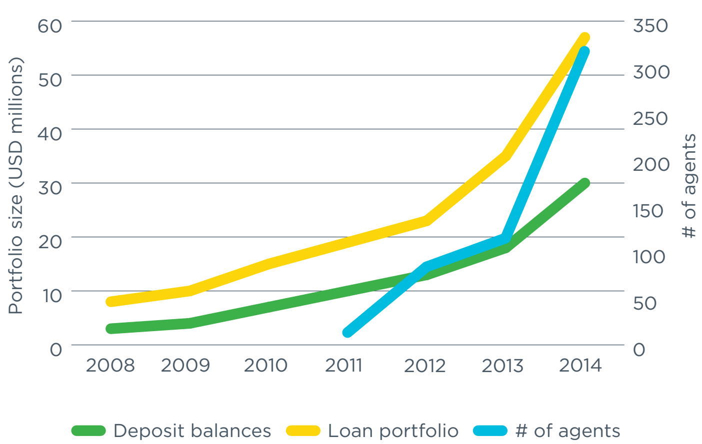
FINCA DRC DEPLOYS AGENTS TO SUPPORT DRAMATIC GROWTH AND LOWER COSTS

FINCA DRC is a compelling ADC scale-up story. FINCA was an aggressive first-mover into the agent banking space in the DRC. Thanks to solid execution in that context (including rollout of 500+ proprietary agents from 2012-2016, leading to 15 times greater geographic coverage than with branches alone), it has enjoyed strong uptake and usage of the channel, and strong overall growth in its number of clients and balance sheet. Currently, almost 60% of all transactions go through agents. Although FINCA DRC's balance sheet was already growing prior to ADC introduction and, as shown below, the balance sheet growth rate stayed roughly the same in the first year or so of agent scale-up, the balance sheet growth accelerated significantly as agents scaled up.

Along with the benefits of successful ADC rollout come challenges and risks. An important challenge is the sustainability of the transaction processing model. FINCA calculates the agent *unit cost per transaction* is two-thirds that of the branch, therefore all the transaction activity is processed relatively efficiently. The costs, however, are still significant. FINCA has elected not to charge clients for transactions, instead hoping to cover the costs through balance sheet growth.

Nonetheless, FINCA wants to find ways to cover the agent cost structure better and is exploring agent incentive mechanisms, including the idea of expanding the services that agents offer (e.g., payments and other transfers). This will not only expand revenue sources but also relieve pressure on deposit and withdrawal activity to cover all agent costs.

Scaling up at FINCA DRC



2.4 Risk Management

FSPs are grappling with the issue of new and increased risks from ADCs for both the institution and its clients. The Foundation partnership with IFC began to explore the relationship between ADCs and risk management and found that there is significant lack of knowledge within the industry on how to manage ADC-related risks and what tools to use to identify and assess them. IFC notes that in the world of digital financial services, we speak of "unknown unknowns."[46] All risks have yet to be identified and are likely to continue to evolve rapidly. Solutions are emerging but still need to be mainstreamed across financial and non-financial services providers.

Some FSPs, however, are proactively addressing risks. As previously mentioned, FINCA was experiencing high levels of failed transactions in its ADCs in Tanzania and Zambia. It implemented a detailed regular report that identified the specific reasons for failure. Because of this new reporting tool, the number of failed transactions in Tanzania dramatically decreased, coinciding with an increase in the share of transactions occurring at agents from 37% to 61%. More generally FINCA has proactively identified risk areas and mitigation strategies to address technological, operational, fraud, strategic, and other risks (See Spotlight 7).

This section has discussed the various facets of ADC implementation from the provider's perspective. Financial considerations alone raise many areas to explore, including investment, managing costs, and pricing strategies. In addition, providers need to make strategic decisions about agent network development, change management, and risk management. In a rapidly changing context, strategies and approaches are continually monitored and adapted to meet market competition and technology trends. FSPs have learned that this is a complex, expensive, and transformative journey, but there is no choice: they must adapt in order to stay relevant in a changing world.

The following section examines the regulatory contexts in which FSPs work and how the enabling environment has supported or hindered progress. It also focuses on how Foundation partners have leveraged learning products and platforms in local markets, with local regulators, and facilitated knowledge exchanges among regulators.

46. IFC-Foundation, Risk Management Workshop Back to Office Notes.

Photo courtesy of CGAP Photo Library

SPOTLIGHT 7

RISK MANAGEMENT AT FINCA DRC

FINCA proactively addresses risks and technical challenges. Through its experience, FINCA DRC has identified six key risks for their ADCs[47]: Strategic, Political, Technological, Operational, Fraud, and Reputational. FINCA has adopted risk management strategies to respond to and pre-empt such risks. The ADC-specific lessons learned are:

1. **Minimize connectivity issues**: To enhance agent uptime (connectivity to the core banking system and, thus, business continuity), FINCA works with three MNOs, each with clear and enforceable service level agreements. All agents get at least two SIM cards for the POS.

2. **Ensure SMS notification reliability**: Improving consistency of SMS notifications of transactions.

3. **Automate reconciliation processes**: Reconciliation processes were previously done manually. Now, they are automated to prevent backlogs, save time, and reduce human error.

4. **Extend operating hours of call centre**: FINCA extended and strengthened call centre operations and established a critical path to resolving issues in a short period of time.

5. **Mitigate withdrawal/deposit fraud**: To mitigate frequent occurrences of agents defrauding clients, FINCA has implemented red flag reporting procedures. The most effective fraud mitigation has been by educating clients on account sign up and through posters at agent outlets. Agent selection and monitoring is another key step.

6. **Preempt regulatory changes**: In order to preempt and prepare for possible regulatory changes, FINCA maintains a close relationship with the central bank.

7. **Formalize risk management**: In order to sufficiently identify, evaluate, and assess risks, FINCA has formalized its risk management unit and separated Internal Controls and Compliance.

47. IFC Risk Management Workshop, FINCA DRC Risk Case Study.

3. HOW DOES LEARNING AND ENGAGEMENT INFLUENCE PROVIDERS AND REGULATORS?

In addition to effective strategy development, leadership, and execution by FSPs, the success of ADCs depends on an enabling environment with healthy competition and effective policy and regulatory frameworks. Such an environment typically has a reasonably open and level playing field that fosters competition and innovation around the value propositions of banks and non-bank providers. It attracts investments and allows providers to focus on refining operations and prudently promoting client adoption.[48]

Learning through the implementation process, from the experience of others, and from knowledge generated and shared through a community of practice are powerful means to strengthen FSP capacity when implementing a channel strategy. First and foremost, a channel strategy or a digital strategy cannot be developed in isolation from an overall business strategy. Traditional business models and strategies are transformed with channel strategies that cut across customer segments and financial products.

Second, most channel implementation is highly contextual based on a country's market and regulatory context that dictates the approach and choices of a provider. Risk management and change management are part of a channel implementation strategy. Finally, strong leadership and execution capacity from strategic and operational teams in an organization are essential requirements for success, irrespective of the country context.

The lessons in this section highlight contextual learning in the implementation of ADCs. Many countries, such as Kenya and Tanzania, have enabled some ADCs to take shape, while others still face ineffective policies and cumbersome regulatory barriers. Such barriers constrain the development of ADC strategies and hold back the expansion of financial inclusion. The Foundation's partners have had mixed experiences with regulatory and other ecosystem challenges. Their lessons reveal helpful insights to navigate complex ecosystems and help ensure the success of ADCs.

3.1 Lessons for Financial Service Providers

Conduct *ex-ante* regulatory scoping. Crucially, FSPs should assess regulatory obligations before deciding whether to deploy ADC strategies. Failing to do so would likely cause delays and other difficulties, such as failing to obtain the necessary licenses from the regulator. In countries where regulation may be non-existent or unclear, however, FSPs may opt to go ahead with ADC deployments and engage with regulators at a later stage. They would, thus, benefit from early mover advantage and provide incentives for regulatory and standard setting bodies to create adequate policies sooner than later. FINCA played the role of first mover in DRC and was sufficiently enabled by the regulatory environment to thrive.

In this context, two regulatory issues are particularly important for FSPs to consider: (i) permission to use agents (non-bank staff) for the delivery of financial services, and (ii) permission for non-banks, such as MNOs, to issue electronic money without being subject to the full range of prudential regulations applied to banks. Several of UNCDF MicroLead's partners have struggled with their rollout of agent networks due to regulatory challenges. CRDB in Burundi, for example, was initially prohibited from having agents open accounts in the field, a common restriction in many countries. It has been working with the central bank of Burundi to obtain this right for its agents and to enable transactions via mobile phones.

Engage central banks. In markets where regulators are unfamiliar with mobile money or agency banking, FSPs have successfully engaged regulators by communicating their plans and clarifying the potential of ADCs. An open dialogue and consultative process between the regulator and the private sector can go a long way in establishing a thriving environment for ADCs. Microcred, in both Senegal and Madagascar, has worked directly with central banks on agent banking experimentation, in spite of occasional delays. Although operations in Madagascar were delayed, Microcred believes that it has earned the respect and confidence of the central bank for its prudent experimentation style and prioritization of lessons learned. Additionally, many of the UNCDF MicroLead partners held consultations with regulatory authorities, whose endorsement was often essential to the rollout of the project.

48. Simone Di Castri, GSMA, *Mobile Money: Enabling regulatory solutions*, 2013.

Gain a clear picture of the market to define competitive edge. A solid understanding of consumer preferences, products on offer, pricing norms, and other key market realities can help identify market gaps to be addressed through an ADC strategy. In DRC, for example, where there were essentially no ADCs implemented at the time, FINCA conducted thorough market research and succeeded in creating a sustained leading market position. In other markets, FSPs started by promoting a non-proprietary agent model. They then moved to focus on building up a proprietary network, often because they sought more control in terms of the client relationship and related quality control (e.g. FINCA Tanzania, Access Bank Tanzania).

Promote the involvement of other stakeholders that can influence policy changes and cross-learning opportunities. UNCDF obtained good results by involving stakeholders that could influence policy changes to favor ADCs. For example, UNCDF organized regional workshops with a distinct intention to influence policy change in Rwanda, Uganda, and Tanzania, together with the FSPs, to share lessons learned around regulatory barriers. NBS Malawi has worked hard to obtain the strong endorsement of their Pafupi product by the Finance Minister which Pafupi has now received formal approval from the Reserve Bank of Malawi. In Rwanda, WOCCU is proactively coordinating with various government agencies to finalize the model for consolidating savings cooperatives across the country and advocate for the formation of a national level cooperative bank.

Additionally, UNCDF has been successful in promoting cross-learning in its two programs, MM4P and MicroLead. Annual workshops bring all partners together. In 2014, MicroLead invited the governor of the Bank of Burundi on an MM4P-organized field visit to Tanzania for policy makers interested in branchless banking. This provided the governor with important insight for putting forward regulations on agency banking in his country.

3.2 Lessons for Policy Makers

Generally, ADCs are a complex topic for regulators. Regulatory policies struggle to stay apace with a rapidly evolving environment. As with most regulatory dynamics, the challenge is to strike a reasonable balance between financial stability and the expansion of financial inclusion within a reasonable time frame. Lessons for policy makers include:

ADCs heighten risks for FSPs and consumers. Some existing risk mitigation tactics, such as Know Your Customer (KYC) requirements for anti-money laundering and countering the financing of terrorism (AML/CFT), are more acute in the context of low-income segments that lack full and formal identification – this creates risks but can lead to exclusion. The use of agents also heightens other risks, such as fraud or lack of pricing transparency.

Consider risk-based approaches for low-balance accounts. Adopting a risk-based approach means that countries, competent authorities, and financial institutions are expected to identify, assess, and understand the risks to which they are exposed and take measures commensurate to those risks in order to mitigate them effectively.[49] If ADCs are to achieve the promise of deepening financial inclusion, regulators must consider that the average mobile money client maintains a low account balance, conducts relatively small transactions, and, in many countries, lacks a permanent address and/or government-issued identification. Simplified KYC rules can be considered to permit alternative forms of client identification and verification for low-income and previously unbanked clients, at least for accounts under a certain threshold balance. Many regulators proactively confront agent issues and work with FSPs to determine how best to supervise them (e.g. selection criteria, training requirements), but it is important to strike a balance to avoid undue delays in agent rollout.

Regulation and policies that promote payment systems, interoperability, and interconnectivity are critical to the success of digital financial inclusion. Creating payment systems that allow clients to easily make payments across platforms and providers is key to driving usage. In this regard, government policy has a great role to play in influencing payment system architectures. Governments can benefit from creating the infrastructure necessary for effective interoperable payment systems. Such systems have the potential to improve tax collections and welfare benefit distributions, enforce adequate KYC/AML, expand national savings, and collect personal information on citizens.

49. FATF, *Guidance for A Risk-Based Approach The Banking Sector*, 2014, http://www.fatf-gafi.org/media/fatf/documents/reports/Risk-Based-Approach-Banking-Sector.pdf

REFLECTIONS AND CONSIDERATIONS

The Foundation's partners continue to harvest insights and useful lessons over the course of their innovations with ADCs. Yet, we are still in the early days of deployments and much remains to be learned. Technological advancements in the ADC space are enabling fast developments and discoveries, which will quickly outpace the collection of portfolio learnings. The Foundation recognizes this and will continue to consolidate and share evidence as it emerges.

The early lessons found in this report highlight important insights and cross-learning for the benefit of others. The Foundation sees promise for ADCs to help deliver good quality and relevant financial services to the underbanked in a sustainable way. It encourages its partners to take advantage of the growing body of knowledge, technical expertise and guidance from the experiences of others to adapt for local circumstances. Key findings include:

1. **Clients.** ADCs have strong potential to bring numerous benefits to clients, including a more convenient, more comfortable, and less expensive way to conduct financial transactions. There is strong evidence that this potential is being realized, which is exciting. Numerous barriers exist, however, for ADC uptake and usage. Learning to use new technologies effectively and independently can be challenging for many low-income clients. In addition, poorly designed user interfaces, unreliable networks, and other limitations contribute to limited use of financial products. Providers need to learn how to engage and retain ADC clients, and to design products to deliver maximum value to users. Additionally, FSPs need to better understand how to cost-effectively educate clients to use the channels, including how to protect consumers from the risks of transacting through ADCs, such as fraud and data privacy. More research on the actual impact of ADCs on clients' livelihoods is expected from these partners in coming years.

2. **Institutions.** The Foundation's FSP partners have been working to establish robust data collection and in-depth business case analyses to validate the faith in ADCs to improve the bottom line. More evidence from data-driven experiments is expected in the years to come from these partners. The core challenges for FSPs lie in the need to understand and address client preferences, carefully manage change when deploying ADCs, assess financial implications, determine the right approaches in terms of pricing and agent network management, and identify and mitigate the new risks of ADCs.

3. **Ecosystem.** An enabling environment for ADCs helps ensure that ADCs bring value to the client, make commercial sense for providers, and allow regulators to identify risks and supervise their mitigation.[50] As we have noted, much progress has been enabled. Some lessons are emerging on the role of central banks to develop enabling policies. Ecosystems and regulatory frameworks are country specific but there is growing awareness of enabling factors for alternative delivery channels.[51] Further research, however, should focus on understanding all 'enabling' factors for ADCs, how to level the playing field for different actors, and how to protect users' interests, while making ADCs commercially viable for FSPs. Policy makers, regulators, and providers can benefit from sharing ideas and intelligence on evolving practices across countries. There is, thus, a tremendous opportunity to promote peer-learning initiatives and encourage cross-fertilization of knowledge.

The Foundation continues to support its ADC partners to achieve the client, institutional, and ecosystem objectives discussed in this report. In the coming years, the Foundation expects to continue to gather, consolidate, and share important lessons, to enrich the learning agenda for the benefit of all stakeholders in this space, and particularly to demonstrate real value to the clients that providers serve.

50. CGAP, Branchless Banking Country Notes, 2012.
51. See CGAP principles on "good guidelines/context" to be in place for ADCs, https://www.cgap.org/sites/default/files/CGAP-Branchless-Banking-Diagnostic-Template-Feb-2010.pdf

APPENDICES: FURTHER READING

Appendix I: MasterCard Foundation Partner Publications

#	Title	Author	Year	Level
1	FINCA: Expanding Access to Finance through Mobile Payments	FINCA	2015	Institution
2	Partnerships in Mobile Financial Services – Factors for Success	IFC, Flaming, Mitha, etal	2013	Institution
3	Challenging Markets Reports – 6 country assessments	IFC	2013	Ecosystem
4	Greenfield MFIs in SSA: A Business Model for Advancing Access to Finance	IFC, Earne, Jansson, etal	2014	Institution
5	Field Note #3 Who are the Microfinance Clients? A Case Study on Customer Segmentation and Product Development	IFC	2014	Client
6	Field Note #4 Find the Gap: Can Big Data Help to Increase Digital Financial Services Adoption?	IFC	2014	Institution
7	MFIs and MFS Channel Case Studies	IFC, Flaming, Mudiri	2014	Institution
8	In the Fast Lane: Innovation in Digital Financial Services	IFC, Parada, Bull	2014	Institution
9	Field Note #2 Greenfield Microfinance in Africa: Benchmarking Quality, Growth and Outreach	IFC	2014	Ecosystem
10	Alternative Delivery and Technology Channels Handbook	IFC, Software Group	2015	Institution
11	The Mobile Banking Customer that Isn't: Drivers of Digital Financial Services Inactivity in Cote d'Ivoire	IFC, Lonie, Martinez, etal	2015	Institution
12	Field Note #5 Women make the Best DFS Agents: How FI ADC Agents perform in Emerging Markets	IFC	2016	Institution
13	Partnership for Financial Inclusion: Evaluation and Learning Strategic Overview	IFC	2015	Client
14	Opportunities for DFS in Cocoa Value Chain in Cote d'Ivoire: Insights from new Data	IFC, Lonie, Martinez, etal	2016	Institution
15	Digital Financial Services and Risk Management	IFC, Denyes, Lonie	2016	Institution
16	Field Note #6 Breaking free of the Branch: Microfinance Institutions and Alternate Delivery Channels in Sub-Saharan Africa	IFC	2016	Institution
17	A Successful South-South Technical Partnership	UNCDF MicroLead	2014	Institution
18	Equity Bank's Agent-Driven Model	UNCDF MicroLead	2014	Institution
19	Integrating People and Technology	UNCDF MicroLead	2015	Institution
20	BRAC'S Experience in Three Postconflict Countries in Africa	UNCDF MicroLead	2015	Institution
21	Mid-term Evaluation: MicroLead Expansion Programme	UNCDF MicroLead	2015	Institution
22	MicroLead Webinar #6, Partners Sharing Experiences, Building a Foundation for Growth: Practical Tools for Managing Agents	UNCDF MicroLead	2015	Client
23	Savings Pilot Assessment Report, UGAFODE, Uganda	UNCDF MicroLead, ENCLUDE	2015	Client
24	Building on agents' optimism to advance digital financial services in Senegal	UNCDF MM4P	2016	Institution
25	How to Succeed in Your Digital Journey: Toolkit #1 Use Mobile as a Tool	UNCDF MicroLead, PHB Development	2016	Institution
26	How to Succeed in Your Digital Journey: Toolkit #1 Use Mobile as a Tool. Part 2: Case Study	UNCDF MicroLead, PHB Development	2016	Institution

Appendix II: Other Publications

#	Title	Author	Year	Level
1	The Digital Discruptors: How Banking got Agile	Accenture	2014	Institution
2	The Role of Core in Digital Adoption	Accenture	2015	Institution
3	The Everyday Bank: A New Vision for the Digital Age	Accenture	2015	Institution
4	Seeking Sustainable Change in Africa's Financial Systems	Accenture, FSDA	2015	Institution
5	The Business of Financial Inclusion: Insights from Banks in Emerging Markets	ACCION Center for Financial Inclusion	2016	Institution
6	Emerging Themes in Responsible Digital Finance	ACCION SMART Campaign, Rizzi	2014	Client
7	Potential risks to clients when using Digital Financial Services	ACCION SMART Campaign, Arenaza	2015	Client
8	Insight #27: Accelerating Financial Inclusion through Innovative Channels	ACCION Channels and Technology, Saxena	2009	Institution
9	Digital Field Applications: Consolidated Case Studies	ACCION Channels and Technology, Software Group	2015	Institution
10	Digital Field Applications: Musoni Case Study (Kenya)	ACCION Channels and Technology, Software Group	2015	Institution
11	Digital Field Applications: Ujjivan Case Study (India)	ACCION Channels and Technology, Software Group	2015	Institution
12	Digital Field Applications: Opportunity Bank Case Study (Serbia)	ACCION Channels and Technology, Software Group	2015	Institution
13	Do Agents Improve Financial Inclusion? Evidence from a National Survey in Brazil	Bankable Frontier Associates, Sanford	2013	Institution
14	GAFIS Focus Note 3: The impact of gateway dynamics on the business case for small balance savings	Bankable Frontier Associates, GAFIS	2012	Institution
15	Big Banks & Small Savers: A new path to profitability (GAFIS Project Report)	Bankable Frontier Associates, GAFIS	2013	Institution
16	GAFIS Focus Note 4: Agents and cash merchant channels begin to deliver useful savings products	Bankable Frontier Associates, GAFIS	2013	Institution
17	Introducing Mobile Money in Rural Mozambique: Evidence from a Randomized Field Experiment	Batista & Vicente	2012	Client
18	Extending Access to the Formal Financial System: The Banking Correspondent Business Model	BBVA, Camara, etal	2015	Institution
19	Responsible Digital Payments Guidelines	Better Than Cash Alliance	2016	Ecosystem
20	Promises and Pitfalls of Mobile Money in Afghanistan: Evidence from a Randomized Control Trial	Blumenstock, etal	2015	Client
21	Retail Banking: Winning Strategies and Business Models Revisited	Boston Consulting Group, Leichtfuss, etal	2010	Institution
22	Customer-Centricity in Retail Banking	Boston Consulting Group, Maguire, etal	2012	Client
23	Customer-centricity in financial services goes digital	Boston Consulting Group, Dreischmeier, etal	2013	Client
24	Global Payments 2015: Listening to the Customer's Voice	Boston Consulting Group, Dab, etal	2015	Client
25	Banking Through Networks of Retail Agents	CGAP, Mas & Siedek	2008	Institution

#	Title	Author	Year	Level
26	Is there a business case for small savers? (Occasional Paper No 18)	CGAP, Westley & Palomas	2010	Institution
27	Microfinance and Mobile Banking: The Story So Far	CGAP, Kumar, etal	2010	Institution
28	Branchless Banking Survey	CGAP, Dermish, etal	2011	Ecosystem
29	Bank Agents: Risk Management, Mitigation, and Supervision	CGAP, Lauer, etal	2011	Ecosystem
30	Regulating Banking Agents	CGAP, Tarazi & Breloff	2011	Ecosystem
31	Agent Management Toolkit	CGAP, Flaming, etal	2011	Institution
32	Understanding the Business Case for Banks in Branchless Banking	CGAP	2012	Institution
33	Incentives for the Introduction of Agents in Colombia	CGAP, Marulanda Consultores	2013	Institution
34	Balancing Regulatory Uncertainty in Branchless Banking Design	CGAP, Staschen & Dermish	2014	Ecosystem
35	Papayas and Digital Finance	CGAP, Ahmed & Gomez	2014	Client
36	Five Bright Ideas for Responsible Digital Finance	CGAP, McKee	2014	Client
37	Digital Financial Inclusion: Implications for Customers, Regulators, Supervisors and Standard Setting Bodies	CGAP	2015	Ecosystem
38	Driving Scale and Density of Agent Networks in Peru	CGAP, Faz, Arabehety	2015	Institution
39	Going Mobile with Conditional Cash Transfers	CGAP, Marulanda Consultores	2015	Institution
40	Supervision of Banks and Nonbanks Operating through Agents	CGAP, Dias, etal	2015	Ecosystem
41	Recourse in Digital Financial Services: Opportunities for Innovation	CGAP, Mazer & Garg	2015	Client
42	Juntos Finanzas, A Case Study	CGAP, Valenzuela, etal	2015	Institution
43	Ghana: DFS Taking Off Amid New Regulations and Market Momentum	CGAP, Zetterli	2015	Ecosystem
44	Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks	CGAP, McKee, etal	2015	Client
45	Competition in Mobile Financial Services: Lessons from Kenya & Tanzania	CGAP, Mazer, Rowan	2016	Ecosystem
46	Interactive SMS Drives Digital Savings and Borrowing in Tanzania	CGAP, Mazer	2016	Client
47	Agents for Everyone: Removing Agent Exclusivity in Kenya & Uganda	CGAP, Mazer, etal	2016	Ecosystem
48	Portfolios of the Poor: How the world's poor live on $2 a day	Collins, etal	2009	Client
49	Building, Incentivizing and Managing a Network of Mobile Money Agents: A Handbook for Mobile Network Operators	GSMA, Davidson & Leishman	2011	Institution
50	New Business Models: Innovation in Practice	GSMA	2012	Institution
51	Driving Customer Usage of Mobile Money for the Unbanked	GSMA, Davidson & McCarty	2012	Client
52	Mobile Money: Enabling regulatory solutions	GSMA: Di Castri	2013	Ecosystem
53	Mobile money profitability: A digital ecosystem to drive healthy margins	GSMA, Almazan & Vonthron	2014	Ecosystem
54	Success Factors for Success of Mobile Money Services	GSMA, Naghavi, etal	2016	Ecosystem
55	Policy Brief: Impacts of Unconditional Cash Transfers	Haushofer, Shapiro	2013	Client

#	Title	Author	Year	Level
56	Agent Network Accelerator Survey: Kenya Country Report	Helix Institute of Digital Finance	2013	Ecosystem
57	Agent Network Accelerator Survey: Tanzania Country Report	Helix Institute of Digital Finance	2013	Ecosystem
58	Agent Network Accelerator Survey: Uganda Country Report	Helix Institute of Digital Finance	2013	Ecosystem
59	Agent Network Accelerator Survey: Nigeria Country Report	Helix Institute of Digital Finance	2014	Ecosystem
60	Designing Successful Distribution Strategies for Digital Money	Helix Institute of Digital Finance, Mas & McCaffrey	2015	Institution
61	IBM Optimizing Distribution Channels: The Next Generation of Value Creation	IBM	2002	Institution
62	Mobile Financial Services and MFIs:	IFC Mobile Money Toolkit, Biallas, etal	2014	Institution
63	Mobile Financial Services and MFIs: mBank in the Philippines	IFC Mobile Money Toolkit	2014	Institution
64	Mobile Financial Services and MFIs: Case Study of Easypaisa and Tameer in Pakistan	IFC Mobile Money Toolkit	2014	Institution
65	Mobile Financial Services and MFIs: Caja Sullana in Peru	IFC Mobile Money Toolkit	2014	Institution
66	Mobile Financial Services and MFIs: Musoni in Kenya	IFC Mobile Money Toolkit	2014	Institution
67	Achieving Scale and Efficiency in Microinsurance Through Retail and Banking Correspondents	ILO Impact Insurance Facility, Leach, etal	2014	Institution
68	Business Correspondent Model vis-à-vis Financial Inclusion in India: New Practice of Banking to the Poor	International Journal of Scientific and Research Publications, Kolluju	2014	Institution
69	Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution	Jack, Suri	2014	Client
70	Getting to the Top of Mind: How Reminders Increase Saving	Karlan, etal	2014	Client
71	Research and Impacts of Digital Financial Services	Karlen, etal	2016	Client, Ecosystem
72	Text-Free User Interfaces for Illiterate and Semiliterate Users	Medhi, etal	2008	Client
73	"The Right Touch" – Reducing Distribution Costs in Alternative Channels for Microinsurance	MicroInsurance Centre, Poulton & Magnoni	2014	Institution
74	Lessons from the Costing Study on BC Network	MicroSave, Balani, etal	2015	Institution
75	Business Correspondents Model in Bihar: Constraints and Way Forward	MicroSave, SIDBI	2014	Institution
76	Building Viable Agent Models	MicroSave	2013	Institution
77	Are Mobile Money Wallets Really Customer-Centric?	MicroSave, Bhat & Saini	2016	Client
78	Predictions for Regulators of Digital Financial Services	MicroSave, Cracknell	2016	Ecosystem
79	How Do Innovative Banking Channels Reduce Costs in Downscaling?	Savings and Development, Haas	2015	Institution
80	Withdrawal from Correspondent Banking: Where, Why, and What to Do About It?	World Bank Group: Finance and Markets Global Practice	2015	Institution
81	The Global Findex Database 2014: Measuring Financial Inclusion Around the World	World Bank Group, Demirguc-Kunt, etal	2015	Client

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The authors would like to acknowledge the Financial Inclusion team from The MasterCard Foundation in portfolio review and research for this publication, particularly **Justice Durland** and **Ruth Dueck-Mbeba**.

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