MEASURING THE PERFORMANCE

OF ALTERNATIVE DELIVERY CHANNELS

ACKNOWLEDGMENTS

MIX has carried out this research thanks to the generous support of The MasterCard Foundation and the additional collaboration of IFC's Partnership for Financial Inclusion and UNCDF's MicroLead program.

The authors wish to thank all the people at financial service providers who graciously shared their thoughts, experiences and results from their respective alternative delivery channels work. In particular, the authors are grateful to the many institutions in Ghana, Tanzania and Uganda that opened their doors, made their teams available, and shared their systems and files to help ground the research in their practical experiences. MIX owes an intellectual debt to the Bankable Frontier Associates team that first piloted a dashboard for ADC monitoaring and to PHB Development for providing critical feedback on the reporting standards presented here. Organizations interviewed for this project are listed in Annex VII.4.

A special thank you goes to the ADC managers and reporting officers of the 16 institutions included in this pilot analysis for their efforts in collecting, checking and explaining ADC data. We are confident that the standards and market data arising from this work will provide more value and save more time in the future than it has cost for this project.

Finally, the authors are grateful to Ruth Dueck-Mbeba at The MasterCard Foundation, Lesley Denyes at IFC, and Jeff Abrams at Bankable Frontier Associates for their invaluable inputs on the findings from this research, and to Nikhil Gehani at MIX for his careful review to make this research an easy-to-read reference. Any errors or omissions are solely those of the authors.

Photo Credit:
Antoine Navarro, MIX
Fiona Graham, WorldRemit
Rachel Hinman, Rosenfeld Media

Antoine Navarro, Blaine Stephens
MIX, March 2017

INDEX

ACRONYMS

ADC	Alternative Delivery Channel
ATM	Automated Teller Machine
B2W	Bank to Wallet
CICO	Cash-in/Cash-out
FSP	Financial Service Provider
MIS	Management Information System
MNO	Mobile Network Operator
POS	Point of Sale
PIN	Personal Identification Number
W2B	Wallet to Bank

I. EXECUTIVE SUMMARY

Financial service providers (FSPs) are deploying various alternative delivery channels (ADCs) to serve their clients outside of branches, often enabled by technology and digitization of the service. FSPs are developing metrics and dashboards to monitor the development of these new channels and to track them against operational and strategic goals. However, FSPs still need visibility onto the rest of the market.

Understanding this need, MIX embarked on research to design ADC performance metrics and benchmarks to enable FSPs to assess their performance against other market actors. With support from The MasterCard Foundation, IFC and UNCDF, MIX was able to interview, visit and collect data from partner FSPs in sub-Saharan Africa. This research builds on the extensive work on ADC metrics conducted by Bankable Frontier Associates in collaboration with The MasterCard Foundation.

In the absence of standard definitions, collecting data across a sample of various institutions types represented a significant challenge and an equally significant achievement. The analysis of this data serves the dual purpose of testing the relevance and usefulness of ADC performance indicators and encouraging market players to adopt ADC reporting standards.

A sample of the key findings:

- **A significant share of transactions is performed at ADCs.** This supports the hypothesis that ADCs contribute to improved client convenience. ADCs accounted for anywhere between 10 and 70 percent of an institution's transactions.
- **Transactions at ADCs are performed by clients who are more active than average.** The question remains whether channels foster increased usage, whether channels only attract transactions formerly performed at branches, or whether ADC users were already more active users at branches.
- **Clients carry out much smaller transactions at ADCs.** It is likely that the lower opportunity cost of using ADCs makes it worthwhile for clients to perform smaller transactions, enabling new behaviors through improved client convenience.
- **Outside of agents, clients enrolled in ADCs rarely exceed 20 percent.** That number drops when considering whether the client is active or inactive. Roving staff register less than half of enrolled clients as active, surprising for a doorstep service. For ATMs and mobile, active enrolled clients falls below 10 percent.
- **Assessing deposit mobilization is made difficult by the multiplicity of channels.** Account balances are the net result of a client's behavior across all channels, making it difficult to assess whether an increase in cash deposits at agents or roving staff, for example, results in a consistent, stable increase.
- **Transactions that remain at branches have specificities of their own that should be considered in an FSP's service point mix.** The value of transactions per service point per month is 30 to 60 times greater at branches. Displacing client transactions at branches, then, implies significant assumptions on client behavior, such as a willingness to perform large transactions outside of branches.

The findings from this research highlight the demand for standard metrics to guide decision making on ADCs in a changing environment. The research also indicates that FSPs must begin by updating their reporting systems and dashboards to track these metrics. Doing so will allow them to analyze ADC performance within their institutions and also to contribute their data to create visibility onto the overall market.

II. INTRODUCTION: THE NEED FOR ADC PERFORMANCE METRICS

Financial services providers (FSPs) focused on the unbanked have made great strides in expanding access to financial services. For the last decade, credit providers have grown their client base by 20 percent annually[1] and the access to basic bank accounts has grown by 20 percent in less half that time[2], now reaching an estimated 62 percent of adults globally. To help them overcome the remaining obstacles to universal access, many FSPs look to technology to enable new means of distributing financial services. Key to these financial inclusion outcomes is the development of alternative delivery channels (ADCs) outside the traditional branch.

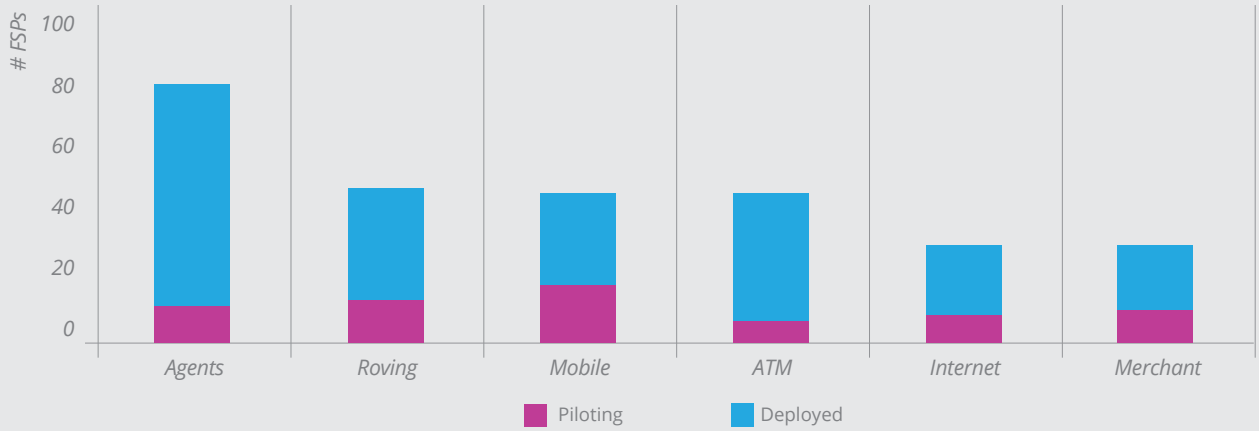
Financial service providers present on MIX Market confirm this trend. In a recent MIX survey[3], just over **60 percent of FSPs stated that they were already delivering services to customers through channels outside the branch.** With the exception of MENA, the majority of FSPs in all regions reported having already begun developing ADCs. Among those channels, agents were cited the most frequently by FSPs, at over 70 percent of FSPs with ADCs. While agents are the most commonly deployed alternative channel today, FSPs also reported that 55 percent of their channel experiments and future plans involve either mobile phones or internet (including smartphone apps), indicating a potential shift ahead in alternative channel deployment. However this landscape shifts, it is clear that FSPs are looking outside their branches to service their clients.

Key to these financial inclusion outcomes is the development of alternative delivery channels (ADCs) outside the traditional branch.

Figure 1: FSPs deploying ADCs

1 See among others, Gonzalez, Adrian, "Defining responsible financial performance: how to think about growth", MicroBanking Bulletin, MIX, May 2011.
2 Demigurc-Kunt, Asla, Leora Klapper, Dorothe Singer, Peter van Oudheusden, "The Global Findex Database 2014: Measuring Financial Inclusion around the World", Policy Research Working Paper 7255, World Bank, April 2015.
3 MIX online survey of 217 FSPs, January – February 2017.

Figure 2: Channels launched and piloted by FSPs



The majority of FSPs managers, then, are currently facing the question not of whether to develop channels outside their branches, but of which channels to deploy, when and how to deploy them. As managers build ADC project plans and teams, they will set goals for these channel developments and determine key metrics that will help them measure and track progress towards these goals. In doing so, they may look to global studies on mobile money deployment[4] and to detailed research on agent network development[5] available in a few markets to understand the dynamics and potential targets for their alternative delivery channel deployments. Yet, in this quickly evolving ecosystem, the available reference points may be insufficiently detailed to apply to specific FSPs in a given market or with a given operational model and may not reflect the latest market developments. Just as important, these external reference points may not be readily usable by the FSP if its own monitoring framework differs from the data in those studies.

As managers build ADC project plans and teams, they will set goals for these channel developments and determine key metrics that will help them measure and track progress towards these goals.

MIX embarked on a project in 2016 (described in **Box 1**) to address the need for a consistent framework and comparable data to help FSPs measure and track their ADC deployments. The research built on work begun by Bankable Frontier Associates to develop and pilot a common ADC dashboard with The MasterCard Foundation partners as early as 2014. This project sought to tackle the dual challenges of **creating common metrics** for ADC performance analysis by building on MIX's existing repository of common reporting standards and of **developing initial benchmarks** to extend the existing range of intelligence and analysis available on MIX Market. By building this framework and the benchmarks into MIX's existing MIX Market platform and products, FSPs and other market actors will have a common reference point for ADC performance measurement and, as the fact set grows, be able to integrate that data with other financial, operational and social performance information from MIX Market to deepen their analysis.

FSPs and other market actors will have a common reference point for ADC performance measurement.

4 GSMA's Mobile Money program produces annual State of the Industry Reports on mobile money.
5 Helix Institute's Agent Network Accelerator reports provide analysis of agent networks and performance in a number of markets.

BOX 1: ADC METRICS RESEARCH METHODOLOGY

In partnership with The MasterCard Foundation, IFC's Partnership for Financial Inclusion program, and UNCDF's MicroLead program, MIX identified FSPs[6] in sub-Saharan Africa deploying alternative delivery channels and invited them to participate in this research effort through interviews and data reports on their ADC deployments. A total of 26 FSPs were interviewed in order to understand their strategic goals for ADC deployment, ADC operating models, and information needs related to ADC operational and strategic management. MIX carried out country visits in Ghana, Tanzania, and Uganda and met with a subset (15) of these FSPs in order to understand each FSP's operational management of the channels, overall reporting systems and ability to track and report on key metrics. MIX also collected data on ADCs from 16 participating FSPs.

In parallel to the FSP research, MIX developed a framework for developing common reporting standards and metrics for ADC performance analysis. This framework considered three basic steps and goals for metrics, that they (1) support decision-making, (2) be easily reported, and (3) be able to be benchmarked across various ADC deployments and models.

For the first goal, MIX reviewed existing reporting frameworks related to alternative delivery channels. Research drew on the extensive work of Bankable Frontier Associates in developing an initial ADC dashboard in collaboration with The MasterCard Foundation, as well as on the metrics used by GSMA's Mobile Money program for its annual State of the Industry Report. Interviews with FSPs and funders allowed MIX to identify existing metrics already deployed in on-going monitoring, as well as understand the types of goals that FSPs had in developing these new channels and that these metrics would need to help monitor. This catalogue of metrics and identification of ADC goals provided the 'ideal' set of metrics from which to start building reporting standards.

These metrics were then tested against FSP reporting capacity to identify the most feasible starting point for reporting standards. Interviews with FSPs and reviews of existing information flows identified a subset of the 'ideal' set of metrics that could serve as a starting point and would be reportable by a broad range of FSPs across various channel deployments. MIX created standard definitions for the metrics, such as 'active clients' or 'active agents' that were deemed reportable but were presented differently by each FSP. The resulting metrics were reviewed by the FSPs as well as by the MIX Gold Community of funders, networks and other stakeholders who manage their reporting through a common platform. The MIX Gold Community adopted the metrics in January 2017 for MIX to implement in MIX Market, its market intelligence products and reporting systems for use by funders and FSPs.

6 For a full list of FSPs participating in this project, see Appendix section VII.4

This report presents the findings from MIX's research process. FSPs have a relatively consistent set of goals for deploying alternative delivery channels - goals that help set the context for selecting appropriate metrics. While FSPs' current operational models and reporting systems may not allow all of them to achieve a complete view on progress towards these goals, MIX has identified a set of basic information that serves as the foundation for ADC reporting standards and metrics.

Data aggregated from this research paints a picture of a vibrant channels ecosystem, one that is enabling new transaction types as well as new financial behaviors with clients, such as more frequent access for much smaller transactions. This ecosystem, from some vantage points, is also reaching scale, with a third of transactions running over these new rails. Yet, from other perspectives, the abysmally low activity rates suggest that this activity is an artefact of an active minority rather than a shift in how the majority of clients interact with their FSPs. The following pages lay out a framework and then apply that framework to an initial data set to provide tools for FSPs and their funders to begin to fill in these key knowledge gaps on delivery channel performance.

MIX has identified a set of basic information that serves as the foundation for ADC reporting standards and metrics.

FSPs have a relatively consistent set of goals for deploying alternative delivery channels - goals that help set the context for selecting appropriate metrics.

III. WHAT ARE ALTERNATIVE DELIVERY CHANNELS

Alternative delivery channels (ADCs) encompass all the ways of serving customers outside of brick-and-mortar branches. ADCs combine various technological and operational arrangements, resulting in a diversity of designs. ADCs may work on POS devices, through mobile phones or tablets; they may use cards, biometrics or PINs; they may transact data in real time, via mobile or ethernet connections or work offline and sync when devices return to connectivity; they may deploy the FSP's own staff, recruit and contract agents, or work through partnerships with MNOs or other service providers. Each country's financial services ecosystem and regulatory regime will impact the range of operations legally allowed and technically feasible for ADCs. A channel typology that caters to all these factors is impractical and would not yield comparable data for benchmarks.

In reviewing how to group these various arrangements, MIX has selected the final customer transaction point as the defining principle for a channel. As a result, **ADCs can be viewed as the point of service for a transaction,** irrespective of the operational or technological arrangements that led to it. The channels are highlighted in **Box 2**.

BOX 2: MIX ALTERNATIVE DELIVERY CHANNELS

Agents: Individuals or businesses entitled to act on behalf of an FSP to perform certain financial or administrative transactions. They may have a direct contractual relationship with the FSP or may be contracted by a third party (super agent, aggregator) who maintains a service agreement with the FSP.

Roving staff / mobile branch: Units that serve customers outside the branch and in their place of residence or business. They may or may not be associated to a particular branch. Only staff or mobile units that manage deposits or handle account opening (other than loan origination) should be counted in this category.

ATMs: Machines with a fixed location that customers use to access services. They may be accessed through different identification means (card, PIN, biometrics) and used for different kinds of cash or non-cash based operations (deposits, withdrawals, but also transfers, account balance consultation, etc.). They may be proprietary ATMs or managed by third parties.

Mobile banking: Mobile services based on USSD or SMS communications that clients can access through their own device.

Internet: Internet-based banking services that clients can access through a personal device (smartphone app, website) using standard internet protocols.

Merchant POS: Networked merchant using a physical payment processing device located at the merchant's place of business (e.g., POS) to accept payment for sales (of its goods or services) from the FSP's customers using the customer's FSP identification means (card or other). The merchant could be acquired by the FSP, or simply part of a network enabling the merchant to process payments.

This customer-centric view is echoed in others' analysis of ADCs. IFC's *Alternative Delivery Channels and Technology Handbook*[7] provides a comprehensive mapping of ADCs defined as "the customer's access point to a FSP – who or what the customer interacts with in order to access the financial service or bank account", emphasizing that "technologies" cannot be equated with "channels". This analysis underscores that channels are not equated simply to the technology platform on which they are delivered. For example, agents and roving staff may both operate using mobile interfaces, or some roving staff at an FSP may use POS while others use mobile phones. This channel typology would maintain them as distinct based on the roving staff or agent interface. The technology neutrality is less obvious for channels such as mobile and ATMs, but **Box 3** suggests a channel typology where technology is not a distinctive feature from a customer experience perspective.

...channels are not equated simply to the technology platform on which they are delivered.

Another key distinction uncovered in the MIX research is between channels and products. This confusion arises for FSPs that have developed financial products that are unique to a given channel and its business model. For example, FSPs have developed small balance deposit products delivered through agents with a goal of reaching this mass market at lower costs. For MIX's channel definition, channels are not equated to products that may partially or fully overlap with them. For this reason, MIX's typology does not include e-wallets, a distinct financial product that a customer may interact with over different channels, such as cash-in/cash-out (CICO) at agents and transfers or payments on a mobile.

...channels are not equated to products that may partially or fully overlap with them.

7 O'Keefe, Geraldine, Charlene Bachman, and Omoneka Musa Oyier, Alternative Delivery Channels and Technology Handbook, IFC, 2015.

BOX 3: CUSTOMER EXPERIENCE AT ADCS

In defining ADCs as the touch point for customer transactions, it is useful to map ADCs by a few key components of the user experience. The table below presents these components as **cash** availability (does the channel allow the customer to transact in cash?), **assistance** for completing the transaction (is someone present to interact with the customer?), and **proximity** to the channel (is accessing the channel likely to require transportation?). These **key components of user experience may help us understand client adoption rates,** the gateway to client and channel activity.

	Cash	Assistance	Proximity
Roving staff	✔ *	✔	✔
Branch	✔	✔	✖
Agents	✔	✔	✖
Merchant POS	✖	✔	✖
ATM	✔ **	✖	✖
Mobile	✖	✖	✔
Internet	✖	✖	✔

*Usually cash-in only. **Usually cash-out only.

For the sake of simplicity, this typology is technology-neutral, and to some extent transaction-neutral as CICO transactions can be viewed as a simple conversion operation of physical money to digital value, separated from the purpose this money will later serve. Finally, it ignores less tangible aspects of the user motivation and experience such as reputation or interface design for device-based services.

Roving staff present the singularity of being a "push" channel, or the only staffed channel going to the client instead of having clients going to a service point. In this aspect where it only competes with mobile, roving staff remain the least time-consuming, with no time or opportunity cost to perform a cash transaction.

Agents are the channel most familiar to clients compared to branches, where they also perform transactions, in cash, with the assistance of an operator. In terms of convenience, transportation may be where agents differ, being closer to clients' homes or place of business, if they are indeed not already a place where clients shop.

Merchant POS is the only ADC that is restricted by transaction types (payments for goods or services of the merchant itself). As technologies and regulations evolve, the gap between agents and merchant POS might reduce, however there is currently a sufficiently common practice of rolling out merchant networks to justify enabling reporting for this channel.

Early performance results, to which we will return in Section V, indicate that staffed channels enjoy higher adoption, which may reflect positively on channels with assisted transactions (✔), although this is in no case a judgment or recommendation. Familiarity with assisted transactions from the branch experience may have a role to play in explaining these differences.

If transportation costs and fully digital interfaces[8] slow down adoption, **ATMs** would combine these two disadvantages. In particular, at early stages of ATM deployments, the machines may be located at the branches themselves, within a close range of tellers performing similar transactions, offering the opportunity to stick to old habits but also to 'skip the line'. Thanks to interoperability of ATM networks, ATMs may however offer clients the opportunity to perform transactions in many more places than their institution's branches.

In addition to merchant POS, **mobile and internet** are the only non-cash channels, although the full transaction journey may be preceded or followed by a cash transaction. Mobile and internet experiences are thus highly dependent on a country's digital finance ecosystem, determining the range of transactions possible. In the case of mobile, the ecosystem also determines the positioning of FSPs vis-à-vis MNOs when there is interoperability between FSP accounts and e-wallets. MIX looks at mobile activity through the FSP's lens. In the case where e-wallets coexist with FSP-led mobile channels, there is a possibility that we see limited mobile activity at FSPs. If MNOs offer similar or more developed payment functions than FSPs, clients may only channel funds to their FSP account for excess e-wallet funds or take advantage of FSPs rewarding deposit balances with interest. Internet, as a channel, leaves the door open to accessing services through devices other than a mobile, including personal computers, or shared computers in internet cafés. As mobile becomes the primary gateway of accessing internet and as smartphone penetration increases, it is possible that these two channels will soon converge.

8 In developed markets, the ATM's status as a non-assisted transaction is already changing. Bank of America launched ATMs with teleconferencing in test markets in the United States in early 2017. See Roberts, Deon, "Bank of America testing completely automated branches", Charlotte Observer, 7 February 2017.

IV. MONITORING STRATEGIC GOALS FOR ADCS

1. STRATEGIC GOALS

Interviews with FSPs touched on general concerns related to ADCs and changing market conditions with new technologies, new operators and new customer expectations. These factors either motivated a desire to be a first-mover or a concern that they had to act or lose their market position. **FSPs also revealed very specific and detailed motivations for developing ADCs (see Figure 3)**, ranging from client-centered concerns of convenience to operational and financial concerns of improving the FSP's bottom line.

These stated goals form the lens through which FSPs will judge success and to which other FSPs will look for confirmation as they develop the hypotheses for their own ADC deployments. **MIX views these goals as a key organizing principle for developing ADC performance metrics,** which will inform decision-making related to the fulfillment of these goals. Reducing costs was most frequently mentioned first by FSPs as a reason for launching ADCs. Nearly two decades of MIX Market data and analysis[9] on operating costs have highlighted the consistently high costs of high touch client service at the bottom of the pyramid compared to traditional banking (microcredit operating costs average 20 percent of average loan portfolio). **There is a sense among FSPs that the costs of basic transactions (deposits, withdrawals) will decrease as they are performed at agents or through mobile phones, and that transaction cost ratios will decrease in the long run as branches close or are repurposed for other tasks.** To support analysis of this goal, MIX considered metrics that allow FSPs to measure direct costs by channel and to understand drivers of cost, such as the productivity of the channel.

Many FSPs interviewed also focused on client-centric reasons for exploring ADCs. The sentiment cited by FSPs that "clients have to travel far" (geographic constraints) or "wait hours in the banking hall" (time constraints) recognizes deterrents of branch-based banking that may limit usefulness for current clients and impede outreach to new clients.

Figure 3: Top 5 most frequently cited goals for ADC deployment

1. **Reduce Costs**
   "We want to cut operating costs as branch costs in some districts are very high."
2. **Improved client convenience**
   "We need to offer convenience. Now you can make payments without leaving your home."
3. **Reach new clients**
   "ADCs will help us reach out to rural areas, beyond our current market segment."
4. **Mobilize deposits**
   "ADCs will make it easier for customers to save and increase deposit balances."
5. **Diversify income**
   "As clients gain maturity they will acquire more services and we will diversify revenues away from credit."

9 Much has been written on the high operating costs of microfinance institutions and the factors driving those costs. See, among others, Gonzalez, Adrian, "Efficiency Drivers of Microfinance Institutions (MFIs): The cast of operating costs", MIX, MicroBanking Bulletin, Autumn 2007.

FSPs spoke at length about deploying ADCs to allow clients to transact when and where they wanted, with the expectation that overcoming constraints to accessibility should increase client outreach and increase client usage of services. Customer experience has many qualitative aspects that user observation or direct user feedback would best answer. Nevertheless, MIX considered quantitative metrics that highlight this client-focused outcome for ADCs and should help FSPs understand where new clients are banking, what types of clients are signing up because of ADCs, and which transactions clients perform across the various channels deployed.

FSPs spoke at length about deploying ADCs to allow clients to transact when and where they wanted, with the expectation that overcoming constraints to accessibility should increase client outreach and increase client usage of services.

While costs and clients dominated the list of reasons for launching new channels, two additional goals also registered consistently: raising deposits and diversifying revenues. For many FSPs, **the ability to expand their reach through ADCs also supported the goal of broadening the deposit base,** whether by reaching new clients or by making it easier and more attractive for current clients to keep their deposits with the FSP. FSPs often linked this expanded deposit base to explicit goals of cost reduction, in this case reducing financial costs from borrowings. While most FSPs interviewed did not charge clients for transactions at ADCs, several targeted potential revenue streams from new transactions, such as bill payments, that these new channels enabled, or, to a lesser extent, from convenience fees charged for using ADCs. Many FSPs cited diversification of revenues away from their loan portfolio, but did not have expectations on the share of those new revenue streams in total revenues. To measure these two goals, MIX considered metrics on deposit transactions by channel and balances held on accounts deemed opened or managed through ADCs. MIX determined these metrics would offer insights into the impact of ADCs, while understanding the share of fee revenue by channel would highlight progress on revenue diversification.

...several targeted potential revenue streams from new transactions, such as bill payments, that these new channels enabled, or, to a lesser extent, from convenience fees charged for using ADCs.

The above analysis yields a long list of potential metrics that inform analysis of key ADC goals. But is that information readily available or comparable across FSPs? The 'ideal' set of indicators must be tested against the constraints of FSP reporting systems.

2. REPORTING CAPACITY

FSPs require two elements to track progress against their ADC goals: (1) a framework for measuring and analyzing progress and drivers; and (2) the systems for regularly capturing and producing the required information. On this first element - a monitoring framework - most FSPs maintained some regular reports that included information relevant to their ADCs, even if only a few produced actual dashboards for analyzing their goals and key performance drivers. It is the second element - reporting systems capacity - which is most relevant to the exercise of developing common reporting standards and metrics for ADC performance. What can a review of the systems tell us about which data on key ADC goals might be readily reportable?

It is the second element - reporting systems capacity - which is most relevant to the exercise of developing common reporting standards and metrics for ADC performance.

In interviews with FSPs, MIX used elements of its reporting readiness assessment methodology[10] to understand what data flows from customer transactions and activity through ADCs and how that data is made available for reports to management. **Figure 4** summarizes the findings from FSP interviews and existing reports analyzed by MIX.

Figure 4: Reporting capacity by areas of data

	In current reports	Effort required to report	Not currently reportable
Client activity	◑	◔	◔
Transactions ($,#)	◕	◔	○
Transaction per unique account/client	◔	◑	◔
Transaction by type	◑	◔	◔
Transaction by client profile	◔	◔	◑
Failed Transactions	◑	◑	○

● all FSPs ◑ half of FSPs ○ no FSPs

The majority of FSPs are readily reporting and monitoring basic information about transactions on each delivery channel. In almost all cases, current reporting includes numbers and values of transactions. In many cases, FSPs also analyze some basic transaction typologies, such as CICO, airtime top-ups, bill payments or account-to-account transfers. This transaction activity is linked to specific delivery channel service points, allowing FSPs to monitor activity for each channel. This transaction activity data allows for a wide range of basic productivity and transactional distribution analysis.

While FSPs are well-equipped to analyze transactions on a channel-by-channel basis, their current systems make it more difficult to analyze behavior across channels or to report on behavior by client profile. For example, FSPs would not regularly track the average deposit or withdrawal sizes of clients added through ADCs to understand how client segments added through these channels contribute to deposit mobilization goals. Similarly, few FSPs would be able to readily report on different behavior between men and women clients, such as activity levels, usage of given channels or typical transaction sizes.

...their current systems make it more difficult to analyze behavior across channels or to report on behavior by client profile.

Many FSPs receive transactional information from different systems for different channels. Reports and data flows are set up to meet the immediate needs of that information, to credit or debit a client's account and to reconcile flows with external parties. Such structures do not facilitate reporting or analysis across channels or from a customer profile perspective. Few have set up data warehouses or implemented other means to connect and report on data from across those channels, client profile and account information. Without such means, FSPs have to invest significant effort to regularly monitor and analyze ADC usage by important client segments.

10 Reporting Readiness Assessment Guide, MIX, March 2017

Current system configurations are both an enabler and a constraint on reporting. Analysis of reporting systems of FSPs interviewed helped MIX identify basic transactional information as the most broadly available data across FSPs and, as such, the best place to start building reporting standards to enable benchmarks. Metrics on client profile, including gender, cannot be considered for the initial reporting standards, but should be a priority for future updates. Given the prominence of client-centric goals for ADC deployment, FSPs will need to continue to improve system capacity to allow regular reporting and analysis by client segment, be that 'gender' to inform how ADCs enable women's access to finance or 'clients added through ADCs' to understand behavior of new clients reached through these channels. In addition, **metrics such as service uptime or transaction failure may not be captured due to technical limitations or, in the case of partnerships, limitations on what data third party providers will share.** Yet, these service quality metrics provide important insights into customer experience and may underpin the slow movement from adoption to actual activity by clients.

Metrics on client profile, including gender, cannot be considered for the initial reporting standards, but should be a priority for future updates.

3. MIX'S ADC METRICS

Based on the analysis of key goals for ADC deployment and reporting capacity of FSPs, MIX worked with FSPs, stakeholders such as Bankable Frontier Associates, and its MIX Gold Community to develop a framework for ADC metrics, including reporting standards and an initial set of proposed metrics.

This framework acknowledges data availability constraints referenced in Section 2. Proposed indicators can be calculated with very basic data. FSPs require data on ADC transactions (number and value), number of ADC service points (registered, active), number of clients (enrolled, active by channel), and revenues by channel, that combine to provide a wide range of relevant indicators. In addition, MIX standardized data in two key areas with variances across interviewed FSP in order to ensure comparability on essential data points: transaction typology and 'active' clients. This harmonization makes it possible to aggregate comparable data across a wide range of institutions and operating models.

A full view of the current framework and metrics is presented in Section VII.2 of the appendix. With similar inputs, ratios can be structured in different ways providing a diverse set of channel-focused and client-focused indicators as represented in **Figure 5.**

- Institution-focused indicators look at scale and productivity of individual ADCs and ADCs in aggregate, as well as their relative share of total transaction activity.
- Client-focused indicators analyze client uptake of these new channels and present a picture of typical client activity by channel and across ADCs.

Figure 5: ADC metrics ratio structure

Channel-focused				Client-focused	
Channel scale	**Channel productivity**	**Channel mix**	**Channel revenue**	**Client uptake**	**Client activity**
Service points	Transactions or clients	ADC transactions	Fee and commission income	Active or enrolled clients	Transactions
To					
Service points or branches	Service points	Total transactions	Service points or transactions	Total clients	Clients
Provides indicators of					
Active service points to branches % of active service points	Number of transactions per service point Value of transactions per service point Active clients per service points	% of total transactions at ADCs, number and value % of deposits (or withdrawals) happening at ADCs, number and value	% of fee income attributable to ADCs Average fee income per transaction at ADCs	% of clients enrolled at ADCs % of enrolled clients active at ADCs % of total clients active at ADCs	Average number of transactions per client Average monthly transaction value per client

This framework allows FSPs and partners to systematically analyze key aspects of ADC performance from both a channel and client perspective. In addition to these insights on specific aspects of ADC performance, the indicators also combine to help users assess progress on the strategic goals that FSPs identified for their channel deployments, as shown in **Figure 6.** While no single indicator or indicator group assesses all aspects of a goal, the combination of the targeted indicators can help assess performance and uncover drivers of that performance. The links between these indicators and the strategic goals will structure the analysis of ADC performance in Section V.

Figure 6: Strategic goals and metrics

	Channel-focused				Client-focused	
	Channel scale	**Channel productivity**	**Channel mix**	**Channel revenue**	**Client adoption**	**Client activity**
Reduce Cost		✓	✓			
Improve client convenience			✓		✓	✓
Reach new clients	✓				✓	
Mobilize deposits			✓			✓
Diversify income				✓		✓

V. FINDINGS FROM PILOT ADC PERFORMANCE METRICS ANALYSIS

1. SAMPLE DESCRIPTION AND CAVEATS

The figures analyzed in this section are the result of data collected from 16 partner FSPs, who provided, in aggregate, data for 28 ADCs, along with institutional figures. In the absence of standard definitions and uniform monitoring practices at the time of this exercise, collecting data across such a sample despite differences in operating models and reporting capacities represents a significant achievement. Institutions are from several sub-Saharan African countries; they have different legal structures, years of operations, and target market segments. They also reported between one and four different ADCs, all at different stages of maturity. Given the sample size and diversity in the sample, these initial benchmarks cannot be broken down into more precise peer groups at this stage.

...collecting data across such a sample despite differences in operating models and reporting capacities represents a significant achievement.

The aggregate results presented below are best analyzed as performance ranges, if not robust benchmarks. **The analysis of this data serves the dual purpose of testing the relevance and usefulness of ADC performance indicators and encouraging market players to adopt ADC reporting standards.** Reaching a critical mass of FSPs reporting on ADCs will be essential to refining these preliminary ranges. To MIX's knowledge, the below analysis is also the most detailed transversal analysis of ADCs performance to date in the public domain.

The analysis reviews each area of ADC goals using the channel-focused and client-focused metrics framework. Under each goal, a table summarizes relevant areas of the new metrics framework, and the text presents a few select metrics (in italics) and their results, based on data availability from the research pilot. This analysis of each goal is not an exhaustive ADC performance analysis; rather, it serves to demonstrate how these new metrics can be applied to assess the factors of ADC performance and progress towards these goals.

...it serves to demonstrate how these new metrics can be applied to assess the factors of ADC performance and progress towards these goals.

2. STRATEGIC GOAL: REACH NEW CLIENTS

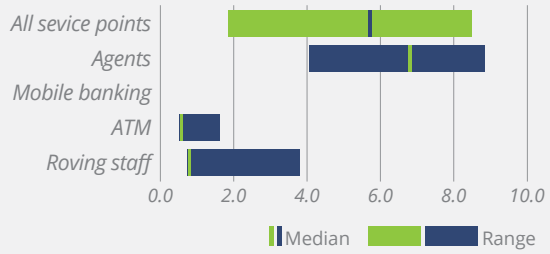
Reaching new clients is high among the goals FSPs have assigned ADCs. This goal is sometimes expressed in terms of client segments, with the idea that new, less bank-like, delivery channels may contribute to bringing the unbanked to financial institutions. This goal is however more commonly referred to in terms of geographical footprint, as FSPs expect to increase their outreach to rural and remote areas or improve proximity in dense urban zones where they will acquire new clients.

Indicators of channel scale, including active service points to branches, and *% of active service points* will document the importance taken by ADC service points as a vector to reach new clients. Indicators of client adoption, among which the *% of new accounts opened at ADCs* will determine whether these channels are actually contributing to acquiring new clients.

	Channel scale	Client adoption
Reach new clients	✓	✓
Sample indicators	Active service points to branches % of active service points % of transactions failed at [ADC]	% of new accounts opened at [ADC]

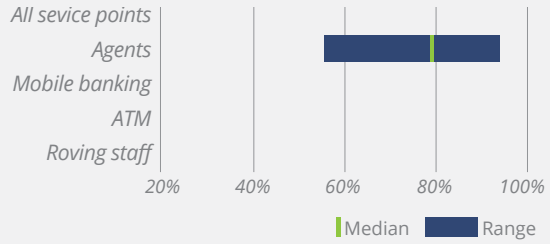
Of all the channels, agents create the most new service points for clients, whereas other channels simply extend the branch network. The ratio of *active ADC service points to branches* shows that ADCs contribute over five times more service points than branches alone **(Figure 8).** Agents drive this multiplier thanks to service points that are seven times more numerous than the branches. This physical presence contributes to the dominance of agents in transaction activities presented later in this analysis. FSPs seem to deploy ATMs and roving staff as extensions of branches, with less than one ATM or roving staff per branch, limiting their impact on closing geographic or convenience gaps for new clients.

Figure 8: ADC Service points to branches



Even where present, service points must be up and running to enable new client outreach; yet, MIX data confirms that service point inactivity is a sizeable problem. In the *% of active service points*, FSPs report a median 20 percent of agents inactive **(Figure 9)**, a value that may underestimate inactivity since reporting systems may total figures for agents rather than agent outlets[11]. Even though these results would suggest a much higher activity rate than the 51 percent reported by GSMA for mobile money agents[12] (based on a large sample of millions of agents), FSPs will want to understand the reasons why 1 in 5 service points do not serve their target clientele, both to improve business model calculations as well as actual results[13]. In many cases, FSPs told MIX how they are working to optimize their ADC service points activity, closing agents or relocating ATMs. The benchmarks from this research provide them a glimpse into the experience of industry peers.

Figure 9: % of active service points



Benchmarks on service point activity and transaction failure (or success rates) will help FSPs pick service points that effectively contribute to their client outreach. Data for this metric was insufficient in this research for aggregate analysis. However, MIX indicators will provide the *% of failed transactions* (number and value) documenting limitations to service availability. FSPs will be able to detect unusual performance that can lead to an investigation into other factors that may cause low activity, such as inconvenient or inconspicuous locations, or lack of trust by potential users. Several FSPs interviewed by MIX are already analyzing transaction failures, even if manually, in order to identify the breakdown (system, channel or customer-related failure) and to develop solutions to improve transaction success.

11 See the excellent discussion of agent counting in Bersudskaya, Vera and Mike McCaffrey, "Agents Count : The True Size of Agent Networks in Leading Digital Finance Countries." Helix Institute of Digital Finance, February 2017.
12 GSMA, State of the Industry Report: Mobile Money, 2015.
13 Service point activity rates are only available for agents in this pilot.

Another tangible element of outreach to clients is actual acquisition of new clients at ADCs. MIX will collect and report the *% of new accounts* opened at ADCs, information that few FSPs were able to reliably report on at this stage. Systems are a primary reason for that gap; FSPs rarely track at which service point new clients are acquired. In addition, client acquisition may be separated from the administrative process leading to opening a new client account. For example, if agents process some account opening formalities, these procedures are often completed and validated by a branch, which will formally appear as the service point where a new client account was created. Similarly, the existence of ADCs may be the reason encouraging people to sign up at an FSP even though the service point was not where the first contact took place. This possibility is difficult to capture outside of qualitative client surveys.

Another tangible element of outreach to clients is actual acquisition of new clients at ADCs.

3. STRATEGIC GOAL: IMPROVE CLIENT CONVENIENCE

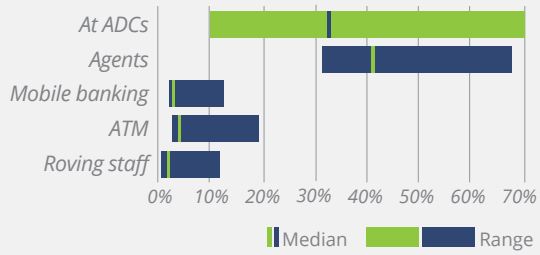
Client convenience, at the heart of client-centric ADC goals, is a necessary, but insufficient condition for client adoption. Adoption, in turn, is a difficult goal to monitor. It requires direct client feedback or detailed monitoring of individual client behavior to measure changes across channels or over time. Both approaches fall outside the scope of this work, which needs to be based on simple data that can be easily and consistently reported across countries, institutions and channels.

	Channel mix	Client adoption	Client activity
Improve client convenience	✓	✓	✓
Sample indicators	% of total transactions at ADCs, number and value % of deposits happening at ADCs, number and value % of withdrawals happening at ADCs, number and value	% of clients enrolled at ADCs % of enrolled clients active at ADCs % of total clients active at ADCs	Average number of transactions per client Average monthly transaction value per client

From the metrics framework, channel mix indicators will provide institution-wide information highlighting the relative importance of ADCs in client transactions. Client convenience will be further documented by client adoption metrics showing whether ADCs are able to attract and retain clients, while client activity indicators will determine the extent to which usage patterns echo the different ADC value propositions.

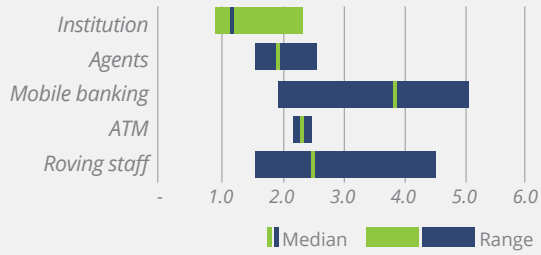
The significant share of transactions performed at ADCs supports the hypothesis that ADCs contribute to improved client convenience. Across this study sample, the *% of total transactions* at ADCs ranges between 10 percent and 70 percent of an institution's transactions, with a median of one third of all financial transactions conducted at ADCs **(Figure 15)**. At first glance, **the fact that over half the respondents reported more than one third of their transactions carried by ADCs is an impressive feat, especially given that few FSPs have been operating ADCs for more than a few years.** Yet this ADC average masks the real driver, which is the agent channel that delivered 40 percent of transactions in institutions where this channel has been deployed. Other channels carry low single-digit volumes, relatively negligible if this traffic is an indicator of client convenience.

Figure 15: % of total transactions at ADCs, number

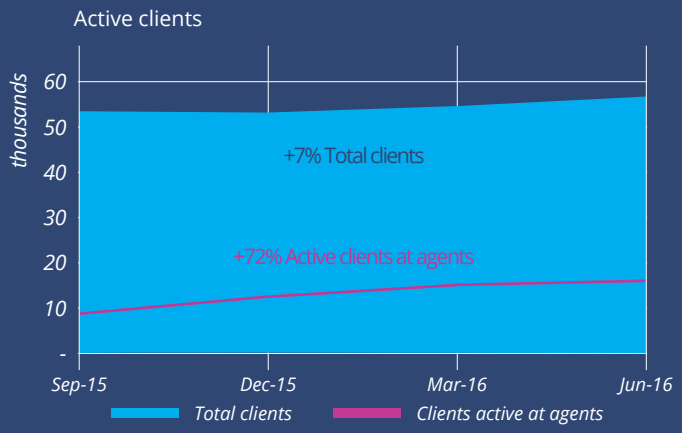


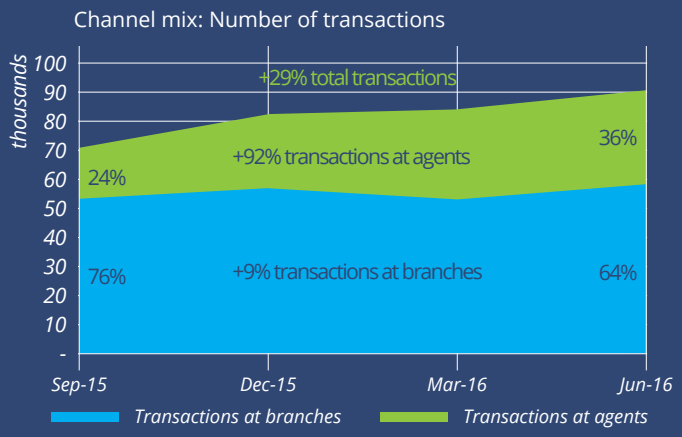
Transactions at ADCs are performed by clients who are more active than the average client. While the *average number of transactions per client per month* is 1.3 at the institution level, this indicator ranges from 2 to 4 per month at ADCs **(Figure 24)**, for clients who may still be performing transactions at branches. Even if all the following options could support the analysis of improved client convenience, the question remains (a) whether channels foster increased usage, (b) whether channels only attract transactions formerly performed at branches, or (c) whether ADC users were already more active users at branches (see **Box 4**). Whatever the reasons, the higher average transaction rates at ADCs may already be a promising sign of greatly improved client convenience.

Figure 24: Average number of transactions per client per month



BOX 4: DISPLACEMENT VS INCREASED USAGE AT AGENTS





Anecdotal evidence from more than one interviewed FSP suggests the agent channel does not only attract transactions formerly conducted at branches but drives an increase in usage or number of transactions.

- Over four quarters, the FSP represented here registered a moderate 7 percent increase in total active clients and a 29 percent increase in number of transactions, largely driven by an increase in transactions at agents (+92 percent vs +9 percent at branches).
- The 92 percent increase in transactions at agents significantly exceeds the 72 percent increase in clients active at the channel, reflecting a higher number of transactions per client.
- With 6,000 additional clients active at agents over four quarters vs. only 3,000 additional clients at the institutional level, we can reasonably conclude that the behavior of existing clients has evolved upon adoption of the agent channel, and that the increase in activity at agents is not only attributable to clients who are new to the institution.

Clients carry out much smaller transactions at ADCs, another factor indicating that ADCs are improving client convenience by enabling new behaviors. Not only do ADC users transact more often, but they transact differently than others with an *average value per transaction* at ADCs smaller by a factor of 2 to 5 (**Figure 26**). In general, it is likely that the lower opportunity cost of using ADCs makes it worthwhile for clients to perform smaller transactions. It is also possible that ADCs do not significantly alter the behavior of existing clients but rather distort the client perimeter, attracting new clients with a different usage of financial services, or the service perimeter, capturing behavior previously happening elsewhere. This may be the case for transactions that fall within an FSP's scope only as a result of rolling out ADCs, such as airtime top-ups: while these transactions happened at MNO agents, the faculty for clients to top-up directly from their mobile thanks to interconnectivity between MNOs and FSPs add this new behavior to FSPs' service offerings.

All the observations on the improved client convenience that ADCs enable must be tempered by the very limited client adoption of ADCs. Before tackling the actual client activity, it is worth mentioning that ADCs are accessible to few clients: outside of agents where an 86 percent enrollment rate is reported, the *% of total clients enrolled* on either mobile services, ATMs or roving staff rarely exceeds 20 percent (**Figure 21**). How a client is enrolled will also matter when analyzing activity rates. If clients must proactively opt in to use a channel, activity rates might be high due to self-selection. Conversely, if all clients are enrolled in channels when they open accounts at a branch, activity rates may suffer. MIX's definition of client enrollment has been adapted to cater for these biases and avoid overestimates, stating that "for channels that do not require any form of enrollment, institutions should report clients located in a geographic area where the channel has been deployed". The margin of appreciation left to FSPs in reporting client enrollment figures according to this definition is a minor pitfall compared to the benefit of more accurate client activity indicators.

In addition to the limited enrollment rate, the *% of enrolled clients active* at ADCs is also low and only **a minority of clients is regularly active at the channel** (**Figure 22**). At the top of client activity, roving staff register just less than half of enrolled clients (45 percent) as active, a surprisingly low figure for a doorstep service. At agents, less than a third of enrolled clients is regularly active, and the performance falls below 10 percent for ATMs and mobile. As a result, **despite the ADC infrastructure development or client enrollment levels, the % of total clients active at ADCs at the FSP level does not exceed 1 out of 5 clients** (**Figure 23**).

Figure 21: % of total clients enrolled

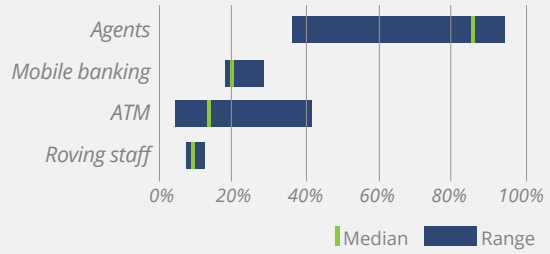


Figure 22: : % of enrolled clients active

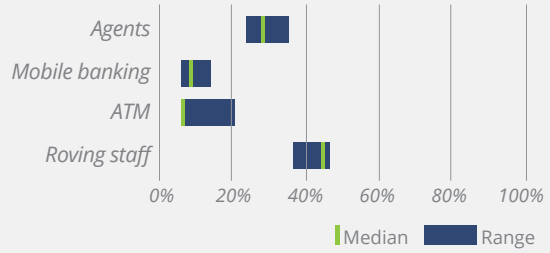


Figure 23: % of total clients active

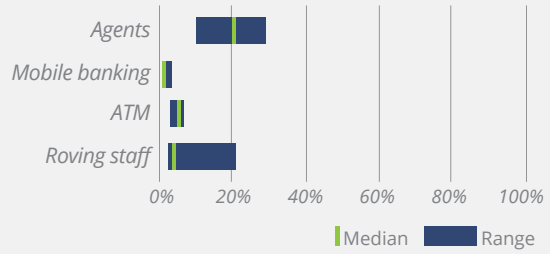
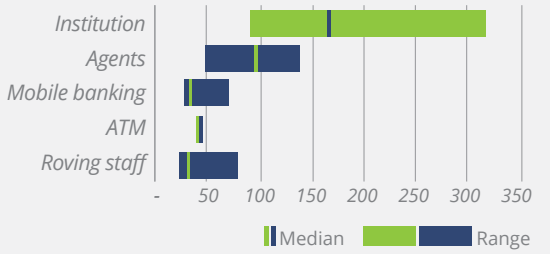


Figure 26: Average value per transaction (USD)



4. STRATEGIC GOAL: MOBILIZE DEPOSITS

Mobilizing deposits is one of the recurring goals cited by FSPs. By opening a large number of low-balance accounts, or allowing existing customers to increase their average deposit balance, FSPs expect to increase their balance sheet at a limited cost, or to at least substitute expensive sources of funding with an extended cheaper deposit basis.

	Channel mix	Client activity
Mobilize deposits	✓	✓
Sample indicators	% of deposits at ADCs, number and value % of withdrawals at ADCs, number and value	Average number of transactions per client per month

Channel mix indicators will provide evidence of the relative importance of deposits and withdrawals at ADCs, while client activity metrics will provide useful information to determine whether ADCs alter client usage in ways that increase the average deposit balances.

Assessing a particular channel's impact on deposit mobilization is made difficult by the multiplicity of channels, as account balances are the net result of a client's behavior across all channels. On an aggregated basis, it is not clear whether an increase in cash deposits at agents or roving staff, for example, results in a consistent and stable increase of account balances, or only has a marginal net impact because they are immediately followed by payments or money transfers of similar amounts performed from a mobile. Proxies can be used based on the flow of transactions, such as the *% of deposit transactions* at ADCs, while more precise analysis of ADC contributions to deposit balances will probably require customized, FSP-level assessments.

At the institutional level, FSPs in MIX's sample usually receive more deposits than withdrawals. For every 100 deposited, 90 are withdrawn. To a large extent, ADCs amplify this gap **facilitating more funding flows to FSPs rather than withdrawals of deposit balances.** Indeed, the *% of deposits at ADCs* reaches 7 percent of the total in value, compared to 5 percent of withdrawals (**Figure 18** and **Figure 20**). Transactions at agents, representing 19 percent of total transaction value, as per **Figure 16**, largely drive this activity. Roving staff and ATMs, where they are deployed, also provide a relatively important number of deposit and withdrawal transactions, respectively. Mobile deposits (W2B) and withdrawals (B2W) are less common as mobile transactions account for only 1 percent of transactions.

The question of loan repayments represents an important blind spot in the assessment of ADC contribution to deposit mobilization. Cash deposits at FSPs can indeed be intended for the payment of a loan installment, and not only for storage of value on an account, whether this is with the purpose of saving or transacting in the future. In the former case, the liquidity comes in as a debt cancellation and interest payments, and not as an increase in deposits. More accurately, in the case of most FSPs interviewed for this study, the cash deposit will temporarily increase a

Figure 16: % of total transactions at ADCs, value

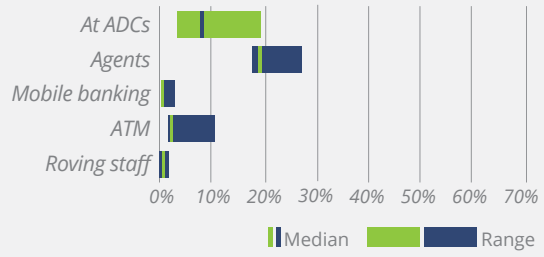


Figure 18: % of deposits at ADCs, value

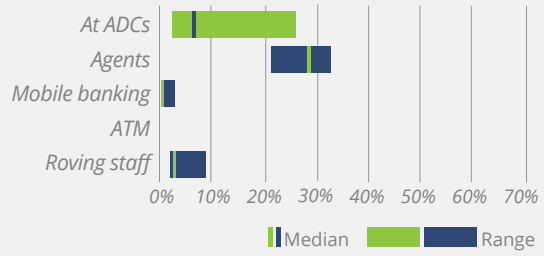
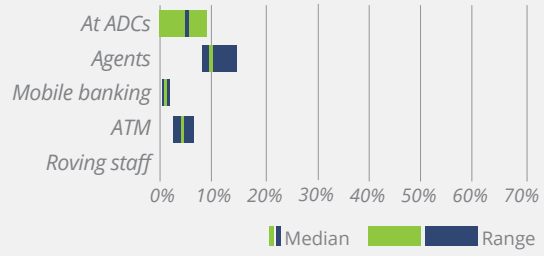


Figure 20: % of withdrawals at ADCs, value



client's deposit balance before the loan installment is automatically debited from the account by the institution's MIS. This operating mode without a dedicated loan settlement account is precisely what prevents most FSPs from identifying and segregating loan repayment cash deposits from other transactions.

As clients perform more frequent but smaller transactions, ADC users may end up maintaining higher balances on their accounts. As we have seen, ADCs drive seemingly increased usage rates and allow for a breakdown of clients' financial flows into smaller constituent parts. Roving staff, for example, generate an *average number of transactions per client* twice as large as branches for an *average value per transaction* 5 times smaller, thanks to daily or weekly pick-ups (**Figure 24** and **Figure 26**). Transactions at agents have the largest average amount of all ADCs, yet are only slightly over half the average amount per transaction at branches. Mobile appears as an outlier with a comparatively large number of transactions per month (3.9) apparently driven by the large number of very small-value airtime top-ups performed through this channel.

These observations reflect the fact that ADCs provide greater opportunities to transact and may remove the need for clients to cash-out greater amounts, not only as a result of digitalization of transfers or payments, but also because cash may be more readily withdrawn on various locations when needed. On average, this behavior may leave larger amounts on deposit accounts. This analysis cannot confirm this hypothesis given the difficulties to report aggregated data on deposit balances held by clients through ADCs, but FSPs can track balances linked to accounts that transact at ADCs, and will want to further analyze this aggregate result for their own clients.

Figure 24: Average number of transactions per client per month

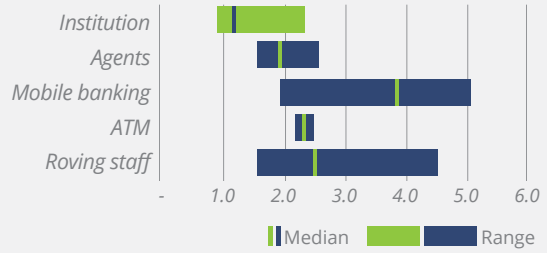
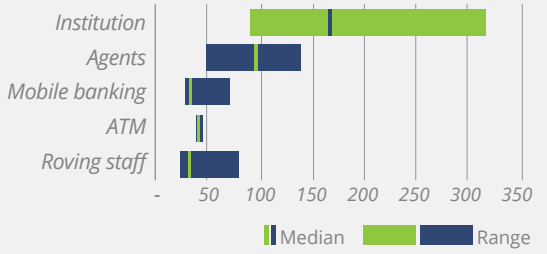


Figure 26: Average value per transaction (USD)



5. STRATEGIC GOAL: REDUCE COST

Cost reduction is an important component of FSPs' motivation to roll out ADCs. Cost reduction is usually expected to happen as routine transactions are migrated out of the (expensive) branch infrastructure and into the (less expensive) ADCs.

	Channel productivity	Channel mix
Reduce Cost	✓	✓
Sample indicators	Number of transactions per service point Value of transactions per service point Active clients per service points	% of total transactions at ADCs, number and value

Accurate assessment of this goal will require costing exercises that involve a number of factors and their allocation to channels and transaction types. Benchmarks on channel mix will provide examples of the different possible allocation of resources between branches and ADCs, while benchmarks on channel productivity will provide indications on the variable cost (and income) per service points that can be expected based on the typical number and values of transactions processed.

Collecting channel cost information in a reliable manner across a large FSP sample does not match MIX's metrics requirements of ease to measure, report, and compare on frequent cycles. There are a variety of ADC business models combining different proportions of – fixed and variable - personnel cost, technology and infrastructure cost, and financial cost. Performance ranges on number and values of transactions conducted at ADCs can however help FSPs model the average cost per transaction. This information is the only input into the average cost by transaction that is neither a given external factor (cost of accessing an ATM network, commissions paid to MNOs) nor an internal policy decision (agent remuneration scheme). Benchmarks at the ADC service point level will help FSPs adequately size a channel offer, and then calibrate cost or break-even depending on the country or FSP-specific constraints.

Performance ranges on number and values of transactions conducted at ADCs can however help FSPs model the average cost per transaction.

In that aspect, ADCs differ from branches as they attract, in aggregate, a significant share of transactions, but each service point realizes a limited number of operations. This is distinct from branches, which gather more intense traffic and process very large transaction amounts. The *average number of transactions per service point per month* at agents and roving staff reaches 200 to 300 transactions, or less than one tenth that of a branch, while ATMs come closer to the traffic of a branch, perhaps because of co-location and spillover during busy banking hours (**Figure 10**). The fact that ADCs process a limited number of transactions needs to be factored into a cost analysis to account for the volume of service points needed to achieve similar productivity to the branch infrastructure. In other words, as agents process 14 times fewer transactions than a branch, are the costs of setting up and operating 14 agents less than those of opening one additional branch?

In addition, **there are specificities to transactions carried out at branches that may not be migrated to other channels.** In line with the characteristics of transactions at ADCs, namely the smaller transaction sizes, there is an important performance gap between ADC service points and branches in terms of amounts processed. The *value of transactions per service point per month* is 30 to 60 times greater at branches than at ADC service points (**Figure 11**). Displacing client transactions from branches implies significant assumptions on client behavior, such as their willingness to perform their largest transactions at channels other than branches, and has important operational implications such as the capacity for ADCs to handle these transactions in terms of liquidity or security.

Figure 10: Number of transactions per service point, monthly

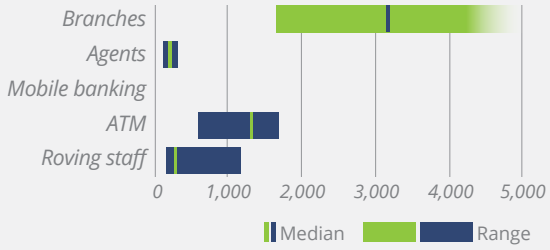
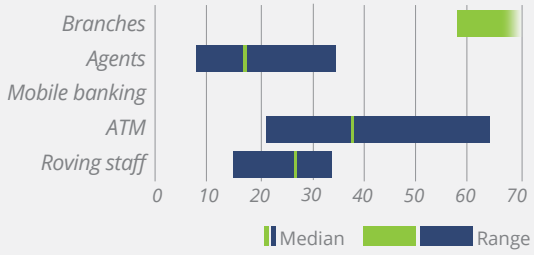


Figure 11: Value of transactions per service point, monthly (USD, thousands)



It is too early to say whether or to what extent ADCs may replace branches, but ADC performance indicators will enable an assessment of the impact on cost of any kind of mix between branches and ADCs. In fact, other parts of this analysis and benchmarks to be provided by MIX will contribute to assessing what kind of channel mix FSPs can target or expect. These figures and their evolution over time will document the performance of ADCs and their impact on branches, notably whether they induce a decrease in transactions in proportions that justify reducing or reallocating front- and back-office staff, or even the branch network itself. These are all aspects that need to be planned in advance in order to avoid generating inefficiencies that may offset the very benefits of ADCs.

It is too early to say whether or to what extent ADCs may replace branches, but ADC performance indicators will enable an assessment of the impact on cost of any kind of mix between branches and ADCs.

6. STRATEGIC GOAL: DIVERSIFY INCOME

As a strategic goal, income diversification was mentioned to increase the share of non-interest revenue, expanding earning opportunities for FSPs beyond the loan book. This was however rarely mentioned among the top 2 strategic goals, probably given the large gap there is to bridge before transaction revenues can compete with the volumes of interest revenues from loans. Data available from the pilot research are insufficient to answer this question, but individual FSPs can already begin their own evaluation on the relative contributions of fee income from different service points.

	Channel revenue	Client activity
Diversify income	✓	✓
Sample indicators	% of fee income attributable to ADCs Average fee income per transaction at ADCs	Average number of transactions per client per month Average monthly transaction value per client

Benchmarks on channel revenues will document both the importance acquired by ADCs in fee income, and also if ADC deployment is correlated to an increase in the average income per transaction. Benchmarks on client activity will provide additional information to explain whether changes in revenues are the results of pricing policies or changes in client usage.

MIX benchmarks will present the share of fee and commission income proceeding from transactions conducted at ADCs, providing an indication of ADC contribution to income diversification, that will need weighting by other factors to understand whether FSPs are realizing actual income diversification, a standard growth of fee and commission income, or a displacement phenomenon from branches to ADCs as we have discussed in other sections.

MIX benchmarks will present the share of fee and commission income proceeding from transactions conducted at ADCs

Upon reporting of the gross fee and commission income at ADCs, MIX's indicators will also be able to provide an average income per transaction, allowing the determination of whether a potential increase in the total volume of income is the result of a higher number of transactions per client, or of a different pricing structure at ADCs. While increasing income with current transactions is possible, if the added value of performing them at an ADC service point justifies it in the eyes of the clients and contributes to the channel's break-even, FSPs usually seek to increase transaction income thanks to new transactions. These might be more of the pre-existing transactions per client, but also new transactions supported by FSP accounts and enabled by ADCs. The most common transactions carried out on mobile channels, such as airtime top-ups, B2W and W2B transfers, are an example of the second category as these use-cases were nonexistent prior to the offering by FSPs of mobile services interconnected with MNOs. Reporting on these income metrics was not sufficiently robust to present aggregate performance ranges for this research.

Upon reporting of the gross fee and commission income at ADCs, MIX's indicators will also be able to provide an average income per transaction

VI. MOVING FORWARD

FSPs in all regions of the world are embracing a range of ADCs as part of their strategies to adapt and grow in competitive markets where technology and other ecosystem changes are enabling new means to provide financial services to the underserved. These providers are making bets that ADCs can provide a secure, more convenient, and lower cost method for reaching and serving clients. In making this shift, they hope to scale their services to clients and geographies previously unserved, as well as enable a whole new range of services and interactions with their clients. Many FSPs count on these changes to provide scale, reduce overall costs, and improve balance sheets, as they become a more convenient part of their clients' financial lives. These are ambitious goals.

Our research in sub-Saharan Africa in 2016 shows positive signs on several of these goals. The ADC footprint, particularly agents, is scaling to provide greater geographic coverage to reach new clients and improve proximity to existing ones. This new service point convenience also seems to unleash new behaviors, as clients at ADCs transact much more frequently in much smaller, arguably more convenient, amounts. Taken in aggregate, these new ADC-enabled transactions also contribute disproportionately to deposits, while being used less to withdraw money. These last two observations lead us to conclude that ADCs are enabling clients to leave higher average daily balances on their accounts, having a net positive impact on deposit mobilization.

Despite these positive signs, progress still needs to be made on improving activity rates of channels and usage by clients if ADCs are to meet their ambitious goals. Despite relatively healthy activity rates reported for agents, interviews with FSPs documented issues with overall ADC activity rates and a general lack of knowledge of system uptime and the extent of failed transactions. At the same time, only a minority of clients is active on ADCs in this research, meaning that the improved service and new

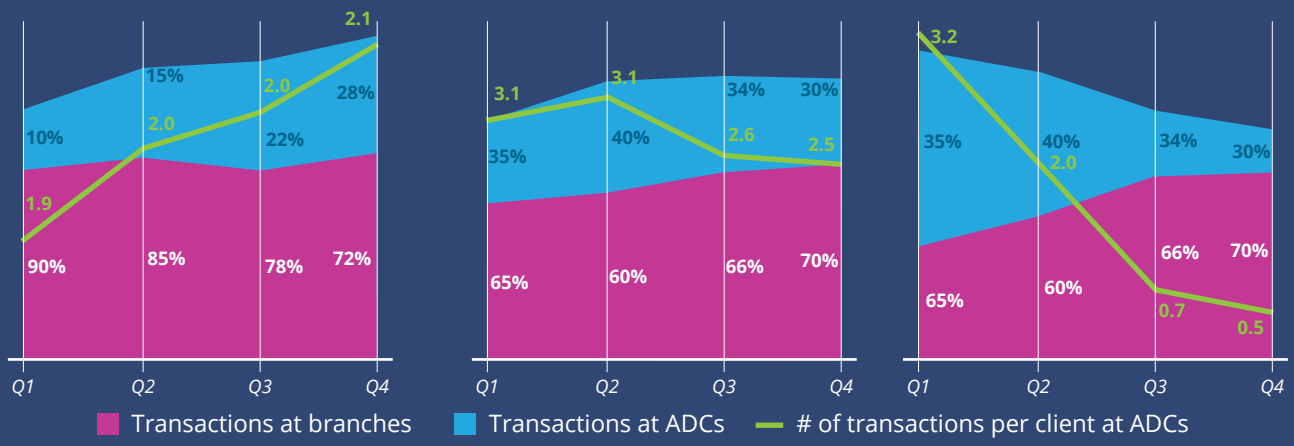
financial behavior noted above is only realized by a few. These two points, ADC availability and client activity, are also mutually reinforcing, as service availability is an important aspect of client convenience and lack of service availability risks turning off clients from future transactions.

In this context, there is still work to do to monitor and learn from ADC deployments, both to have a firm grasp on if and how each deployment is supporting an FSP's strategic goals, but also to draw on the experience of the market to set realistic objectives. Not all FSPs will reach their lofty goals with each ADC deployment, but every FSP can improve their deployments with consistent information that allows them to analyze their goals and the factors underpinning that performance. This research has identified a set of metrics that the majority of institutions can produce and monitor on a regular basis, irrespective of their systems arrangements. These metrics, which look at key factors at the channel level – like scale, productivity, mix and revenues – and at the client level – like adoption and activity – combine to analyze the scope and drivers of the main ADC goals. Every FSP deploying ADCs should be able to calculate, track and analyze these key metrics. **Box 5** lays out a very simple starting point for adopting these reporting standards and beginning to monitor deployment performance.

This research provides a quantitative guide to FSPs as they pilot and roll out new delivery channels. Concerted effort is needed by industry actors to create a robust, reliable reference for ADC performance data. From MIX's prior experience developing metrics and producing benchmarks for financials, products and social performance, we know that FSPs and their partners must actually adopt these new reporting standards and metrics in order for these benchmarks to become more robust and precise. FSPs interviewed during this research already expressed strong interest to be able to use benchmarks to analyze ADC performance at various stages of lifecycle development (e.g. pilot, scaling, mainstream) and to access robust data at a country level, especially as technological and operational conditions change so quickly in several markets. For its part, MIX will soon complete the addition of this data into its common reporting standards and enable these ADC metrics as part of its reporting service. This will allow partner FSPs and clients to begin collecting data and analyzing ADC performance in a standard way. As FSPs and partners adopt these new metrics, and as MIX's reporting base grows, the sector will build a resource that can support data-driven decision making to help FSPs successfully build and deploy their alternative delivery channels.

BOX 5: GETTING STARTED WITH ADC REPORTING

Steady growth, stagnation, free-fall: which ADCs will you run?



While all departments are focusing on getting channels up and running, what should an ADC manager focus on to make sure he or she will get meaningful information after roll-out? The following indicators are a good starting point. While keeping the reporting burden to a minimum, these indicators embed most of the key inputs of ADC reporting.

$$\text{\% of transactions at ADCs} = \frac{\text{Number of transactions at ADCs}}{\text{Total Transactions}}$$

$$\text{Average number of transactions per client at ADC} = \frac{\text{Number of transactions at ADC}}{\text{Clients active at ADC}}$$

Getting these indicators right requires a positive answer to the three following questions. And if this is the case, reporting on more indicators should be easy.

Can you easily identify the transaction point of origin? ADC reporting depends on the FSP's ability to easily identify over which channels transactions originated. Roving staff transactions, for example, may be blended in with the transactions of the branch at which they are based.

Can you isolate client transactions, at ADCs and for the FSP in general? Reporting must be limited to transactions performed by clients (on self-service channels such as mobile or ATMs) or at the direct request of a client (on assisted channels such as agents, roving staff and branches). In other words, reporting should not include "fake" transactions such as automated interest accruals or fee charges. It should also exclude transactions that are linked to a specific ADC but are not a direct client service operation, such as agent rebalancing operations.

Can you track the number of unique active clients per ADC? Client-focused ADC indicators are based on the number of clients who actually used the channel over the reporting period. In an ideal systems configuration, once ADC transactions have been identified, they should link to an account, and the account to a unique client identifier. But this may not be always the case.

VII. APPENDIX

1. GLOSSARY

Data point	Definition	Period type
Service points		
Branches	Staffed points of service and administrative sites / branches used to deliver or support the delivery of financial services and wide array of face-to-face and automated services to clients.	As of date
Agents	Individuals or businesses entitled to act on behalf of an FSP to perform certain financial or administrative transactions. They may have a direct contractual relationship with the FSP or may be contracted by a third party (super agent, aggregator) who maintains a service agreement with the FSP.	As of date
Roving staff / mobile branches	Units that serve customers outside the branch and in their place of residence or business. They may or may not be associated to a particular branch. Only staff or mobile units that manage deposits or handle account opening (other than loan origination) should be counted in this category.	As of date
ATMs	Machines with a fixed location that customers use to access services. They may be accessed through different identification means (card, PIN, biometrics) and used for different kinds of cash or non-cash based operations (deposits, withdrawals, but also transfers, account balance consultation, etc.). They may be proprietary ATMs or managed by third parties.	As of date
Mobile banking	Mobile services based on USSD or SMS communications that clients can access through their own device.	As of date
Internet	Internet-based banking services that clients can access through a personal device (smartphone app, website) using standard internet protocols.	As of date
Merchant POS	Networked merchant using a physical payment processing device located at the merchant's place of business (e.g., POS) to accepts payment for sales (of its goods or services) from the FSP customers using the customer's FSP identification means (card or other). The merchant could be acquired by the FSP, or simply part of a network enabling the merchant to process payments.	As of date
Number of active service points (one month)	Active means that a transaction has been performed in the prior 30 days. For clients and accounts, active denotes any financial transaction that is initiated by the client, but does not include information requests, administrative transactions or the automated payment or deduction of interest, fees or commissions. For service points, active denotes the facilitation of such transactions.	For the period
Clients		
Number of clients enrolled	Clients who are technically and theoretically able to access a product or service through a given delivery channel. For all channels that require completing a specific enrollment process (approval of application, capture biometrics, enrolling on a mobile platform, being issued a card, etc.), only clients who have completed this process should be included. For channels that do not require any form of enrollment, institutions should report clients located in a geographic area where the channel has been deployed. This figure should be reported only for current clients (i.e. clients who have active accounts).	As of date
Number of active clients (one month)	Active means that a transaction has been performed in the prior 30 days. For clients and accounts, active denotes any financial transaction that is initiated by the client, but does not include information requests, administrative transactions or the automated payment or deduction of interest, fees or commissions. For service points, active denotes the facilitation of such transactions.	For the period

Data point	Definition	Period type
Transactions		
Number of transactions	Number of transactions that are initiated by a client on its account during the reporting period. This excludes payment or deduction of interest, fees or commissions by the FSP on the account.	For the period
Value of transactions	Value of transactions, initiated by a client on its account during the reporting period. This excludes failed transactions as well as payments or deduction of interest, fees or commissions by the FSP on the account.	For the period
Cash deposit	A deposit of cash onto a client's account. This should not include any over-the-counter transactions that are made in cash but are for the purpose of transfers or payments.	For the period
Cash withdrawal	A withdrawal of cash from a client's account. This should not include any over-the-counter transactions that are paid out in cash but are for the purpose of collecting a transfer or payment.	For the period
Wallet to Bank (W2B)	Transfer value from a Mobile Network Operator's e-wallet or other store of electronic money to an account at a financial institution.	For the period
Bank to Wallet (B2W)	Transfer of value from an account at a financial institution to a Mobile Network Operator's e-wallet or other store of electronic money, not including account at financial institutions.	For the period
Transfer	Transfer of value via electronic means between accounts of the same or different parties.	For the period
Payment	Movements of value from a client account to a third party to pay for goods or services.	For the period
Failed transactions	Transactions that are initiated but that do not successfully complete. This failure may be due to lack of float (agents, merchants), lack of cash (ATMs, roving staff), system error or other issue.	For the period
Fees and commission income other financial services	Non-interest income from financial services other than credit. This may include payment, money transfer, insurance or other financial services.	For the period

2. MIX ALTERNATIVE DELIVERY CHANNELS METRICS

The mention "at [ADC]" refers to indicators and data points that are for a specific channel, e.g. 'agents' or 'ATMs'.

The mention "at ADCs" refers to indicators and data points that aggregate all alternative delivery channels, e.g. everything but the branch.

The mention of [institutional] refers to indicators and data points that aggregate alternative delivery channels and branches.

Indicator		Numerator		Denominator
Channel scale				
Number of registered [ADC] service points				
Number of active [ADC] service points				
% of active [ADC] service points	=	Number of active service points	/	Number of registered service points
Growth in registered [ADC] service points				
Growth in active [ADC] service points				
Registered service points to branches	=	Number of registered service points	/	Number of branches
Active service points to branches	=	Number of active service points	/	Number of branches
% of transactions failed at [ADC], by number	=	Number of failed transactions at [ADC]	/	Total number of transactions at [ADC]
% of transactions failed at [ADC], by value	=	Value of failed transactions at [ADC]	/	Total value of transactions at [ADC]
Channel productivity				
Average number of active clients per service point	=	Clients active at [ADC]	/	Number of active service points, average over the period
Average number of transactions per service point	=	Total number of transactions at [ADC]	/	Number of active service points average over the period
Average number of information requests per service point	=	Number of information requests at [ADC]	/	Number of active service points average over the period

Indicator		Numerator		Denominator
Average monthly transaction value per service point	=	Total value of transactions at [ADC]	/	Number of active service points average over the period
Average number of deposits per service points	=	Total number of deposit transactions at [ADC]	/	Number of active service points average over the period
Average number of withdrawals per service point	=	Total number of withdrawals at [ADC]	/	Number of active service points average over the period
Channel mix				
Total transactions				
Total number of transactions [institutional]				
Growth in total transactions, by number				
% of total transactions, by number, at [ADC]	=	Total number of transactions at [ADC]	/	Total number of transactions [institutional]
% of total transactions, by number, at ADCs	=	Total number of transactions at ADCs	/	Total number of transactions [institutional]
Total value of transactions [institutional]				
Growth in total transactions, by value				
% of total transactions, by value, at [ADC]	=	Total value of transactions at [ADC]	/	Total value of transactions [institutional]
% of total transactions, by value, at ADCs	=	Total value of transactions at ADCs	/	Total value of transactions [institutional]
Credit transactions				
Number of deposits [institutional]		Number of cash deposits + number of wallet-to-bank transactions		
% of deposits, by number, happening at [ADC]	=	Total number of deposit transactions at [ADC]	/	Total number of deposit transactions [institutional]
% of deposits, by number, happening at ADCs	=	Total number of deposit transactions at ADCs	/	Total number of deposit transactions [institutional]
Value of deposits [institutional]		Value of cash deposits + value of wallet-to-bank transactions		
% of deposits, by value, happening at [ADC]	=	Total value of deposit transactions at [ADC]	/	Total value of deposit transactions [institutional]
% of deposits, by value, happening at ADCs	=	Total value of deposit transactions at ADCs	/	Total value of deposit transactions [institutional]

Indicator		Numerator		Denominator
Debit transactions				
Number of withdrawals [institutional]		Number of cash withdrawals + number of bank-to-wallet transactions		
% of withdrawals, by number, happening at [ADC]	=	Total number of withdrawals at [ADC]	/	Total number of withdrawals [institutional]
% of withdrawals, by number, happening at ADCs	=	Total number of withdrawals at ADCs	/	Total number of withdrawals [institutional]
Value of withdrawals [institutional]		Value of cash withdrawals + value of bank-to-wallet transactions		
% of withdrawals, by value, happening at [ADC]	=	Total value of withdrawals at [ADC]	/	Total value of withdrawals [institutional]
% of withdrawals, by value, happening at ADCs	=	Total value of withdrawals at ADCs	/	Total value of withdrawals [institutional]
Channel revenue				
% of fee income attributable to [ADC]	=	Non-interest fee and commission income on transactions conducted at [ADC]	/	Non-interest fee and commission income [institutional]
Average fee earned per transaction performed at [ADC]	=	Non-interest fee and commission income on transactions conducted at [ADC]	/	Total number of transactions at [ADC]
Client adoption				
% of clients enrolled at [ADC]	=	Clients enrolled at [ADC]	/	Active clients [institutional]
% of enrolled clients active at [ADC]	=	Clients active at [ADC]	/	Clients enrolled at [ADC], average over the period
Growth in clients enrolled [ADC]				
Growth in clients active at [ADC]				
% of new accounts opened at [ADC]	=	Number of accounts opened at [ADC]	/	Number of accounts opened [institutional]
Client activity				
Average number of transactions per client	=	Total number of transactions: at [ADC]	/	Clients active at [ADC]
Average monthly transaction value per client	=	Total value of transactions at [ADC]	/	Clients active at [ADC]
Average number of information requests per client	=	Number of information requests at [ADC]	/	Clients active at [ADC]

3. ADC PERFORMANCE METRICS – PILOT RESULTS

For each indicator, the graph displays a performance range from the 1st to 3rd quartile, 25th to 75th percentile, of available values. In other words, the blue bars represent 50 percent of the sample excluding the highest and lowest 25 percent of values.

The central point (in light blue) presents the median value for each indicator. If the median is close to one end of the bar, then observations are more clustered in that quartile. If the median is further from one end of the bar, then observations are more dispersed in that quartile.

With the exception of client adoption indicators, the top bar of each graph (in light blue) is an institutional point of comparison. Depending on the type of indicator, this can represent a value for the total institution, for branches, or for all ADCs aggregated.

For example, the first indicator in **Figure 7**, is the number of branches: the range is 16-37 branches, with 16 branches representing the 25th percentile, and 37 branches representing the 75th percentile; and 29 branches is the median.

CHANNEL SCALE

Figure 7: Number of service points

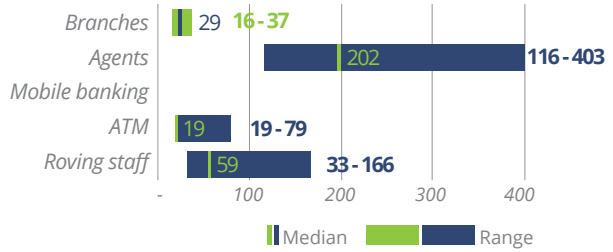


Figure 8: ADC service points to branches

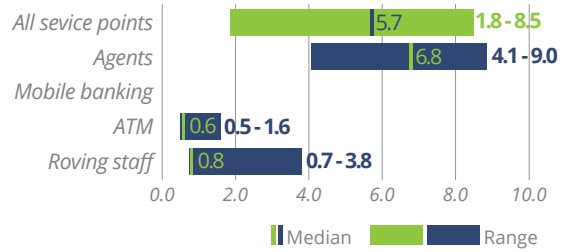
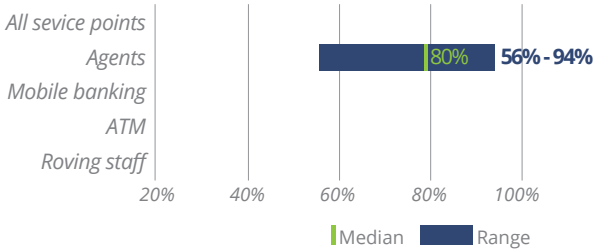


Figure 9: % of active service points



CHANNEL PRODUCTIVITY

Figure 10: Number of transactions per service point, monthly

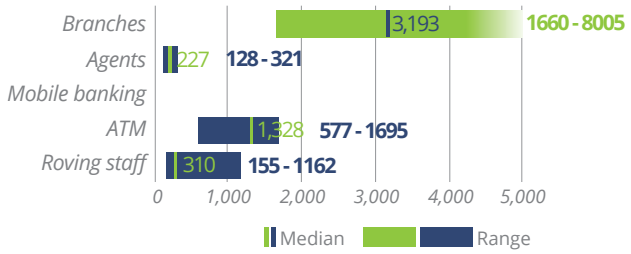


Figure 11. Value of transactions per service point, monthly (USD, thousands)

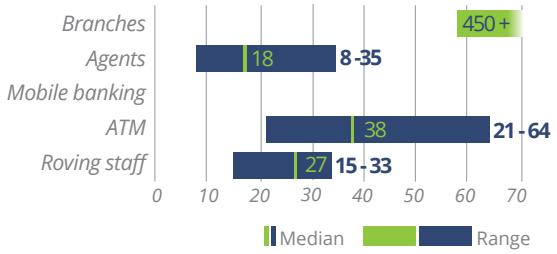


Figure 12: Active clients per service points

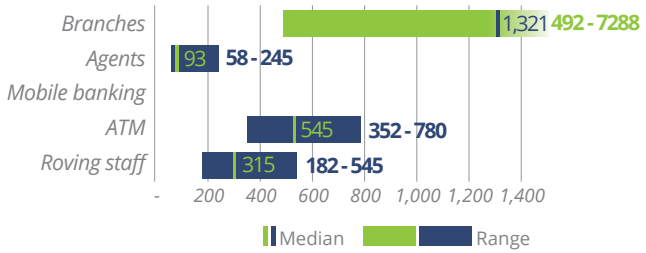


Figure 13: Average number of deposits per service point, monthly

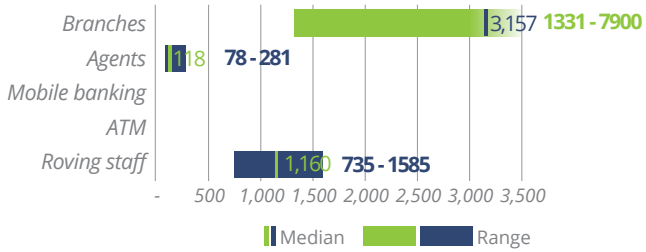
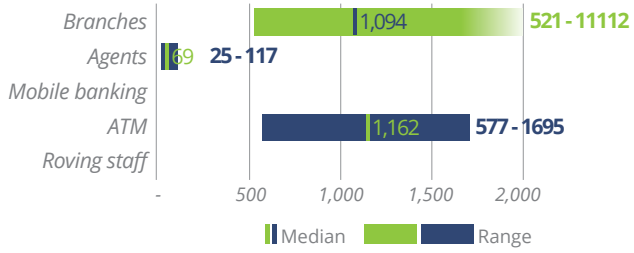


Figure 14. Average number of withdrawals per service point, monthly



CHANNEL MIX

Figure 15: % of total transactions at ADCs, number

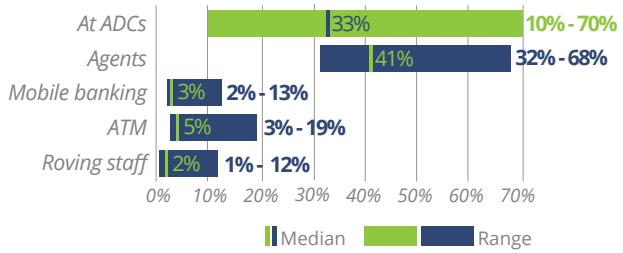
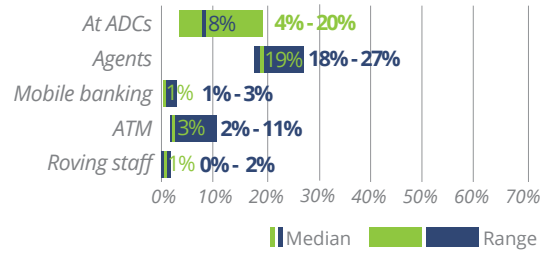


Figure 16. % of total transactions at ADCs, value



CHANNEL MIX

Figure 17: % of deposits at ADC, number

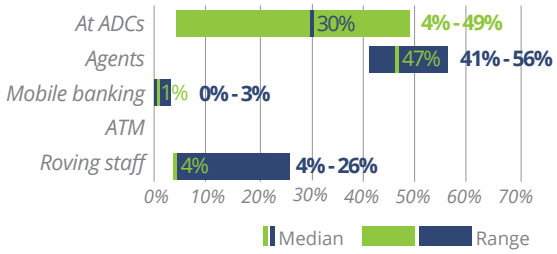


Figure 18: % of deposits at ADC, value

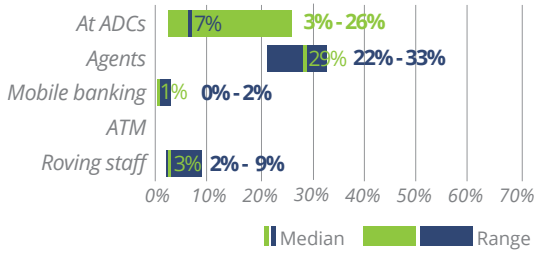


Figure 19: % of withdrawals at ADC, number

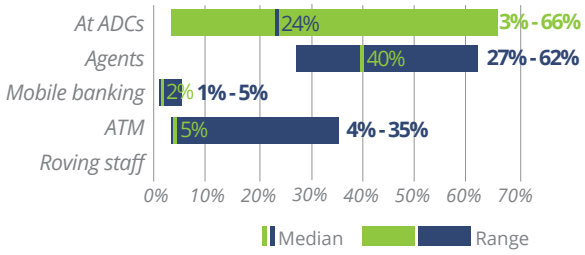
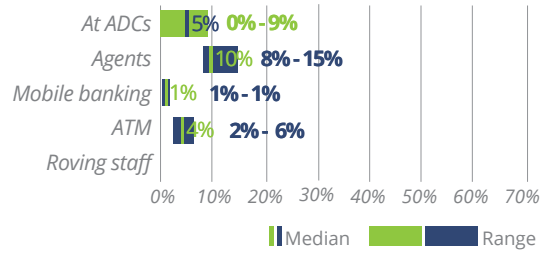


Figure 20: % of withdrawals at ADC, value



CLIENTS UPTAKE

Figure 21: % of total clients enrolled

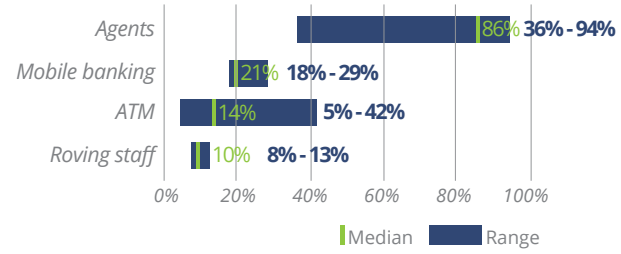


Figure 22: % of enrolled clients active

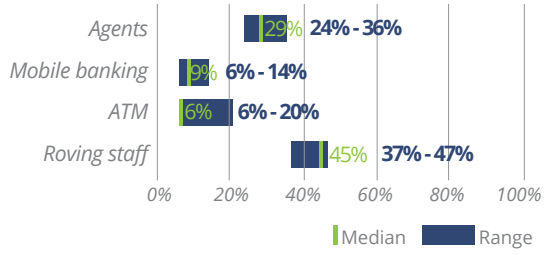
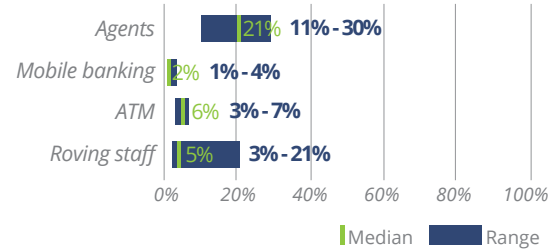


Figure 23: % of total clients active



CLIENT ACTIVITY

Figure 24: Average number of transactions per client per month

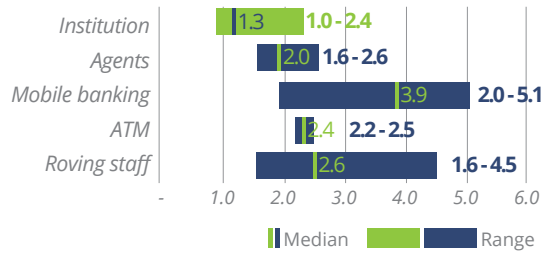


Figure 25. Average monthly transaction value per client (USD)

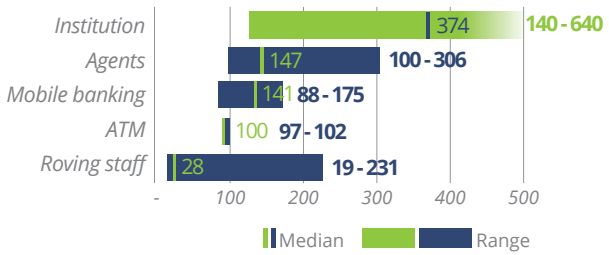
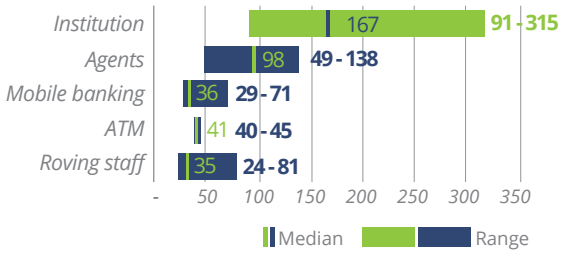


Figure 26: Average value per transaction (USD)



4. ORGANIZATIONS INTERVIEWED

MIX interviewed a range of FSPs, funders, consultants and other ecosystem players for this research. These actors are listed below and grouped, where relevant, by country.

Country	Organization
Congo, Dem. Rep.	FINCA
Ghana	Advans, EcoBank, Fidelity Bank, GHIPSS, In Charge Global, MTN, Opportunity International S&L, Sinapi Aba S&L
Madagascar	Accès Banque, Microcred
Malawi	NBS
Nigeria	AB Microfinance Bank, Diamond Bank, LAPO
Rwanda	Urwego Opportunity Bank
Senegal	Microcred
Tanzania	Access Bank, Equity Bank, FINCA, Letshego, Mwanga Community Bank, NMB, Selcom, VisionFund
Uganda	Airtel, Centenary Bank, FINCA, Pride Microfinance Ltd, UGAFODE
Zambia	FINCA
Global	Access Group, Advans Group, Bankable Frontier Associates, IFC, FINCA Holding, Microcred Group, PHB Development, UNCDF, Women's World Banking

MIX OFFICES

LATIN AMERICA AND THE CARIBBEAN REGIONAL OFFICE
Jr. Leon Velarde 333
Lima, Lima 14, Peru
t/ +51 1 472 5988

AFRICA AND THE MIDDLE EAST REGIONAL OFFICE
Villa n°4, cité Ablaye Thiam, Ouest-Foire
BP 25220 Dakar-Fann, Senegal
t/ +221 33 820 77 40

EASTERN EUROPE AND CENTRAL ASIA REGIONAL OFFICE
44 J. Jabbarli street, Caspian Plaza I,
5th Floor, 1065, Baku, Azerbaijan
t/ +994 50 644 07 85

ASIA REGIONAL OFFICE
801 - A, 8th Floor,
The Platina, BIT- II, APHB,
Gachibowli, RR District,
Telangana, India 500032
t/ +91 40 65551600

GLOBAL HEADQUARTERS
2020 Pennsylvania Avenue, NW #353
Washington, DC 20006, U.S.A.
t/ +1 202 659 9094
e/ info@themix.org

CONNECT

www.themix.org

twitter.com/mix_market

facebook.com/microfinanceinformationexchange

www.linkedin.com/company/microfinance-information-exchange