MFI Digitization in Central America's Northern Triangle:

The Impact of the Covid-19 Pandemic

January 31, 2023

TABLE OF CONTENTS

Executive Summary

EA Consultants was commissioned by the Financial Access Initiative at NYU-Wagner, with funding from the Mastercard Center for Inclusive Growth, to assess microfinance sector digitization in the "Northern Triangle" of Central America (El Salvador, Guatemala, Honduras and Nicaragua). In this work, digitization is defined as changing analog processes into digital ones. To give as complete a picture as possible, we captured a broad range of MFIs in terms of size, target market and structure, in addition to the diverse regulatory structures and national contexts in the region. In general, there is a global sense that the Covid-19 pandemic accelerated digitization; however, digitization requires significant funds, and return on investment relies on the promise of scale. As smaller countries with (relatively) small microfinance institutions in a part of the world where donors have had limited presence, the countries in the study lacked both. EA Consultants collaborated with REDCAMIF, the regional microfinance network in Central America and the Caribbean, to survey 41 MFI managers, representing about 82% of the USD 1.77 billion combined portfolio of REDCAMIF-affiliated MFIs in the region. We additionally held in-depth interviews with 12 managers and conducted focus groups and individual interviews with a small subset of loan officers and clients in each country.

Defying dire predictions from experts at the start of the pandemic[1], MFIs in the region showed great resilience through the challenges of lockdowns, economic downturns and pandemic casualties. Despite their relatively small scale, or perhaps because of it, the MFIs maintained stable profitability and have mostly grown since the pandemic. They have proven to be very adaptable to digital change. Over 80% of surveyed MFIs claim to have made significant progress in this area, defining "digital" broadly to include front office software and apps, tech-driven back-office process efficiencies, and upgrades to core systems and hardware that enable digitization.

The success of these processes was attributable to a few factors, first and foremost the availability of local expertise. MFIs were able to source in-house staff and local consultants. Local staff were able to design new tools or integrate existing tools from the market such as Cartera Digital and Tigo Money, into the MFIs systems. As in many countries, these new apps and software were layered onto existing third-party tools such as WhatsApp and chatbot features integrated into existing platforms to reach clients and manage MFI staff remotely. These solutions were cost-effective, allowing 27 of 31 MFIs that made any digital investments to fund these either completely or partially with internal funds, while only 6 used donated funds.

Of the investments we observed, MFIs in the region primarily focused on front office support for agents and staff to gain access to clients as a response to lockdowns during the pandemic. As a second priority, they invested in upgrades to back-office processes and technology. This enabled remote loan origination, disbursement and collection, and remote contact with agents, staff, and clients, increasing productivity. Client-facing digital solutions were also tested but have shown

[1] https://www.cgap.org/blog/covid-19-how-does-microfinance-weather-coming-storm

little traction. MFI managers believe that this is because clients are unfamiliar and unready to use technology in lieu of in-person service (even virtual personal service). Our understanding of microfinance clients in other regions, combined with our interviews with clients, corroborates this interpretation.

While fintech apps and online banking were not quickly adopted in this region, existing remote infrastructure served as an important bridge for clients during the pandemic. Clients were served primarily through contact with non-bank correspondents/agents, as well as remote and physical visits from loan officers. ATMs were also used, albeit less commonly. MFI sector investments in agent networks and ATMs prior to the pandemic paid off.

Despite the agility and creativity of many MFIs in the region, our study also highlights a new digital divide. Of the 31 MFIs that made significant digital changes, 14 would not repeat them because of limited budgets, poor sequencing and selection errors. Larger institutions and those part of global networks (e.g. Accion) were better positioned over smaller ones in the development of digital solutions. Critically, many of these organizations had already begun developing strategies to digitize: the pandemic merely accelerated what were well-thought-out plans. Additionally, they had more robust systems or were able to invest in them. New apps and software rely on solid back office and core systems to function. Many smaller institutions were not able to invest in these upgrades but rather focused on solving immediate needs such as providing loan officers with short-term tools to manage clients and approve loans. Bugs in their applications, and complaints from loan officers (the main users of the new technologies) ensued. Those that made investments in back office and core systems were more likely to be disappointed with these.

Left to their own devices, it appears that smaller MFIs will not be able to keep up with the requirements of increasing digitization in the region. The long-term effects of falling behind are unclear but there is reason to be concerned if only the largest or most connected MFIs can effectively digitize and maintain operations. Small and medium-sized MFIs, including cooperatives, have been critical to the inclusive financial sector ecosystem in sparsely populated regions, along borders, and in hard-to-reach territories where the cost of accessing remote households is high. Their role is not only critical in terms of deepening financial inclusion. They are more likely to reach and employ women and reach rural households. They can become essential when political and climate disasters strike, offering a lifeline to marginalized customers who have limited access to public services. Smaller and medium-sized MFIs are also offering more ancillary (and high-touch) services including health education, agricultural extension services and financial education.

To minimize the cost of investment in technology, donors can accelerate adoption by working with the sector to develop products and partnerships that meet customer needs (such as remittances and payments) and by "teaching digital." Over time, we consider the importance of taking a systems approach to the digitization of MFIs in the region. Specifically, the rise in Banking as a Service (BaaS) solutions suggests that in the future, MFIs can plug into one common balance sheet and back office while focusing on what they do best, providing trusted hybrid financial services to remote clients.

Background and Objectives

EA Consultants was commissioned by the Financial Access Initiative at NYU-Wagner, with funding from the Mastercard Center for Inclusive Growth, to assess digitization in the microfinance sector in the "Northern Triangle" of Central America (El Salvador, Guatemala, Honduras and Nicaragua). To give as complete a picture as possible, we captured a broad range of MFIs in terms of size, target market and structure, in addition to the diverse regulatory structures and national contexts in the region. In general, there is a global sense that the Covid-19 pandemic accelerated digitization; however, digitization requires significant funds, and return on investment relies on the promise of scale. As smaller countries with (relatively) small microfinance institutions in a part of the world where donors have had limited presence, the countries in the study lacked both. It took place between March 2022 and July 2022

EA Consultants collaborated with REDCAMIF[2][3], the regional microfinance network in Central America and the Caribbean, to survey 41 MFI managers, representing about 82% of the USD 1.77 billion combined portfolio of REDCAMIF-affiliated MFIs in the region. We additionally held in-depth interviews with 12 managers and conducted focus groups and individual interviews with a small subset of loan officers and clients in each country. Our sample mirrors the variety of intuitional structures represented by REDCAMIF, including NGOs, cooperatives, finance companies, corporations, and banks, with NGOs being the largest. Most of these institutions offer individual loans (nearly 80%). Women represent 60.7% of the organizations' portfolios and rural clients represent just over half (53%).

Since 2018 and with funding from ADA, an NGO from Luxemburg that specializes in inclusive finance, REDCAMIF has been implementing the program "Improvement of Social Value Added in Microfinance." The program's purpose is to improve the quality of life of low-income households in Central America, by supporting digital transformation projects that strengthen the microfinance sector's capacity. By the end of 2019, the program supported 7 MFIs in defining a digital transformation strategy; an additional 6 MFIs received support during Covid to implement specific digital tools to improve client outreach.

[2] The regional microfinance network in Central America and the Caribbean REDCAMIF, promotes financial inclusion in Central America and the Caribbean through development programs, projects and services that aim to strengthen the competences, efficiency and resilience of institutions that offer financial and non-financial services for economic and social development in the small and micro companies (MYPE) in urban and rural areas.
[3] https://redcamif.org/

Methodology

This study consisted of qualitative and quantitative methods in addition to a review of existing market and case study information:

Desk research: Including a review of REDCAMIF's microfinance network data and information, and the case studies of technical assistance with MFIs under the REDCAMIF/ADA digitization program.

Quantitative Survey of MFI Managers: With the help of REDCAMIF we contacted CEOs from MFIs in the 4 countries with a 38-question survey aimed at understanding their institutions' current state of digitization and their perceptions of the impact of digitization on employees, clients and their overall business performance. The survey was conducted in March and April of 2022 and 41 MFI Managers of REDCAMIF affiliated MFIs in 4 countries responded.

Qualitative data collection: this included three sources. From the survey results, we selected MFIs that represented small, medium and large institutions in different phases of digitization. We then conducted in-depth interviews with 12 MFI managers (General managers, management teams and IT managers) in the 4 countries, focus group sessions with loan officers (men and women of varying ages) from 4 MFIs and Individual phone interviews with 4 clients from each of these 4 MFIs (total of 16 men and women from 4 countries).

Descriptive statistics

There are 118 MFIs affiliated to REDCAMIF, 73 of them are located in the four countries where our research takes place: Guatemala, El Salvador, Honduras, and Nicaragua. 41 responded to our survey representing a total loan portfolio of USD 1.5 billion out of USD 2.7 billion in total and jointly serving over 900,000 clients. Guatemala represents the largest loan portfolio, Nicaragua the smallest. The 41 MFIs that responded to our survey represented over 82% of the loan portfolio of REDCAMIF affiliates in the target countries. These MFIs serve low-income households and have average loan sizes of between USD 375 (Guatemala) and USD 500 (Honduras).

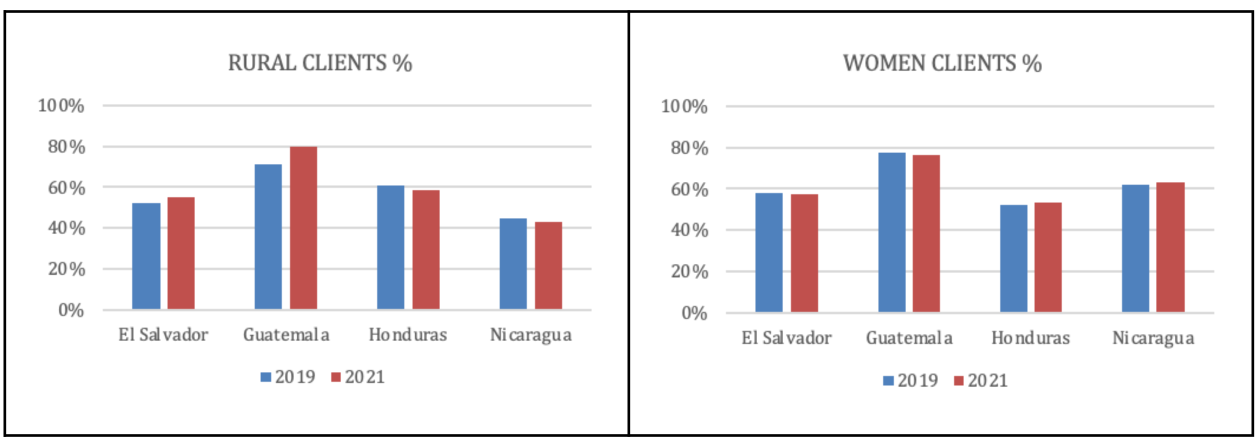
TABLE 1. BREAKDOWN OF SURVEY RESPONDENTS AND THEIR MAIN CHARACTERISTICS

	Number of MFIs Surveyed	Min Average Loan Size	Max Average Loan Size	Number of Loan Clients	Total USD Loan Portfolio
El Salvador	8	450	8132	109026	327
Guatemala	12	375	13468	387326	544
Honduras	11	500	9170	200387	441
Nicaragua	10	400	2354	213161	142
TOTAL	41	375	13468	909900	1454

In our sample, 59% represent unregulated MFIs[4] , NGOs and cooperatives and 41% represent regulated institutions. 35 of the sample are large institutions (with assets over USD 15 million), 6 are medium (with assets between USD 4 and USD 15 million). While small institutions did not reply to our survey, we made sure to select small institutions for the in-depth interviews.

While our sample institutions have traditionally had a rural slant and have generally served women in greater numbers than men, the pandemic favored these trends. In El Salvador and Guatemala, the percentage of rural clients after pandemic lockdowns increased from pre-pandemic level to 54% and 80% respectively. The number of women clients served remained relatively steady at above 50% region-wide, increasing slightly in Nicaragua and Honduras where more urban markets were served more aggressively. Notably, in Guatemala, women clients represent over 76% of MFI's portfolios even though their focus is highly rural. This illustrates the especially difficult task of Guatemalan MFIs of serving last-mile poor female rural clients.

FIGURE 1. OUTREACH TO WOMEN AND RURAL HOUSEHOLDS OF SAMPLED MFIs BY COUNTY



[4] These typically are for-profit financing corporations without deposit-taking licenses.

Findings

MFIs DEFINE DIGITIZATION BROADLY, TAKING INTO ACCOUNT THE INTERCONNECTED TECHNOLOGICAL CHANGES REQUIRED TO BECOME DIGITAL

Of 39 MFI Managers who answered, "How does your institution define digitization?"*

31 define it as front office software used by staff

28 define it as back-office technology

27 define it as front office software used by clients

22 define it as core banking software/ hardware / servers

*These definitions do not correspond with the actions taken to advance digitization during Covid, possibly because some efforts toward digitization were already in place, or due to resource constraints.

MFIs in our survey use different definitions for "digitization" that range across front and back-office technologies. These require different levels of investment and sophistication and are ultimately interdependent. Our sample covered 4 countries and 41 institutions that were themselves at different stages of the digitization process. Virtually all the MFIs made investments that addressed the need to reach clients during lock down, either through software for apps, apps and software for clients or both. 32 of 41 also invested in back-office processes, and about half also invested in core systems, servers or hardware.

TABLE 2. MFI SURVEY RESULTS: DIGITAL CHANGES IMPLEMENTED IN THE PANDEMIC (N=41)*

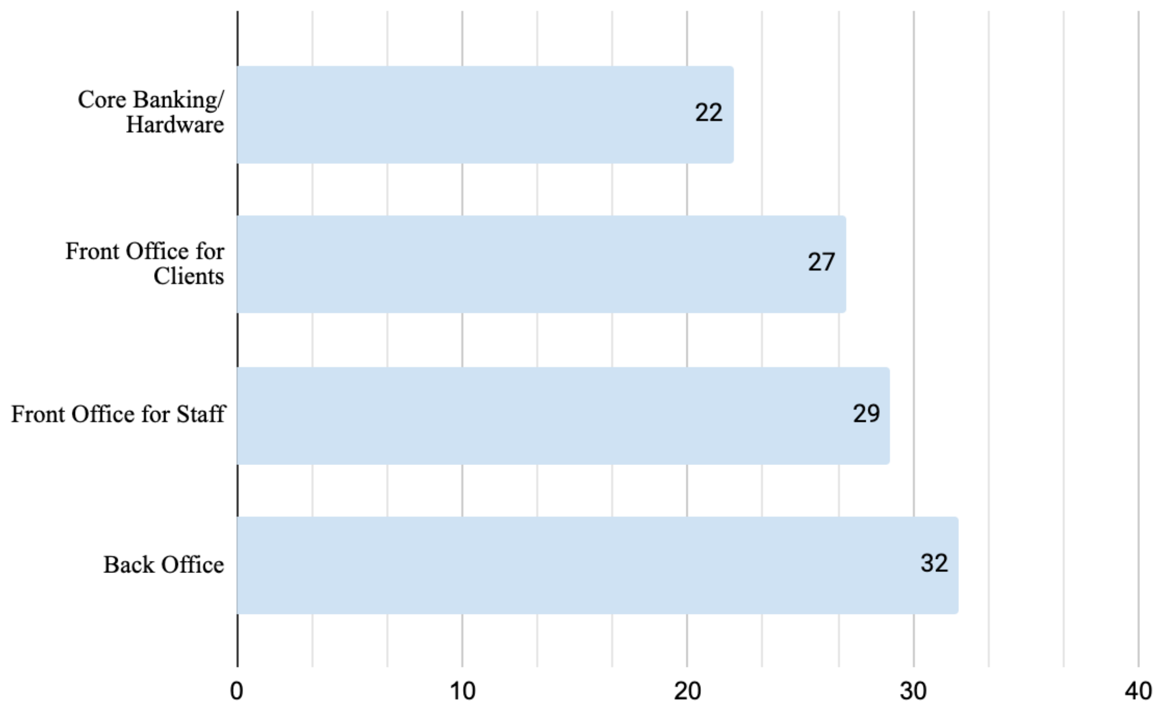
	Total (n)	Change to Front Office for Clients	Change to Front Office for Staff	Change to Back Office	Change to Core Banking Software/ Hardware/Servers
El Salvador	8	3	5	5	4
Guatemala	12	10	9	10	7
Honduras	11	10	9	9	6
Nicaragua	10	6	4	8	5
TOTAL	41	29	27	32	22

*multiple responses were permitted

MFIs WERE MORE RESILIENT THAN ANTICIPATED, IN PART BECAUSE THEY ACCELERATED THE PACE OF DIGITIZATION

Despite the challenges of lockdowns, economic downturns, and pandemic casualties, MFIs in the region responded to the challenge of lockdowns with some digital strategy and great resilience. Over 80% of surveyed MFIs claim to have made significant changes related to digitization as defined above—the majority in back-office systems and processes, as well as software and apps for front-office staff and agents to ensure that clients could continue to be served remotely. This enabled remote loan origination and collection and remote contact with staff and clients.

FIGURE 2. MFI SURVEY RESULTS: DIGITAL CHANGES IMPLEMENTED IN THE PANDEMIC (N=41)



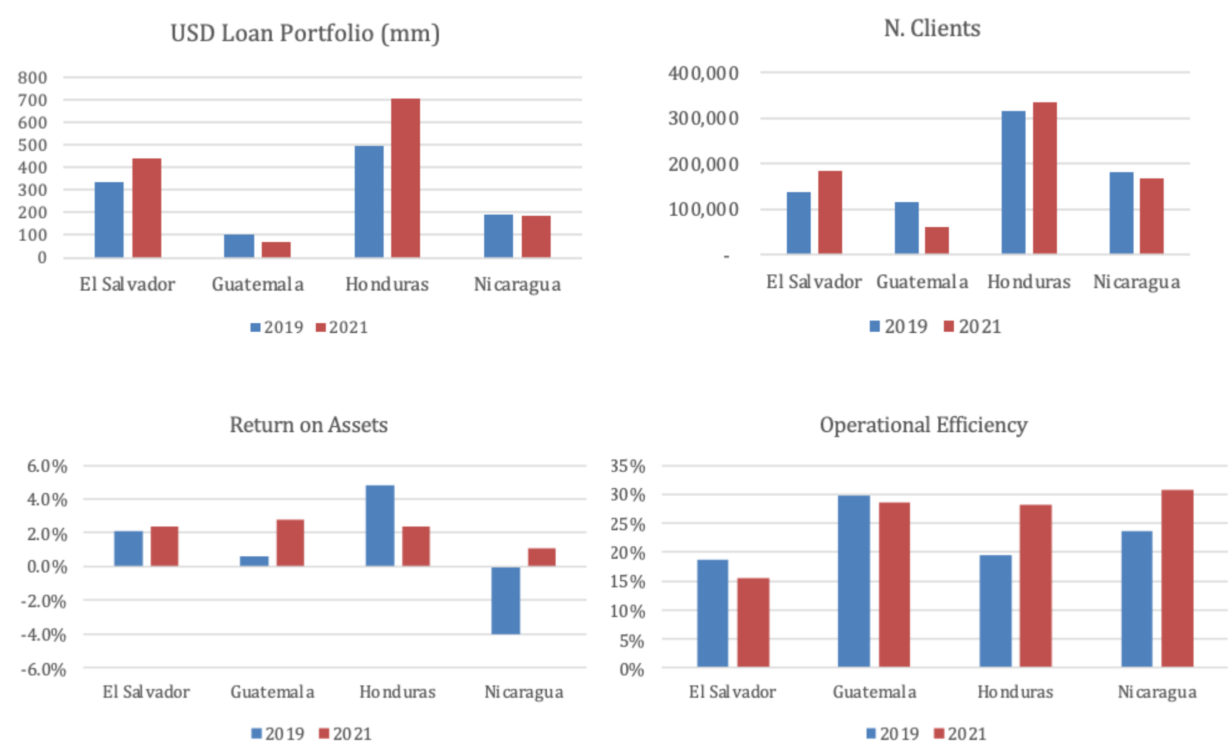
When MFI managers were asked about the impact of their investments on some key performance metrics, back-office processes and front-office solutions had a direct impact on client acquisition, expansion of portfolios and growth in new segments (Table 3). While a less direct impact was perceived from upgrades to core systems and servers, we learned that they were extremely important to the entire digitization process.

TABLE 3. MFI SURVEY RESULTS: MFI MANAGER PERCEPTION OF THE IMPACT OF DIGITAL INVESTMENTS ON KEY PERFORMANCE METRICS

	Front Office: Client-Facing		Front Office: Staff/Agent-Facing		Back office: Processes		Core: Systems and Servers	
	High-Good	None-Low	High-Good	None-Low	High-Good	None-Low	High-Good	None-Low
Reaching New Clients	18	5	18	3	13	2	9	5
Portfolio Size	17	3	14	1	13	1	10	1
Client Acquisition	16	6	12	4	11	3	9	1
Portfolio Quality	15	7	8	2	8	2	8	2

Arguably, these investments contributed most to the efficiencies that drove profitability. Despite their relatively small scale, or perhaps because of it, the MFIs maintained stable profitability and have mostly grown since the pandemic. An analysis of MFI performance data reported to REDCAMIF by these same MFIs shows that they cut costs by closing branches and streamlining back-office processes, which led to improvements in operational efficiencies in Nicaragua and Honduras. In El Salvador and Honduras, changes also contributed to an increase in the size of loan portfolios. These benefits likely helped keep Honduran MFIs afloat, and led to increased profitability in Guatemalan, Salvadoran and Nicaraguan MFIs.

FIGURE 3. ANALYSIS OF REDCAMIF MFIs ALONG FOUR FINANCIAL INDICATORS PRE- AND POST- PANDEMIC



MFIs WERE ABLE TO SOURCE LOCAL EXPERTISE INEXPENSIVELY AND RAPIDLY TO IMPLEMENT CHANGES

The success of these processes was attributable to a few factors, first and foremost the availability of local expertise. MFIs were able to source in-house staff and local consultants. Local staff were able to design new tools or integrate existing tools from the market—such as Cartera Digital and Tigo Money—into the MFIs systems.

They generally did not rely on outside donations for these changes. Twenty seven of 31 MFIs that made any digital investments did so either completely or partially with internal funds while only 6 used donated funds. Funding was primarily sourced through the regional MFI network, REDCAMIF, and its program with ADA (See box below), which was relatively inexpensive. This program was especially useful in providing a digitization strategy and action plan for smaller MFIs that were not part of larger existing networks that offered support in this process. A few networked MFIs (Vision Fund, Pro Mujer, etc.) were able to rely on their international network expertise, licenses and partnerships to access new technologies affordably.

ADA / REDCAMIF DIGITAL TRANSFORMATION PROJECT

Between 2018-2020, ADA (Appui au développement autonome, a Luxembourgish, non-governmental organization) and REDCAMIF (the Central American and Caribbean microfinance network) launched a digital transformation program for MFIs affiliated with REDCAMIF. In total, 7 MFIs were supported in defining and implementing a digital transformation strategy based on a client-centric methodology. 7 additional MFIs were added to address the Covid crisis. The project had two phases:

1. **Developing a digital transformation strategy (pre-Covid**) using design thinking, agile methods, and iteration. The results were contextualized within the competitive, technological and regulatory environment in each market; and

2. **Implementing "quick wins" (during Covid)** to help MFIs intelligently digitize their operational processes, business and new product development and customer experience. In this phase MFIs were not required to have a digital strategy written down, but they had to have a credible strategic plan that contained a digital transformation action plan with the approval of its Board of Directors.

The cost of the technical assistance was approximately USD 30,000 and MFIs were asked to finance USD 15,000. MFIs interviewed for this study that had participated in this project found it was extremely useful in supporting them to build a strategic approach to digital transformation.

MFIs ASSUMED GREATER CLIENT READINESS TO USE TECHNOLOGY BUT INSTEAD NON-BANK CORRESPONDENTS BECAME A KEY INTERMEDIATE "PHYGITAL" LIFELINE

Beginning a digital transformation to respond to a sudden lack of contact with clients was challenging. As they embarked on a digitization process, many MFIs discovered that their existing analog and digital processes provided poor client information. Addresses and phone numbers were often outdated in MFI systems. Instead, loan officers were accustomed to tracking client whereabouts informally, without recording this information in MFI systems. Clients, on the other hand may have smartphones, but in rural areas, they have spotty connectivity and a lack of familiarity and trust in digital tools. One MFI in Honduras explained in our survey "They [clients] don't have internet, they don't have smartphones, they don't know technology well and there are areas with no connectivity."

MFIs were both resource-constrained and pressured to identify solutions to maintain their liquidity by ensuring that existing clients repaid loans and that new loans could be issued. They found that rural clients, group borrowers and female clients felt most comfortable turning to familiar communication channels such as WhatsApp and using nonbank correspondents rather than digital solutions to avoid branches during lockdowns.

> "Other people don't use the apps out of fear, because they think they're insecure because they think transactions aren't executed well or that they're wrong."
> – Loan officer, ProMujer Nicaragua

> "HDH has an app and bank correspondents, but I only use the bank correspondents."
> – Hermandad de Honduras Client, Honduras

> "What I use are the correspondents' agents and the *cajas rurales* to make my payments."
> – Fundación Génesis Client, Guatemala

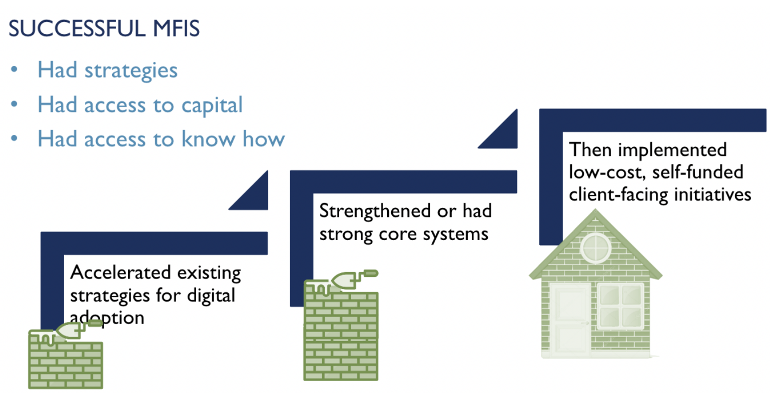
> "I haven't had any problems, the important thing is to do our part to learn….my son is a computer's engineer, and he explains to me, and also the girl that works with me."
> – Integral client, El Salvador

According to MFI managers, their clients—and particularly rural and women clients—use non-bank correspondents much more than they do ATMs, online banking or fintech apps. MFI managers believe that awareness of fintech apps is low and that even when clients are aware of them, many do not yet use them. They also believe that consumer loan clients, many of whom are urban or formally employed, are more tech aware (See Table 4).

TABLE 4. MFI SURVEY RESULTS: MFI MANAGER PERCEPTION AWARENESS AND USE OF CLIENT CHANNELS BY SEGMENT (N=40)

		Rural Clients	Group / Communal Loan Clients	Women Clients	Consumer Loan Clients
Online Banking	Not aware	22	17	15	8
	Aware / doesn't use	16	16	19	17
	Aware / uses	1	3	5	12
ATMs	Not aware	7	9	6	4
	Aware / doesn't use	20	14	18	12
	Aware / uses	12	12	14	20
Non-Bank Correspondents	Not aware	8	11	5	6
	Aware / doesn't use	2	2	5	6
	Aware / uses	28	23	29	25
Fintech Apps	Not aware	21	19	14	12
	Aware / doesn't use	13	11	18	14
	Aware / uses	4	4	6	10

OF THE 31 MFIs THAT MADE SIGNIFICANT DIGITAL CHANGES, 16 WOULD NOT REPEAT THEM BECAUSE OF LIMITED BUDGETS, POOR SEQUENCING AND SELECTION ERRORS



MFIs saw apps and digital solutions as an investment toward the future, perhaps accelerating an inevitable trend. However, some regretted their choices. Of our sample of 41 MFIs, 14 would make changes differently if they had to repeat them, while 16 would make them the same way (11 did not respond to this question). In some cases, MFIs assumed clients were more digitally ready than they were. For example, chat bots were integrated into online platforms to respond to client requests but were not immediately used. MFIs that made changes to client-facing and loan officer-facing solutions were more likely to respond that they would not have done things differently in hindsight as compared to those who made changes to back office or core banking systems and hardware (See Table 5).

TABLE 5. MFI MANAGERS RESPONSE BY TYPE OF DIGITAL CHANGE IMPLEMENTED (N=30)

"If you made [digital] changes, would you do these differently if you had to repeat them?" asked of those who made specific changes to their technologies:

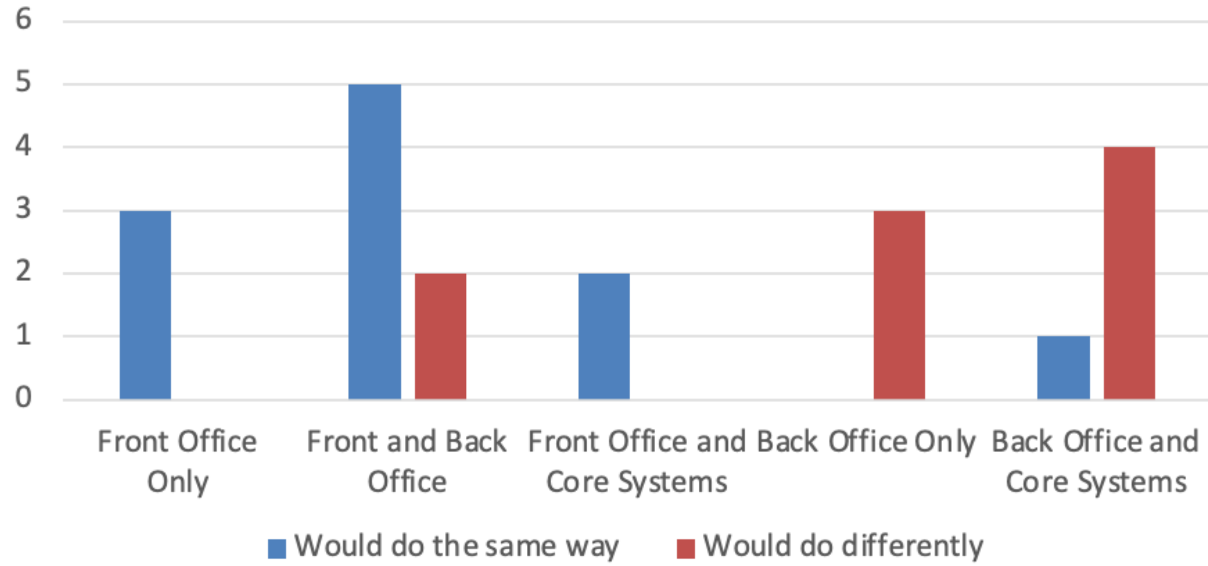


Table Definitions
Front Office: online banking, ATMs, Agents, Apps used by clients, channels or providers
Back office: accounting, CRM, credit analysis, processes, client monitoring, collections
Core systems: core, cloud, security, Client ID, Connectivity, servers

Sequencing mattered in determining MFI satisfaction with their investments. Some MFIs found their core systems and hardware did not support some new applications and software. Larger and networked MFIs with stronger core systems, or those who could afford to invest in them, had an advantage. One MFI manager explained that he is investing in a new core system over the coming years, anticipating a USD 800,000 budget. For some MFIs, choosing a right-fit provider can also be difficult and mistakes can be costly. This points to the importance of having a clear strategy and the right guidance. Larger MFIs were also more likely to have had a digital strategy in place, which they accelerated during the pandemic, while smaller MFIs needed to come up with strategies under pressure.

> "The pandemic came while we were still designing our digital strategy. We began to see a decline in our repayment rates. In 2021, we designed a digital roadmap and created a specific digital transformation Unit. Since then, things are tracked and executed with greater structure and control."
> - MFI Manager, Credicampo, El Salvador

> "We had been implementing changes over 5 years after 2 different consultancies on developing a strategy and digital route. As a result, we developed a mobile app for loan officers and one for clients, virtual training courses for clients, and other technological initiatives."
> - MFI Manager, Integral, El Salvador

> "When we began working on a strategic plan for 2015-2019, one of the things raised (with a consultant) was what was the vision of our institution…it was a nice discussion, and we made the decision to continue being an institution with a rural focus. This meant addressing challenges of widespread geographies, and high costs. So, we decided to start by automating the basic client management process to be able to control, measure and help improve what the loan officer was doing manually."
> – MFI Manager, Hermandad de Honduras, Honduras

LARGER AND NETWORKED MFIs WERE FAVORED, BUT SMALLER MFIs PLAY AN IMPORTANT ROLE IN THE FINANCIAL AND SOCIAL SECTORS IN THE REGION

Fundación Génesis Empresarial in Guatemala, a large, unregulated microfinance institution, had an advantage because of its size, resources and strategic thinking (See box on the next page). According to their General Manager, "In 2016 we developed a strategic digital plan, so when the Covid pandemic arrived we were very advanced." They were also able to leverage their global networks to access technical assistance and funding from Acción International and others. Smaller MFIs, on the other hand, struggled more. They were generally less advanced in their digital transformation process, and more resource constrained, and those in more remote areas had less qualified technological staff to turn to.

> "We wanted to strengthen our [digital] capacity before the pandemic, but it was expensive, and we are a small MFI. We did some things, like a mobile wallet, because it did not require much money and allowed us to avoid handling cash. But it had limited functionality. It did not allow loan origination or payment collection. With the pandemic, we had to make some changes. Now loan officers can originate loans electronically. We received a grant to help educate them and clients and practice 'learning by doing.'…[I]t is a long process but if we don't begin with a first seed, we won't get anywhere. This will be an important moment in our institution's history."
> – MFI Manager, Pana Pana, Atlantic Coast, Nicaragua

Small and medium MFIs have been critical providers of financial services in some of the most sparsely populated regions in the countries of the Northern Triangle, where the cost of accessing remote dwellers is high. They offer smaller loan sizes, have more rural and female clients and proportionally more female employees (See Table 6). They are also present along borders and in hard-to-reach areas (see map), which can be costly for larger institutions who benefit from reducing their marginal costs on new clients rather than reaching last mile clients. As such, they provide useful social services. These include health education, agricultural extension services, and channeling financial support to clients during climate disasters.

TABLE 6. OUTREACH AND INCLUSION INDICATORS BY MFI SIZE

	Small MFIs	Medium MFIs	Large MFIs
Average loan size	USD 672	USD 965	USD 1856
Rural clients	0.61	0.461	0.538
Women clients	0.714	0.709	0.59
Women employees	0.544	0.477	0.414
Women loan officers	0.37	0.278	0.171

FIGURE 4. HEADQUARTERS LOCATION OF THE 41 SURVEYED MFIs

CASE STUDY OF A LARGE MFI, FUNDACIÓN GÉNESIS EMPRESARIAL, GUATEMALA

In 2016, Génesis developed a digital strategic plan, and began developing software in house with some third-party plug-ins such as facial recognition and psychometric scores. Their investments have been extensive, and focus on two main areas of strategic interest: improving efficiency and growing their market share. Below are examples of their progress on both fronts:

Digital Efforts in Operating Efficiency:

- Electronic agenda for loan officers and collection officers
- SDG system to track client social performance integrated into loan officer systems
- Loan origination software that segments and offers customized products
- Collection management App offers customized payment plans
- Geolocation of loan officers and collection managers
- Loan "factory": Centralized loan approvals in real time
- Pronet: Payment collection system
- CRM, Chatbot, call center functionalities

Digital Efforts in Customer Service:

- Génesis App: Clients can track loan progress and find support, information, and education.
- Génesis Cash: app for customers to apply for digital loans integrated into Génesis wallet Includes value chain financing options with suppliers on the system (Cementos Progreso, Pepsi, and others.)
- Génesis Wallet: payments app compatible with 8 banks, major MFIs, utility companies, and various remittance recipients. Seeking partnerships with Visa and Mastercard.
- Digital education platform: content, videos can be downloaded, etc.

According to Génesis management, the process has met some challenges. In particular, loan officers require constant training and attention. One loan officer explained, "In the beginning it is hard to learn, but as you become more familiar with the technology, and use it every day, you notice that it is useful and good." Client facing products are even more difficult to promote. According to management, "the digital wallet has had very slow traction, clients explain that they trust paper more." Relatedly, staff are reluctant to promote products that don't work with clients. They value their relationships with clients and do not want to break that trust. As such, it is essential not to launch products that are not tested and well-functioning. "If you launch products that have bugs, you lose the confidence of your staff." Despite challenges, Génesis has seen some traction with staff and clients throughout the digitization process. This has been most attributable to persistence and hard work. Managers cite a "demonstration effect" when clients see loan officers using technology. It is thus important to ensure that loan officers are incentivized and trained, because it will have positive repercussions on clients. "Change requires investment in education and changing culture so that people trust the technology."

Conclusions and Recommendations

MFIs in the region rushed to invest in front office support for agents and staff as well as back-office technology as a response to lockdowns during the pandemic. This enabled remote loan origination, disbursement and collection, and remote contact with agents, staff, and clients, increasing productivity. But as a result of the rush implementation some MFIs regret their decisions, especially those that did not have a previous roadmap or digital strategy. Change management, training in technology and new recruitment strategies were essential in complementing digital investments. Having thoughtful and sequenced digital strategies, as well as strong core banking systems, hardware and software enabled more stable and robust back- and front-office changes. Those who did not have capable core banking systems struggled to integrate new software and apps. These systems were difficult to upgrade and some MFIs who tried found themselves frustrated with technical challenges. Most MFIs invested needed time in "teaching digital" to staff and clients who continue to lag in digital adoption, as much or more than clients.

While MFIs in Central America were extremely resilient in the face of Covid and lockdowns, their path to digitization suggests that there may be a new **digital divide** ahead. One where larger, well-networked institutions are advantaged because robust digital solutions require robust systems on the back end which are expensive and need scale to offset investments. They also require time. Clients, and to a lesser extent staff, require time, education and confidence in new technologies before adopting them.

Strengthening the value proposition for clients to use technology can offset some of the cost of investing in digital technology by increasing client adoption and use and reducing the time it takes to acquire customers. Clients and loan officers suggested that digital solutions should be more focused on payments (e.g. bills and remittances), which are a concrete client need. Clients, on the other hand, require some hand-holding early on. Programs that focus on developing products and partnerships that can address client needs and support them with a "teach digital" strategy could be useful in this context.

Similarly, investments in core systems, servers, hardware and other foundational technologies will be critical to ensure that front-end systems are agile and robust. Many of our respondents who made forays into this space were disappointed. This can be expensive and may not merit an investment for MFIs with only a few thousand clients. Yet these MFIs offer critical value to last-mile clients, women and rural households. A redesign of the MFI ecosystem may be merited, and technological advances offer new possibilities where small MFIs can share balance sheets and back-office systems while offering multiple products and services through one-stop shop marketplaces. Shared third party technologies, products and platforms make sense considering the scale of some institutions. Exploration of solutions such as BaaS (Banking as a Service) platforms at the country or regional level might be useful. Already, REDCAMIF has seeded a microinsurance broker, Serinsa, which sources right-fit insurance products from major insurers and offers a platform that networked MFIs can plug into for enrollment, payments, and claims management.