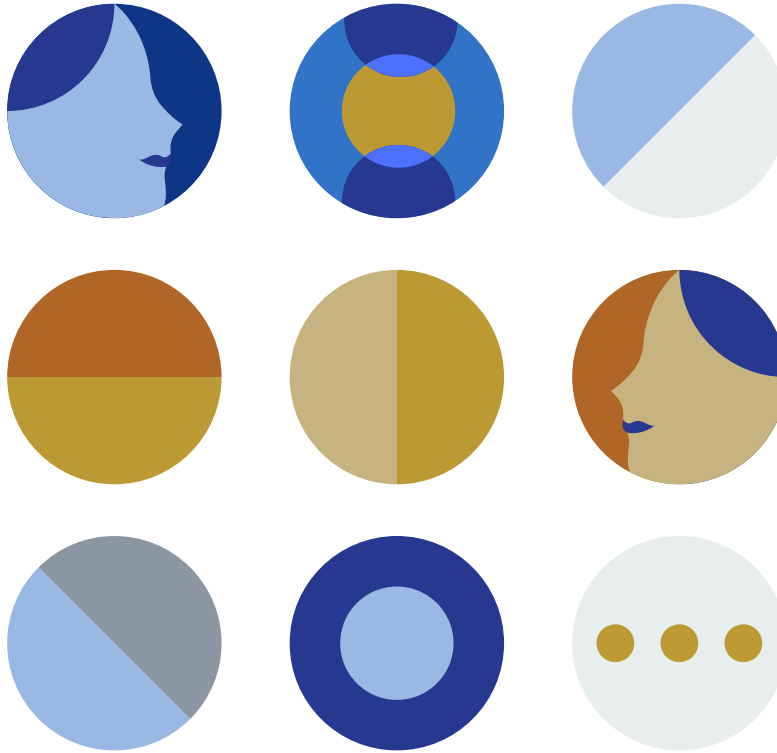




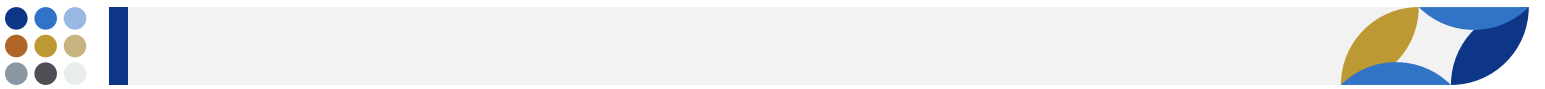
Women's World Banking



# Designing Digital Payments for Mexican Women Entrepreneurs

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# Foreword

The world had been progressing toward an increasingly digital economy, but the pandemic brought about a material inflection point; it fundamentally changed the way people and businesses interact with each other and underscored that digital payments are vital to deliver funds quickly to those in need, providing an economic lifeline for many. However, of the 1.7 billion people around the world who remain unbanked, the majority are women. In Mexico, more than half of the population is either financially excluded or does not have access to a bank account, with women facing outsized barriers. The digitization of money has helped increase equal access to financial services and bring more women into the global financial system, but there are still significant obstacles within the existing system.

Research shows that access to financial services has a direct impact on a person's ability to lift themselves out of poverty. This is especially true for women in developing economies. When women have economic empowerment and access to financial tools, the positive ripple effects for them, their children and families cannot be overstated. And yet the findings of the Women's World Banking report revealed that the gender gap in financial services partially persists due to reservations about the digital economy.

To progress toward greater financial inclusion for women, it's important that businesses, nonprofits, and governments work together to overcome the barriers that prevent adoption, including low digital financial literacy. At Facebook, we are focused on empowering everyone, everywhere to access the world's financial system to accelerate financial inclusion and economic empowerment. One of the ways we do that is by supporting the efforts of groups like Women's World Banking. Governments can help accelerate this effort and the adoption of digital financial services by committing to digital inclusion and programs that educate and enable adoption of digital financial services. For instance, governments could consider moving G2P transfers from cash to digital wallets to provide quicker and more secure access to funds for women and their families. WWB is doing its part to increase awareness of the needs of economically underserved communities, which you'll learn more about in this important and timely report.

**David Marcus**

Head of F2 (Facebook Financial)





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The data collection team, led by Bitacora Social team and their network of anthropologists, spent months observing and analyzing the financial ecosystem in which women entrepreneurs operate. These contributors included Gerardo Serrato, Ksenia Kameneva, Pablo Camarena, Tania Honorat, Pilar Montero, Galdino Hernández, Berenice Arceta at Bitacora Social, and the anthropologists Alberto Sánchez, Andrea Benazir Juárez, Angela Nicolás, Angélica Villa, Caleb Gustavo Pérez, Carlos Melchor Ángeles, Diana Perales, Franciso Mariscal, Iván Romero, Joyce Medina, Raziel Saldaña, Malitzin Marcial, Marcela Rivera, Mariel Guzmán, Mayra Román, Paloma Armenta, Reneé López, Ricardo Flores, Sara Herrera, Rosalía Guerrero, Valeria Rojas, Aura Guerrero, and Daniela Hernández. Ksenia Kameneva, particularly, was helpful in providing an analysis of the data and in offering revisions to the paper. To the broader Women's World Banking team, we owe our thanks. Sophie Theis and Giudy Rusconi launched the research design and provided written contributions to phase 1 of this research. Sonja Kelly provided extensive guidance throughout the research process and review of the paper. Marina Dimova also offered substantive comments on the paper. Finally, thanks to Facebook for their financial support of this work.

This report is authored by a Women's World Banking team which included Jaime Edelshein, Victoria Johnson, and Gerardo Pedroza. The views expressed herein are those of the authors and Women's World Banking.



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# Introduction

Mexico's 6.3 million micro, small, and medium-sized enterprises (MSMEs) generate nearly half of Mexico's GDP and employ 37 percent of the workforce.<sup>1</sup> Of MSMEs, 94.2 percent are micro-enterprises, and over half of these are women-owned or women-led.<sup>2</sup> Despite this segment's dominance in the economy, the majority of MSMEs transactions are still cash-based.<sup>3</sup> In part, this could be explained by Mexico's lower rates of financial inclusion. Among adults in Mexico, the majority—53 percent—do not have access to a bank account, and 32 percent do not have access to any formal financial product.<sup>4</sup> Moreover, women—who make up a large proportion of MSMEs—are also more likely to be fully excluded from the formal financial sector: 35 percent of women are financially excluded compared to 28 percent of men. Low digital payment take-up might also be explained by entrepreneurs' financial ecosystem, which influences their accessibility, capacity, and receptivity to digital payments.

In 2019, Women's World Banking set out on a two-year journey to understand why MSMEs have not shown widespread digital finance adoption in Mexico. We started by hypothesizing that poor supply, low demand, and an inadequate ecosystem are driving this low take-up. We began our inquiry by looking at the big picture—Mexico's financial inclusion landscape and regulatory environment—and then moved on to deep qualitative research with Mexican women entrepreneurs to better understand their pain points and the financial ecosystem in which they operate.

<sup>1</sup> INEGI, CNBV, Encuesta Nacional de Inclusion Financiera, 2018.

<sup>2</sup> INEGI, Economic Censuses, 2019.

<sup>3</sup> OECD, "Financing SMEs and Entrepreneurs," 2020.

<sup>4</sup> INEGI, National Survey for Financial Inclusion (ENIF), 2018.





Digital payments—and mobile-based payments specifically—have the potential to advance financial inclusion in Mexico. Mobile-based payments hold the promise that they can meet the needs of women in the segment that currently are financially excluded, and help them securely and confidently manage their finances. Digital payments also have the potential to transform MSMEs by reaching more customers and suppliers, accessing more capital, making payments easier and more secure, and providing new skills for entrepreneurs.<sup>5</sup>

Social commerce entrepreneurship, the emerging business model that blends social media e-commerce with payment and delivery platforms, has seen increased uptake of non-cash payments in response to COVID-19.<sup>6</sup> The COVID-19 pandemic has accelerated the use of social commerce and e-commerce platforms as well as digital payments, and has contributed to a reduction in the use of cash.<sup>7</sup> While Mexico has seen digital uptake recently, use of mobile-based payments remains low. Under current regulations, a bank account is required in order to access mobile financial services in Mexico.<sup>8</sup> However, only 26 percent of Mexicans who have a bank account access mobile services.<sup>9</sup>

This report first shares an overview of Mexico's financial inclusion landscape, then it assesses the needs of women entrepreneurs by understanding their barriers and motivations in relation to digital payment adoption, and, lastly, it envisions the digital payments of the future. It concludes with recommendations for government and financial services providers to support the development of a mobile-based payments ecosystem specific to low-income women entrepreneurs in Mexico, to reduce barriers and increase access.

### ***Box 1: Social commerce and digital payment readiness in other markets***

In 2019, Women's World Banking conducted research in Indonesia and India to explore the potential of social commerce to advance women entrepreneurs' financial inclusion.<sup>10</sup> This research divided Indonesian and Indian women into four segments, according to the digital platform they used: WhatsApp, social media, e-commerce, and digital payments. The research showed that when adopting digital payments, women social commerce entrepreneurs often maintained use of cash-based payments, and viewed cash and digital payments as having distinct functions. Many of these findings overlap with our findings about women entrepreneurs in Mexico.

*Source: "Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia," Women's World Banking, 2019.*

<sup>5</sup> According to a 2021 Visa Study in Mexico, SMBs identify business growth as the top benefit of accepting digital payments due to additional payment options for customers, increased convenience, improved security, and greater customer satisfaction, among other factors.

<sup>6</sup> Del Valle, Dias, Lehr, and Gil, "The Acceleration of Financial Inclusion During the COVID-19 Pandemic," 2020.

<sup>7</sup> "Financial Cards and Payments in Mexico," 2020.

<sup>8</sup> The 2018 Fintech Law, Article 45, allows for exceptions for Fintechs that apply for authorization to offer mobile wallets not linked to a bank account.

<sup>9</sup> World Bank, Global Financial Inclusion Database, 2017.



***Box 2: Methodology***

This research—both quantitative and qualitative—included two phases. Phase 1 focused on the big picture: Mexico's national financial inclusion story, regulatory environment, and ecosystem. We constructed a literature review on social commerce and digital payment readiness. We conducted our own analysis on the microdata from ENIF 2018. Then, we interviewed 12 key informants: 4 banks and financial services providers; 2 Fintechs or payment platforms; 4 financial inclusion experts; and 2 government policy makers.

In phase 2, we selected 45 women entrepreneurs and 6 bank agents with whom to conduct semi-structured interviews. These women came from urban (Mexico City), semi-urban (Veracruz), and rural (Oaxaca) areas in Mexico. Within micro and small enterprises from each of the target locations, we identified the following women entrepreneurs: 5 shopkeepers, 5 food vendors, 5 catalog sellers, and 2 bank agents. Within each enterprise type, we included entrepreneurs who accepted only cash-based payments, some who accepted a hybrid of cash-based and digital payments, and some entrepreneurs who primarily operated with digital payments. Interviews took place over two to three segments, depending on the entrepreneurs' availability. In six business locations, we conducted ethnographic research to understand the neighborhood geography, competition, and infrastructure, as well as the women's context in their communities.

To complete phase 2, we held second-round interviews with 12 of these 45 women entrepreneurs to conduct prototype testing on a hypothetical digital financial product using the first interview insights as base. The sample used for co-creation and prototyping included 4 entrepreneurs from each segment. Follow-up interviews focused on a series of mock-ups based on the most-mentioned platform, to test appropriateness, gauge reactions, and gather additional ideas.

<sup>10</sup> Theis and Rusconi, "Social Commerce Entrepreneurship and New Opportunities for Women's Financial Inclusion in India and Indonesia," Women's World Banking, 2019.





# Overview of Financial Inclusion in Mexico

In Mexico, more than half of the population is either financially excluded or does not have access to a bank account.<sup>11</sup> The Mexican National Institute of Statistics, Geography and Informatics reports that 32 percent of adults are financially excluded, meaning they use no formal financial products. With no bank account, loans, or insurance, this third of the population relies exclusively on informal instruments to manage their financial needs. Women are more likely to be fully excluded from the formal financial sector. Among women in Mexico, 35 percent are financially excluded compared to 28 percent of men. Overall, people who do not own a mobile phone are more likely to be excluded than those who do own a mobile phone. More than half—53 percent—of Mexican adults are unbanked, meaning they do not have access to a bank account. The gender gap in account ownership is relatively small, with 54 percent of women having no bank account compared to 51 percent of men. Owning a mobile phone does not substantially affect the likelihood of having a bank account. Some Mexicans have access to bank accounts but do not use them: 17 percent of Mexican adults are inactive account holders who did not use their bank account during the past 12 months. Women are less active than men, with 18 percent inactivity versus 16 percent inactivity.

Within the current Mexican banking sector policy, a formal bank account is required to make mobile-based payments. Use of mobile-based payments in Mexico is currently limited. Overall, only 4 percent of women have a mobile money account versus 7 percent of men, and only 6 percent of women have used a mobile phone to access an account versus 9 percent of men.<sup>12</sup> Among Mexicans with a formal financial account, only 26 percent access mobile banking services. The younger population is most likely to use mobile banking, with 35 percent of adult account holders aged 25-34 using mobile banking.<sup>13</sup> Of those who use mobile banking, most use the service to consult their balance (89 percent), make transfers (55 percent), or pay for their utility services (47 percent). Of those who have not yet adopted mobile banking, many report that they do not trust the service (32 percent) and prefer to use other payment methods like cash and debit cards (26 percent). Out of all mobile phone owners, only half (51 percent) are banked.

Use of other formal financial instruments—such as credit, insurance, and retirement accounts—is also limited (Table 1). Only 31 percent use formal credit, and this usage again shows a relatively small gender gap of 4 percent between men and women (33 percent of men versus 29 percent of women). Interestingly, a larger gap of 21 percent exists between the share of mobile phone owners who access credit and non-mobile-phone owners who do so. Usage of insurance products is low in Mexico overall, with only 25 percent using insurance. A larger share of men than of women are

<sup>11</sup> To obtain the latest overview of financial inclusion in Mexico, we relied on the 2018 National Survey for Financial Inclusion (ENIF) conducted by the Mexican National Institute of Statistics, Geography and Informatics (INEGI), except where noted.

<sup>12</sup> Data on mobile money are from World Bank's 2018 Global Financial Inclusion Database.

<sup>13</sup> There has been a significant increase in digital uses during COVID-19. For example, **Citibanamex, Mexico's second largest commercial bank**, added 7.4 million digital customers by September 2020, which represents an annual growth of 32 percent. Mobile payments also doubled in the past 12 months.







accessing insurance products (28 percent versus 23 percent). Less than half—40 percent of the population—reports having a retirement account. In line with the disparities in labor force participation, the share of men with a retirement account is much larger than the share of women, resulting in a gender gap of 18 percent. People who do not own a mobile phone are less likely to have access to a retirement account.<sup>14</sup>

Figures that demonstrate low access to and use of financial accounts reflect the fact that the currently available formal financial services are inadequately addressing the needs, preferences, and constraints of the unbanked and excluded segment. In Mexico, rural and low-income populations are more likely to be excluded from formal financial products and services (Table 2), with women and indigenous populations experiencing compounded barriers. Understanding this segment's needs, preferences, and constraints is necessary for designing appropriate financial products that will offer them the option to avail themselves of formal financial instruments.

**Table 1: Key financial inclusion indicators**

|                              | Total (%) | Men (%) | Women (%) | Mobile Phone Owner (%) | Non-mobile Phone Owner (%) |
|------------------------------|-----------|---------|-----------|------------------------|----------------------------|
| <b>Population</b>            | 100       | 47      | 53        | 79                     | 21                         |
| <b>Financially excluded</b>  | 32        | 28      | 35        | 27                     | 48                         |
| <b>Unbanked</b>              | 53        | 51      | 54        | 49                     | 66                         |
| <b>Inactive<sup>1</sup></b>  | 17        | 16      | 18        | 15                     | 23                         |
| <b>Loan<sup>2</sup></b>      | 31        | 33      | 29        | 36                     | 15                         |
| <b>Insurance<sup>3</sup></b> | 25        | 28      | 23        | 29                     | 11                         |
| <b>Retirement account</b>    | 40        | 49      | 31        | 45                     | 20                         |

*Note:* Women's World Banking computations are based on ENIF 2018. <sup>1</sup> Has a bank account but did not deposit money during the past 12 months and did not use debit cards or mobile banking during the last month. <sup>2</sup> Currently has a formal loan. <sup>3</sup> Has insurance other than the one provided by the government (Seguro Popular, IMSS, or ISSSTE).

**Table 2: Who is the unbanked and banked population?**

|                                             | Banked     |            | Unbanked   |            |
|---------------------------------------------|------------|------------|------------|------------|
|                                             | Men (%)    | Women (%)  | Men (%)    | Women (%)  |
| <b>Population</b>                           | 48         | 46         | 51         | 54         |
| <b>Urban<sup>1</sup></b>                    | 73         | 68         | 56         | 62         |
| <b>Mobile phone owner<sup>2</sup></b>       | 88         | 80         | 75         | 72         |
| <b>Median yearly Income</b>                 | 88,400 MXP | 62,400 MXP | 62,400 MXP | 41,600 MXP |
| <b>Saving money (formal &amp; informal)</b> | 78         | 76         | 60         | 58         |
| <b>Loan<sup>3</sup></b>                     | 48         | 41         | 19         | 19         |
| <b>Insurance<sup>4</sup></b>                | 45         | 37         | 11         | 10         |

*Source:* ENIF 2018. <sup>1</sup>Residents in localities with more than 15,000 inhabitants. <sup>2</sup>Mobile phone ownership does not distinguish between feature phones and smartphones. <sup>3</sup>Currently has a formal loan. <sup>4</sup>Has insurance other than the one provided by the government (Seguro Popular, IMSS, or ISSSTE).

<sup>14</sup> INEGI, National Survey for Financial Inclusion, 2018.








## Mobile-based payments

Mobile money regulation enacted in 2010 established a bank-led model in Mexico. The legal framework held that mobile money constituted a deposit and by law deposits can only be taken by banks and regulated institutions.<sup>15</sup> Based on this regulation, any mobile money account in Mexico required a bank account. The bank-led model stands in contrast to the telco-led model employed in other countries such as Kenya. Under a telco-led model, mobile money providers can offer wallets to clients who do not have a bank account. These wallets can hold value but do not pay interest. The Fintech Law of 2018 again mandated that customers have an account at a regulated financial institution in order to interact with Fintechs, thus preventing wallet openings for the unbanked. Since March 2019, however, secondary regulation allows authorized Fintechs to cash in up to approximately \$65,000 pesos (USD\$3,200) per month from their clients.

Because accounts at regulated financial institutions are de facto required in Mexico for anyone who wants to use mobile-based payments, the previous barriers to account ownership and use remain important to address. However, additional supply- and demand-side barriers must be considered in order to promote the adoption of mobile-based payments in Mexico, as presented in Table 3.

Even with these challenges, mobile-based payment does offer the potential to greatly increase financial inclusion, particularly as rates of internet connectivity increase across Mexico. Table 3 lists some of these benefits.

**Table 3: Barriers to and potential of mobile-based payments for financial inclusion**

|  <b>Supply-Side Barriers</b> |  <b>Demand-Side Barriers</b> |  <b>Potential Benefits</b> |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| A bank account is required for using mobile-based payments.                                                     | Smartphone ownership among women is limited.                                                                    | Reduced risk of theft.                                                                                          |
| The mobile-based payment ecosystem is limited.                                                                  | Users have limited digital capabilities.                                                                        | Greater privacy and control.                                                                                    |
| Agent network coverage remains limited.                                                                         | There is low awareness of the digital agent network.                                                            | Reduced transportation costs.                                                                                   |
| Agents do not reliably offer a full range of transactions to customers.                                         | Users have limited confidence in transaction confirmation.                                                      | Potential to build financial capabilities.                                                                      |
|                                                                                                                 | The financial ecosystem may be entirely or primarily cash-based.                                                | Improved customer experience.                                                                                   |
|                                                                                                                 | Suppliers may not reveal that they accept digital payments or may charge users a fee to pay digitally.          | Reduced discrimination.                                                                                         |
|                                                                                                                 | Agent fees are relatively high.                                                                                 | Improved access to other financial products, such as loans and insurance.                                       |

<sup>15</sup> Suarez, "Poor People's Money: The Politics of Mobile Money in Mexico and Kenya," 2016.





# Assessing Mexican Women Entrepreneur's Needs

Low-income women entrepreneurs are picking up digital tools across financial and social commerce platforms, and the pandemic has accelerated this adoption in discreet ways. For instance, in our sample, women remarked that they learned new mechanisms and strategies for developing customer relations “without realizing it.” They often gained digital capabilities from their family members, clients, and suppliers. However, openness to new digital tools and resources, as well as digital finance transaction frequency and amount, vary depending on the entrepreneur's age, life-stage, and business type.<sup>16</sup> This section examines perceptions of cash versus digital payments, highlights three main personas that emerged in this research, and explores the main motivations for digital payment adoption.

## ***Box 3: Digital access and DFS use among women entrepreneurs***

Among our sample, every participant had a mobile phone, and 95 percent of participants had a smartphone. Every interviewee who has a smartphone uses at least Facebook and WhatsApp, but the use of more-advanced apps increases depending on a number of factors (i.e. autonomy in the use of technology, access to the internet, digital literacy). The most advanced users are familiar with mobile banking, mobile-based spreadsheets, and video conferencing applications.

All of the participants used digital social networking platforms<sup>17</sup> for their businesses. Entrepreneurs use social media and messaging platforms to engage with customers, announce daily offerings and sales, receive orders, and send banking details or receive a record of transactions. The most-advanced technology users had practiced this behavior prior to the pandemic. Less technology-familiar interviewees adapted messaging platforms into their businesses during the pandemic as a medium for business continuity. Everyone found the social networking platforms to be mechanisms for business continuity, regardless of the type of business.

Participants fell into one of three different payment behaviors: cash-based, mostly cash-based but using digital finance with reluctance, and primarily digital. Catalog sellers, now fully digital given COVID-19, are more inclined to accept digital payments. Beyond this link between particular business type and digitization, however, business type was not the best predictor of preference for cash versus digital.

*Source: Authors' description*

<sup>16</sup> Entrepreneurs are more inclined to use digital money when they already have a bank account, which is required for accessing mobile money, as well as a card. The additional effort required to access mobile money is much less for those who already hold a bank account.

<sup>17</sup> Facebook funded this research. We were hoping to find entrepreneurs using platforms other than Facebook and WhatsApp, which is owned by Facebook, because of the risk of perception of bias among our audience. However, while there are other platforms such as Telegraph available in Mexico, all of our participants were using WhatsApp, consistent with other market research about the high demand for the service.







## Perceptions of cash versus digital

For most women entrepreneurs in Mexico, the use of cash is part of a professional and personal lifestyle. The following findings reveal entrepreneurs' perceptions of cash-based and digital payments (Table 4), regardless of the mix of cash versus digital preference:

- Digital money complements cash.
- Cash-based and digital payments have distinct functions. For example, digital money may be for planned expenses, while cash may be used for daily business operations or to pay for planned or unplanned expenses.
- Digital money and cash have their own perceived security benefits and risks. Digital payments are seen as physically safer than carrying cash, which can lead to getting robbed or receiving a fake bill. Digital payments, however, are perceived as less secure in other ways, since they carry risks related to card cloning, lack of privacy, the mis-entering of numbers, a lack of confidence in transaction completion, or a lack of proof of payment. In these ways, cash-based payments are perceived as more secure.

**Table 4: Understanding entrepreneurs' perceptions of cash versus digital payments**

|                      |  <b>Cash Payments</b>                                                                                                                                              |  <b>Digital Payments</b>                                                                                                                                                                                                                                                                                              |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advantages</b>    | <ul style="list-style-type: none"> <li>• Transparency</li> <li>• Practicality</li> <li>• Liquidity</li> <li>• Familiarity</li> <li>• Accessibility</li> <li>• Better control of finances</li> <li>• Confidence in transaction completion</li> </ul> | <ul style="list-style-type: none"> <li>• Safety against robbery</li> <li>• Less time needed for payment transactions</li> <li>• Healthier – no need to touch money (COVID-19)</li> <li>• Practical for protecting savings (less tempting to use)</li> <li>• Helps in acquiring new customers and growing a business</li> <li>• Easier for receiving advance payments and making secure sales</li> </ul> |
| <b>Disadvantages</b> | <ul style="list-style-type: none"> <li>• Risk of either losing a sale if there's not exact change, or having to give a "microloan" to the customer</li> <li>• Potential to spend money on unnecessary purchases</li> <li>• Easy to spend</li> </ul> | <ul style="list-style-type: none"> <li>• Need to have internet or mobile data</li> <li>• Lack of clarity in transactions</li> <li>• Risk of forgetting a password</li> <li>• Inability to use it to pay all merchants</li> <li>• Need to have banking details at hand</li> <li>• High cost of installing POS</li> <li>• Need to send/receive payment receipt</li> </ul>                                 |
| <b>Fears</b>         | <ul style="list-style-type: none"> <li>• Fake bills</li> <li>• Being robbed</li> </ul>                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Card cloning</li> <li>• Failure of payment to go through</li> <li>• Inability to solve problems immediately</li> <li>• Risk of making costly mistakes</li> <li>• Transaction fees</li> </ul>                                                                                                                                                                   |
| <b>Myths</b>         | <ul style="list-style-type: none"> <li>• The idea that "everyone only uses cash in this sector, store, or area"</li> <li>• Suppliers accept cash only</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>• "You need to be very intelligent to do it"</li> <li>• "It's a youth thing"</li> <li>• "For expensive purchases only"</li> <li>• "For big businesses"</li> <li>• "They charge you for everything"</li> </ul>                                                                                                                                                    |

Source: Authors, Qualitative Data

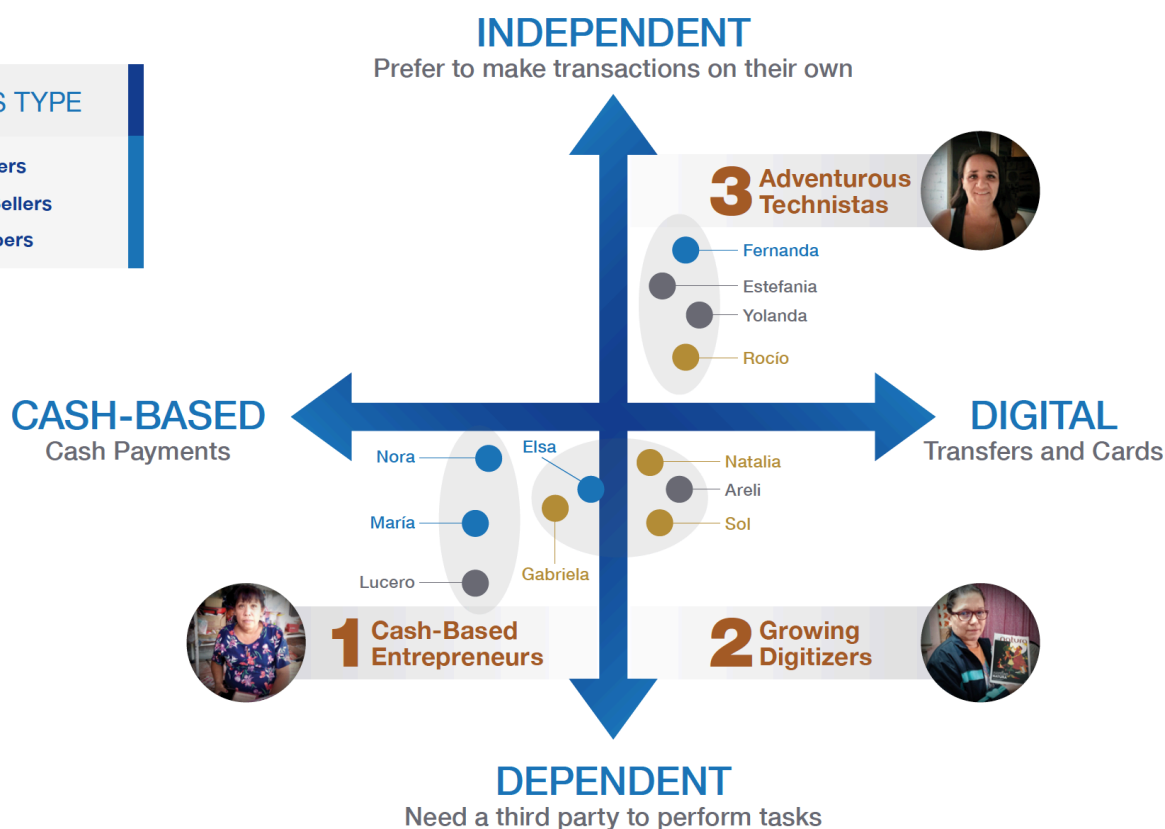




## Three digital readiness personas

As part of our analysis, we considered where entrepreneurs fall along two key axes: (1) range of autonomy in using digital finance and (2) level of digitization of an entrepreneur's customers/clients. Using these variables, we noticed three clusters: Cash-Based Entrepreneurs, Growing Digitizers, and Adventurous Technistas (Figure 1). In each of these clusters, we noticed that the financial ecosystem had an outsized influence on digital payment comfort and adoption.

*Figure 1. Three personas and their digital payment readiness*



*Source: Authors' analysis. Names of interviewees have been changed for anonymity.*

Each of the identified personas showed a particular behavior related to access, adoption, and use of digital payments, and pointed to specific needs. The digital payments of the future will need to address different needs in their value propositions in order to appeal to each of these personas. All three personas in our sample tended to serve a woman-centric customer base.





## Cash-Based Entrepreneurs



Lucero, CDMX

**Cash-Based Entrepreneurs** see cash as agile, efficient, and instant. They may be aware that digital provides benefits for some people, and they are comfortable using simple apps, but they prefer to avoid technology as it is complex and hard to understand. They are afraid of making mistakes that result in loss of money, and they do not like relying on someone else to solve technology problems.

### Key attributes:

- Have a high appreciation for tangibility of cash
- Use social media and message platforms as a business tool ever since pandemic started
- Appreciate personal attention because they can solve problems quicker and feel valued
- See value that digital could add, but find it difficult, out-of-reach, and scary when it comes to resolving mistakes
- Unaware of digital financial offerings
- Like to do things on their own, and when they can't (such as on mobile) they drop them
- Want to know that offerings are not from traditional banks
- Had bad experiences with FSPs

## Growing Digitizers



Elsa, Oaxaca

**Growing Digitizers** are entrepreneurs who, though they are familiar and comfortable with cash, have customers who prefer to pay digitally (via transfers or cards). They may have gained a little confidence in accepting payments, but prefer to withdraw cash and complete payment cycles with cash when they have a choice. They depend on close family and relatives in learning to use new digital tools.

### Key attributes:

- Own a previously opened account due to a nudge by a third party, but seldom use it; prefer to cash-out (salaries, remittances, government support)
- Make cash payments to suppliers and for personal expenses (with draw frequently from ATM) because (1) their suppliers don't accept digital payments and (2) they are used to doing so
- Concerned about security
- Value agility in cash
- Rely on younger member of the family to teach them how to use digital tools
- Require an intuitive environment to feel confident
- Require access to digital literacy through video tutorials or other external support

## Adventurous Technistas



Yolanda, Veracruz

**Adventurous Technistas** are women who are familiar and comfortable with technology. They like to explore new ideas, and they consider technology a tool they can use to make their lives better. They are used to making and receiving payments but are limited by a rather cash-based environment in which many of their clients still pay with cash and many of their suppliers will only accept cash.

### Key attributes:

- Feel on-trend and up to date with technology
- Try to make and receive mostly digital payments, but believe cash is necessary as not everybody pays/receives in digital
- Concerned about digital security (hacks, card cloning, fraud)
- Self-learners
- Not afraid of making mistakes, but prefer to try with small amounts first
- More open to exploring new platforms, such as e-wallets and delivery apps
- Have found business benefits in digital payments







## Payments cycle: key differences among entrepreneurs

A payments cycle is composed of seven key stages. The personas fulfill each of the stages using different mechanisms and technologies that vary based on whether digital or cash-based payments are used. The payment cycle starts with the promotion of products/services to their customers, which is followed by the negotiation and the sale of their products/services. The entrepreneurs then charge the customer and receive payment. Entrepreneurs then separate the received money into buckets to pay suppliers, pay expenses, and save any remaining funds (Figure 2).

*Figure 2. Payment cycle by entrepreneur persona*

### PAYMENTS CYCLE

- Cash-Based Entrepreneurs
- Growing Digitizers
- Adventurous Technistas



Source: Authors





## 1. Market products

Product offering occurs both in brick-and-mortar and in digital channels. Entrepreneurs send lists of products and offerings to their contacts using social networks (SN) platforms or messaging apps. Among the entrepreneur personas, Adventurous Technistas are the most comfortable using apps for marketing via SN and other messaging platforms. They often use platforms such as Facebook, Instagram, WhatsApp, and Telegram, for instance, and often post Stories on Instagram and Statuses on WhatsApp.

“My little nephew opened a Facebook page to show my products to my contacts. He handles it very well and customers post their request in the comments. I reply with my number so they can text me and make their request.”

– Lucero, CDMX, Food Seller,  
Cash-Based Entrepreneur

“It’s taken me a lot of work to adapt to digital sales. I don’t consider myself an elderly woman, but I had a lot of difficulty since I made my sales talking to the clients, and I wanted to understand their needs to sell them the right product.”

– Elsa, Oaxaca, Catalog Seller,  
Growing Digitizer

“Social media makes it very easy for me because I don’t have to move and take the physical products. Now it’s very easy since I just take the photo or the catalog file and send it to the customer”

– Rocío, Oaxaca, Catalog Seller,  
Adventurous Technista

## 2. Make sales

Customers ask for the price of a product/service of interest, the entrepreneur replies with a price, and both parties negotiate to come to an agreement on final price and delivery/ pick-up. Sales occur in brick-and-mortar channels if the entrepreneurs have a physical space in which to attend to customers or if they can go to customers’ homes. Sales can also occur through digital channels such as messaging platforms, social media direct messages, video-conference platforms, or calls.

“They ask us on WhatsApp what we have that day. We send what we have in the moment (photos) and they reply with their order.”

– Nora, CDMX, Food Seller,  
Cash-Based Entrepreneur

“I like using the phone and social networks in my business. It is a lot easier to make sales.”

– Gabriela, CDMX, Catalog Seller,  
Growing Digitizer

“We chat on Messenger first and if I see interest, I give them my WhatsApp. I can send voice notes or pictures and offer them a special offer to close the sale.”

– Rocío, Oaxaca, Catalog Seller,  
Adventurous Technista







### 3. Receive payments

Customers pay the entrepreneur for the products/services. For cash-based entrepreneurs, customers always make payments with cash in the store or on delivery. In the case of Growing Digitizers and Adventurous Technistas, payment happens either in person through cash or by digital means (Oxxo transfer, mobile banking transfer, or card payments). According to self-reported data, 60-80 percent of entrepreneurs accept payments in cash and 20-40 percent accept payments digitally. Some Growing Digitizers withdraw their digital payments from banks immediately because they do not trust the bank to safely keep the money, or because the account belongs to a friend or family member.

**“We handle everything in cash on delivery. Now there are only two clients who make me a deposit. My sister lent me her account and lets me deposit there.”**

– Maria, Oaxaca, Food Seller,  
Cash-Based Entrepreneur

**“I charged in cash only, but since we started accepting cards there are several customers who paid in cash and now only card. ... I don’t have an exact number but it has gone up.”**

– Areli, CDMX, Shopkeeper,  
Growing Digitizer

**“I like Clip,<sup>18</sup> but it doesn’t make much difference. Not many pay me by this means, but there are indeed some people that do.”**

– Fernanda, Veracruz, Food Seller,  
Adventurous Technista

### 4. Manage money

After finishing the sales cycle, entrepreneurs gather the money they have, and using a physical notebook they count their total revenue, profit, and the costs of sold goods. For all three personas, cash available is separated into an envelope to cover re-investment. Remaining cash is also separated into envelopes for paying expenses (both business and personal). Growing Digitizers and Adventurous Technistas go to the closest ATM to withdraw the money they have earned digitally and continue to cover the expenses that will have to be paid with cash. Adventurous Technistas are likely to leave some money in the account to use for planned expenses or savings, while Growing Digitizers are more inclined to withdraw the entire amount.

**“I like to have everything together because that way it is easier to make know how much I invested, how much I spent, and get my profit. This is where I start to do my math. And I say this money is for this expense, and I use envelopes. Let’s say this box is for electricity bills, gas, I don’t know. Somehow I organize myself. The advantage is that the money is there. I’m seeing it, but also it is a disadvantage because sometimes unforeseen expenses arise.”**

– Lucero, CDMX, Food Seller,  
Cash-Based Entrepreneur

**“As I receive money, I keep it in a little box to have everything we get paid together every day, and we write it down in the notebook. As the suppliers come, I take the money out of the box to pay them. What we receive in the account, which is not much, we try not to touch so we can withdraw it at the end of the month and pay the bills. We also try to write that down.”**

– Areli, CDMX, Shopkeeper,  
Growing Digitizer

<sup>18</sup> Clip is a mobile POS system developed by a Mexican Fintech, and it allows people and businesses to accept card payments using their own mobile phones.





## 5. Pay suppliers

Procurement of goods and supplies for the businesses predominantly occurs over messaging apps that allow entrepreneurs and suppliers to communicate, negotiate, and arrange deliveries. In the case of catalog sellers, this happens over the platform that most brands have provided to their customers. Payment to suppliers occurs most often in cash in the case of food sellers and shopkeepers, as their suppliers will take cash only. Some suppliers, however, take money transfers and some accept card payments. Catalog sellers pay with cards online and money transfers if they are Adventurous Technistas, or make Oxxo deposits if they are Growing Digitizers, even if this represents a fee for the deposit.

“I go to the market to get most of my supplies. They only take cash in there. The rest of my supplies, we get it from a supermarket. My husband pays with his card because of the loyalty program where they give us cash back, but it’s just a little money what we spend there. Mostly it’s the regular market with my own cash.”

– Nora, CDMX, Shopkeeper,  
Cash-Based Entrepreneur

“Lately I’ve been transferring from the bank’s app but that’s a bit difficult sometimes, but usually what I do is take my money and transfer it from Oxxo.”

– Sol, Veracruz,  
Catalog Seller, Growing Digitizer

“Some of my suppliers developed apps so I can place my order and pay online, especially beers, spirits, and so on.”

– Yolanda, Veracruz, Shopkeeper,  
Adventurous Technista

## 6. Pay expenses

After paying suppliers and ensuring business continuity, entrepreneurs prioritize buying food for the family, paying rent, education bills, repaying loans (if any), and spending on leisure. These payments are usually either done with cash at the same place where goods or services are acquired—that is, by paying cash for food at the market, for electricity at the CFE branch, and for the telephone bill at the company branch, etc.—or by paying at a bank branch or by Oxxo transfers. Adventurous Technistas, however, use mobile banking to pay bills or fees when possible to save time; use cards to pay for goods if merchants accept card payments; and make money transfers.





"I pay all of my expenses with cash, but I pay the electricity bill using the ATM that accepts my cash and it is more practical for me. The others are at a till. I do with cash because I don't have an account and I like it better."

– María, Oaxaca, Food Seller,  
Cash-Based Entrepreneur

"I go to make deposits at a Banco Azteca branch. I have the account number of the person I am paying written down. So, I go to the ATM to withdraw my cash and then to the bank branch to make the deposit."

– Areli, CDMX, Shopkeeper,  
Growing Digitizer

"Usually I make Oxxo deposits, but now I started paying online through a website or with mobile banking. Usually, if I pay a person, everything goes from mobile banking. It's easier and more comfortable. You do it at the very moment you want and at the moment you have time and you save a lot of things."

– Yolanda, Veracruz, Shopkeeper,  
Adventurous Technista

## 7. Save money

After paying for expenses, fees, and leisure activities, the remaining money is saved in cash within the house. In the case of the Adventurous Technista, as the money in the accounts is the least reachable, cash is consumed first, and any money left in the account is seen as savings. Cash-Based entrepreneurs from all three personas utilize informal savings groups known as Tandas. In Tandas, a given amount of money is handed to the organizer, who collects the money from all participants, and then gives those funds to a select participant at the end of that cycle. Participants take turns saving and borrowing money without interest. The money saved is usually used for personal care.

"I save my money in a piggy bank inside the house to have a backup, in a Caja de Ahorro because it is practical and I use it for increasing my business. And then I have the Tanda with my friends from this very town. The money I save from my Tanda I use it for my cravings and personal care."

– María, Oaxaca, Food Seller,  
Cash-Based Entrepreneur

"I have boxes in my business where we keep the bills. The money left at the end of the day, I move it to my home and put it somewhere safe, somewhere I know but not so accessible so I won't touch it unless necessary. Every two weeks I also take some money for the Tanda and I like taking the last turn because that way I can use it in anything I want as it is money paid as an expense. I use it for paying for my body creams."

– Areli, CDMX, Shopkeeper,  
Growing Digitizer

"What I have as digital money, as I can't see it directly, I cannot touch it. I cannot spend it so easily, so it helps me to have savings. I let my account slowly fill as I receive payments, and constantly check how much I have so I can keep control of my finances."

– Yolanda, Veracruz, Shopkeeper,  
Adventurous Technista





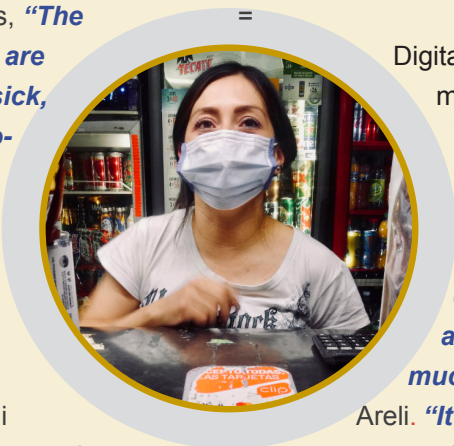
#### Box 4: Payment cycle for Areli, Growing Digitizer, CDMX

**Areli**, 54 years old and a shopkeeper in the suburbs in Mexico City, opens her store Monday through Thursday at 9 a.m. At work, she checks her mobile constantly as she might get orders from customers through WhatsApp. According to Areli, ***"People send us their list by WhatsApp. We take it, and they pay us at their doorstep. We ask first with which bill they will pay us so we can make change. It's been awkward because you have to find time to take the order, but it has helped us keep the business running."*** She employed this strategy for business continuity during the pandemic, and it has allowed her to maintain good relationships with clients. She says, ***"The customers that ask me on WhatsApp are older, or are people who have fallen sick, so they are happy to receive their groceries at their doorstep. But also, the clients who see me go out to deliver say, 'Ah! That's so nice. Happy to hear you are doing this for people who need it.'"***

During normal business operations, Areli charges customers in the store by cash or card. Areli started accepting debit and credit cards after customers repeatedly asked her for the option. Out of fear of losing customers, she decided it was time to implement this payment method. ***"Many people asked us if we accepted cards. When there was trust, we would tell them, no, pay me later, but we thought that the terminal might be a better idea,"*** says Areli. ***"It wasn't until they asked for it that we decided to have a POS. Many people said, 'Why don't they accept [cards]? I have to go get money.' But they weren't going to get money. They went to another store that would accept cards."***

Areli accounts for cash inflows in a series of small boxes inside her store. At the end of the day, she separates these piles into envelopes in order to allocate the necessary

amount in reinvestment, expenses, and salaries. With the cash, she goes to the nearest bank branch and pays her bills. She also makes a deposit into her Tanda, the informal savings and loan group to which she belongs. Areli needs to have cash available daily to pay for store supply purchases, but she feels unsafe. She says, ***"I don't like paying in cash. We have boxes with different bills and then, when the supplier arrives and I have to pay, I have to open the boxes and if there are customers, they are just seeing how much I take. I didn't feel that before, but from a while here I'm afraid."***



Digital inflows have a different purpose and mental accounting system than cash. These funds are stored in her bank account until the intended amount is ready to be withdrawn from the nearest ATM. ***"I go once or twice a week, depending on how much cash I have at hand to pay the supplies and how much I've gathered in the account,"*** says Areli. ***"It takes me about 70 minutes to go and get money from the bank. I could use that time to open my business. My opening hours are at 9 a.m. However, as the bank opens at 9 a.m., I have to leave earlier to be there when they open and then come back and open the business later."***

Areli would like her customers to pay more digitally, both to increase her physical sense of security and to increase customers purchases. She will not be able to shift completely to digital, though. Her suppliers won't accept digital payments, so she feels tied to cash. Also, she needs direct support to learn how to use new tools as she doesn't feel comfortable with technology. She says, ***"Doing everything through the phone might be easier, but I have never learned."***





## Motivating behavior change for digital payment adoption

Entrepreneurs seek to increase their sales and their operational efficiency; they adapt their businesses to the digital world when that may attract more clients or better serve their existing customers. All personas in our sample saw that digital payment adoption could be a catalyst for business growth. However, some also noted that their current cash-based ecosystem and its path dependency could be hindering their digital payment adoption.

**“I started accepting digital payments since customers asked for it. I decided not to put that barrier and not lose customers.”**

– Sol, Veracruz,  
Catalog Seller

Our sample consistently reported several factors that could encourage the adoption of digital payments. Women entrepreneurs need an enabling ecosystem in which both customers and suppliers accept and receive digital payments. To facilitate this, entrepreneurs are looking for services which develop transaction trust and confidence, increase digital capabilities, and respond to challenges as they occur.

## Customer preferences drive entrepreneurs' digital payment adoption

Women entrepreneurs might shift to accepting digital payments largely due to customer preferences. They would do so to satisfy customer needs and avoid losing clients. Anthropological fieldwork and women entrepreneurs themselves further indicated the need to prioritize customer care, as customers are often from the community and share sustainable relationships with the entrepreneurs.

**“I think that our sales would increase if we accepted cards, since many of those who work receive their payment in a card, and if they could pay us that way, we could have more clients.”**

– Naibi, CDMX, Food Vendor

## Internet connectivity is critical to digital payment adoption

Young adult women are often direct mobile phone users who feel comfortable using mobile technology and developing digital skills. Older adult women may own their own phones, but are likely to report relying on their children or grandchildren to teach them how to install and use applications. Most of the women in our sample stated that they use the internet through their cell phone. In addition to its merely practical functions (calls, messages, internet access, etc.), the mobile phone has a symbolic value for women: It is a platform for personal management and control, and it offers opportunities for self-expression.

Entrepreneurs noted many benefits of mobile-based internet connection. They liked prepaid internet packages, as they were cheaper and more adaptive to entrepreneurs' behavior and needs. However, many emphasized their reliance on Wi-Fi, which is now more accessible. Many entrepreneurs noted that they adapted to using the internet on their devices after it was already established in their house or business.

**“Every time I transfer to someone new, I first send \$1 MXN to make sure that everything is OK. It's tedious that first time, but afterwards I really like it because it's quick and I am sure that what I am sending will come across.”**

– Fernanda, Veracruz, Food Seller







## Digital financial capability is essential for digital adoption

Most women entrepreneurs have adapted to digital marketing and communication for their businesses through the use of social networks, yet they remain distrustful when it comes to digital financial services. Entrepreneurs reported that this is primarily due to their discomfort with financial services on their mobile devices—also referred to as digital financial capability.<sup>19</sup> The women entrepreneurs we talked with feared that any mistakes would result in money loss, and were unsure of where to turn for assistance in developing digital financial capability. Entrepreneurs also said that potential IT problems during the transaction process would make it more difficult to trust in digital transactions.<sup>20</sup>

**“I do digital transactions with nerves that I do not know if everything will go well in the transaction.”**

– Natalia, Veracruz,  
Food Vendor

## Security, liquidity, and confidence in managing and using money increases adoption

A sense of confidence in cash-payment transactions may keep entrepreneurs using cash-based payments. With time and practice, digital financial services might also prove to be convenient and accessible and might inspire confidence, motivating engagement with digital payments. Entrepreneurs value lean and intuitive interfaces in their digital products—which is why they adapted to digital marketing. The design of the digital financial service is important for minimizing the perceived risk of mistakes. Any recourse must be timely and decisive, as entrepreneurs look for quick answers when they inevitably have problems, and it must create certainty and increase confidence in digital payments.

**“I don’t like accounts because sometimes you get charged unknowingly. If you make a mistake, it takes forever to get in touch with somebody and nobody has an answer. With cash, I can solve misunderstandings quickly.”**

– Elsa, Oaxaca, Food Vendor

## Suppliers close the payment cycle when they accept digital payments

**“If I could receive deposits, my relationship with suppliers and clients would be better, and many things would be easier for me as I wouldn’t have to go to the ATM and spend my time there.”**

– Maria, Oaxaca, Food Vendor

Although communication with suppliers has improved through digital platforms, many entrepreneurs still make cash payments when they physically collect their merchandise from suppliers. Despite digital communication with the entrepreneurs, suppliers often maintain a traditional cash-based business model, forcing entrepreneurs to pay exclusively with cash. Entrepreneurs mentioned that paying suppliers with mobile money would increase their opportunity to use digital payments.

<sup>19</sup> See Women's World Banking's publication, "Empowering Women on a Journey Towards Digital Financial Capability," for more information.

<sup>20</sup> In many countries, a higher proportion of women are less educated and illiterate compared to men; women also often lack digital skills or the confidence to use mobile services and the internet.



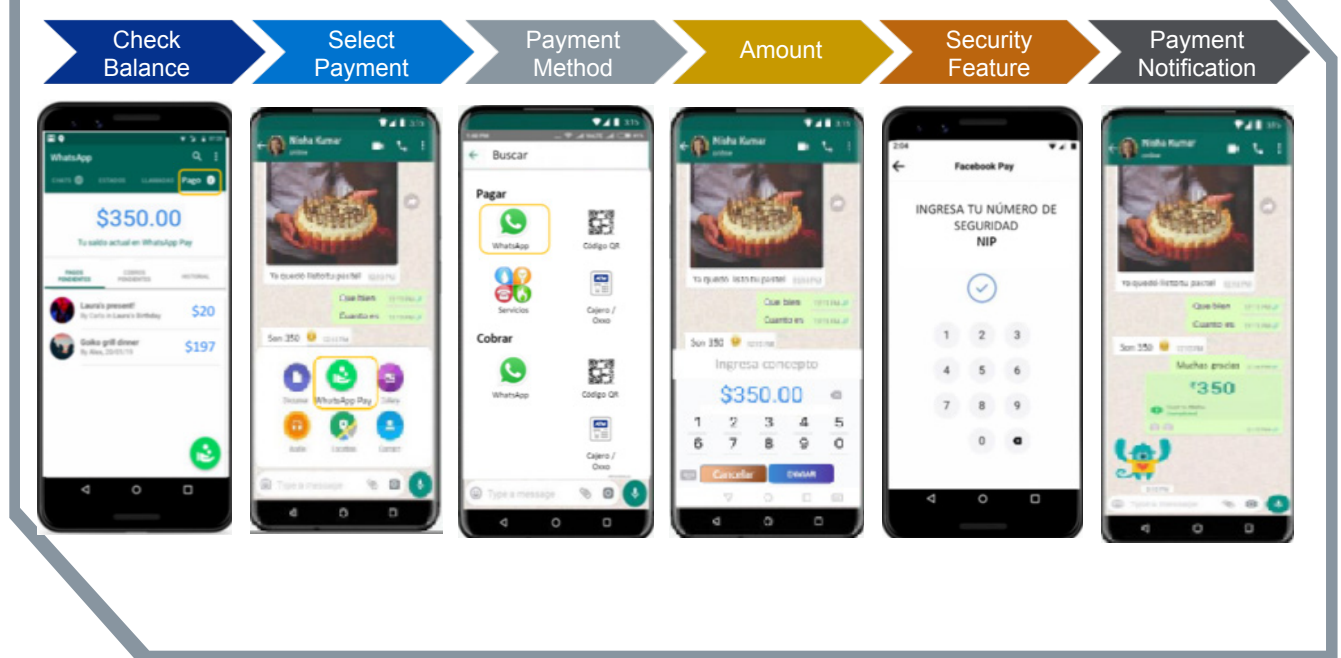


# Envisioning a Future of Digital Payments for Women

The last section provided context for women entrepreneurs' preferences and the financial ecosystem in which low-income women entrepreneurs operate. This section presents a prototype for future digital payments, co-created with the women entrepreneurs in our sample. This section also contains recommendations for how government regulators and financial services providers can influence women's economic empowerment through digital payments and social commerce in Mexico.

Entrepreneurs listed saving time and reducing transportation or transaction costs as the two greatest prospective benefits of digital payment adoption. With this in mind, we built a hypothetical prototype that highlights time and cost-saving techniques. Understanding the pain points and motivators of mobile-based payment adoption, we developed the following wireframes (Box 5).<sup>21</sup>

## Box 5: Mock-up of digital payment design features



Source: Authors

Entrepreneurs seek a simple, intuitive digital platform through which to send and receive payments, track transaction history, and confirm account balance and payment receipt. Currently, low-income women use multiple social media, messaging, and payment platforms to conduct their businesses.

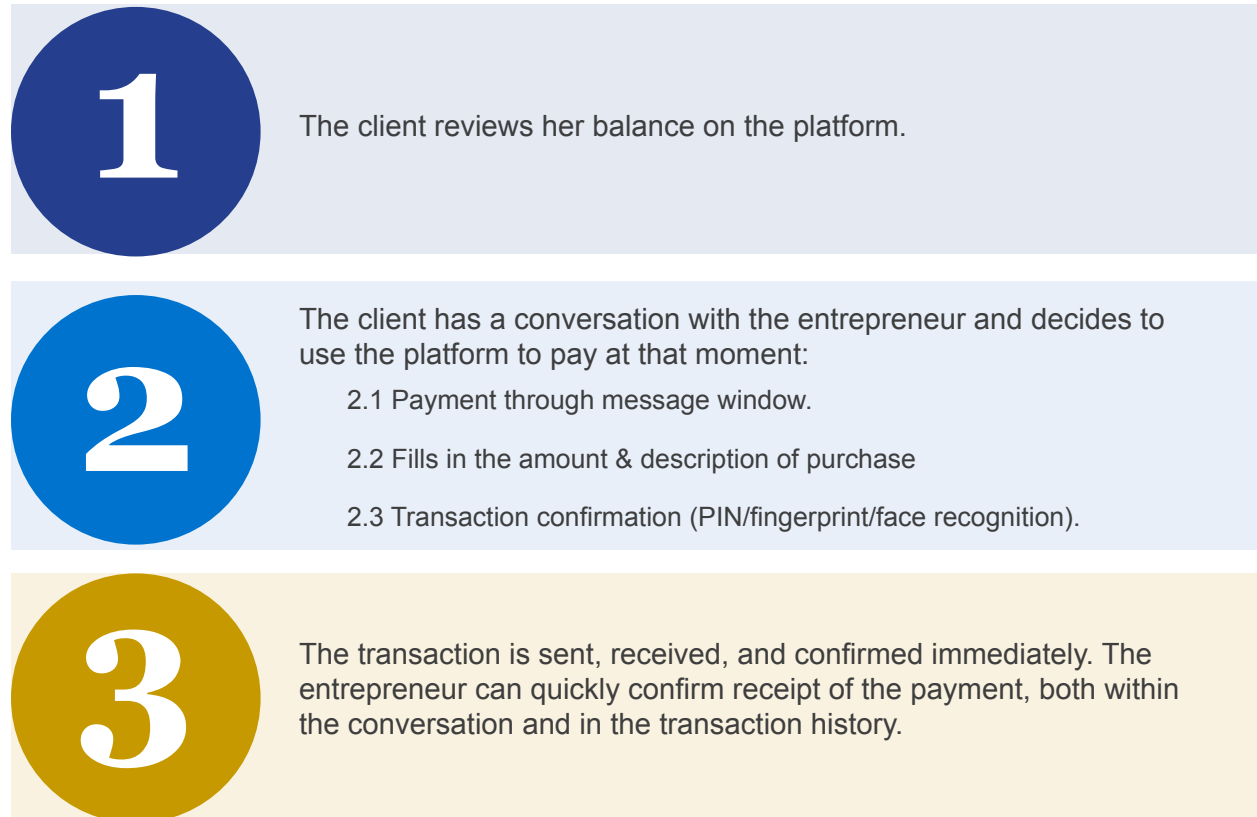
<sup>21</sup> We built a future platform through WhatsApp as an example, because it's the most widely used social media platform in Mexico, but this payment feature could be applied to any other social media platform.





Mexico's market currently does not offer a platform that combines all three, and this market gap is what our prototype seeks to fill. With this in mind, we proposed a concept that combines multiple tools to allow entrepreneurs to perform all personal and business activities in the same application: Entrepreneurs can advertise goods and services, message clients and suppliers, make transactions, pay bills, and track transaction history within the same platform.

In our mock-ups (Box 5), we created a conversation between an entrepreneur and her client, in which the client commits to paying the entrepreneur through the messaging platform in three steps:



**Entrepreneurs responded positively to this prototype and provided the following insights:**

- 1. Social media platforms and messaging apps can serve as a springboard to digital financial inclusion for those familiar with the apps.**
  - a. Existing platforms may benefit from doubling as digital wallets or serving as channels for making financial transactions. Entrepreneurs responded well to a mock-up messaging app that sent and received payments, such as direct debit payments, private and government services payments, online purchases, and airtime top-ups.
  - b. Switching between apps is a barrier for entrepreneurs—they would much prefer to have an integration of functions.







**2. Entrepreneurs value immediate customer support.**

- a. Some entrepreneurs relied on family or peer support to develop their digital financial capability. The intuitive addition to a familiar messaging platform may facilitate ease of adoption.
- b. Similarly, entrepreneurs valued their ability to connect with 24/7 online customer support. Entrepreneurs mentioned they might need to validate a balance or to request immediate help in moving balances in their account.

**3. Entrepreneurs might feel more confident and develop trust in the payment channel when they can immediately confirm transaction completion.**

- a. Entrepreneurs were eager to avoid manual confirmation of payments, such as having to request a photo of the deposit receipt to confirm a transaction.

**4. Entrepreneurs value the ability to collect and maintain customer information regarding transactions completed, documents sent, and customers' payment administration in one easy-to-navigate platform.**

- a. This comes with the added benefit of saving phone memory, as entrepreneurs will no longer need to download multiple applications, which can be seen as a barrier for many entrepreneurs when they have to decide between the bank app or personal photos and videos.

**5. Entrepreneurs may experience increased sales through digital payments.**

- a. Some entrepreneurs mentioned that clients are more likely to make larger purchases with mobile payments.

Mobile payment channels will move the customer journey to one convenient platform, and close the digital payment cycle to allow customers, entrepreneurs, and suppliers to utilize and develop the same digital tools.





## Recommendations to drive adoption and increase impact of mobile payments

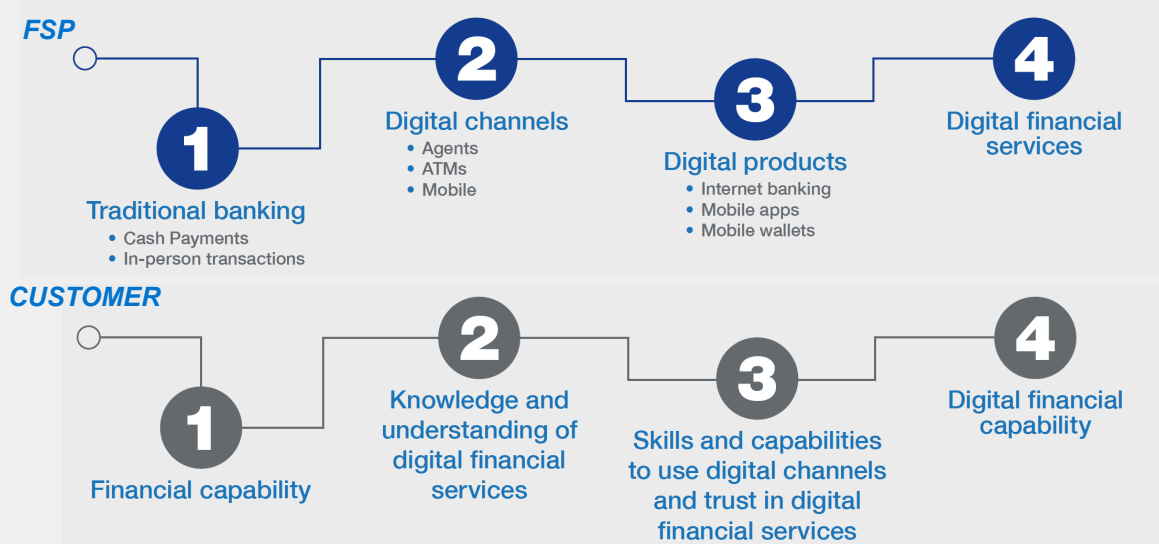
For mobile-based payments to deliver on their promises of financial inclusion, they must be able to interact easily with all types of digital transactions, build on existing digital financial capability, and see wide adoption among all parties involved in the payment cycle as clients, entrepreneurs, suppliers, or financial services providers. In Mexico, adoption of mobile-based payments remains limited. In this section, we provide a series of recommendations to facilitate the uptake and use of financial services for the purpose of impact. These recommendations are targeted towards two key stakeholders: regulators/policymakers and financial services providers.

### ***Box 6: Women entrepreneurs need greater digital financial capability***

Digital financial capability (DFC), defined as the knowledge, attitudes and skills that enable a person to actively use digital financial services, moves women a step closer to financial inclusion.

In 2021, Women's World Banking conducted exploratory research to understand the role of digital financial capability (DFC) in digital payment take-up. We found that women customers need DFC to adopt digital payments for the first time: Financial capability and digital literacy are not enough to drive take-up. In fact, many women may have “digital literacy” and “financial capability,” but lack DFC. With DFC, women entrepreneurs have the knowledge and understanding of digital financial services, as well as the skills and capabilities to use and trust in those services. Women with DFC are active users and endorsers of digital financial services, such as mobile payments.

***Figure 3: Digital transformation journey for financial services providers and customers***



Source: “Social Commerce Entrepreneurship and New Opportunities for Women’s Financial Inclusion in India and Indonesia,” Women’s World Banking, 2019.





## Regulators and policymakers

In emerging markets, government measures taken to create an enabling environment have been key in developing mobile-based payments and driving financial inclusion. In Mexico, the telecommunications and banking sectors have been dominated by a few large players. This dominance combined with current regulation has created an environment that does not favor the development of a robust mobile-based payment ecosystem. The following government actions can enable a more favorable environment for mobile-based payments and financial inclusion:

### Improve mobile network connectivity

**Increase connectivity in rural areas where mobile network coverage is inadequate.** Mobile internet is fundamental for mobile-based payments. Investments in connectivity will lay the groundwork for universal access to network services, increasing the ability of the population to access financial services providers.

### Communicate the benefits of mobile-based payments

**Launch broad awareness campaigns to promote understanding and adoption of new technologies** such as CoDi, and support high-touch activation campaigns. CoDi promotional campaigns should also involve activation using peer ambassadors and referral incentives. Such high-touch strategies are important for low-income segments to adopt new mobile-based financial services when they have low levels of trust in formal financial institutions.

### Lead by example and digitize P2G and G2P payments

**Digitize person-to-government (P2G) payments.** Provide the option for Mexicans to easily pay local, state, and federal taxes online. Ensure that all state-owned utility companies offer an easy-to-use portal or app for bill payments. Potentially offer a small discount to early adopters paying through mobile-based channels, at least in the initial adoption phase, to create monetary incentives for users.

**Digitize all government-to-person (G2P) payments.** The current administration has announced plans to transition all welfare benefits from cash to direct deposit or mobile-based wallet. To further support a movement away from cash, this should be linked to a campaign where the beneficiaries could decide if the bank or Fintech will receive the G2P payments, without any restrictions on how recipients can spend the money.

**Improve G2P and P2G user experience.** Digital wallets can offer an enhanced user experience for government payments by providing critical information to those making or receiving transfers.

### Promote blended finance for inclusive Fintech

**Promote blended finance.** Blended finance mechanisms can incentivize venture capital and impact investment funds to make longer-term investments into Fintech startups that target low-income populations and women.





### Collect data on mobile-based payments in national financial inclusion research efforts

**Collect data on mobile-based payments.** The National Financial Inclusion Survey (ENIF) is the authoritative dataset on financial inclusion in Mexico. However, it does not currently collect detailed data on mobile-based payments. This data would be relevant for understanding the transactional behavior of the beneficiaries.

### Ensure digital financial capability among customers, providers, and regulators

**Ensure digital financial capability among all stakeholders.** Increase focus on training and educational programs for customers, providers, and regulators.

**Shift financial education for consumers to digital financial capability.** As financial services shift to digital channels, investment in customer knowledge, skills, and attitudes in the digital realm should either complement or replace traditional financial education.

## Financial services providers

With few exceptions, the Mexican banking system remains focused on upper-middle-income customers. Financial services providers have largely seen digital transformation as an opportunity to better serve their existing upper-middle-income clientele—not as a way to reach the unbanked low-income customer segment. Financial services providers can take the following actions to advance digital payments for financial inclusion:

### Realize the commercial potential of reaching the low-income segment

**See the commercial potential at the base of the pyramid.** Most banks and Fintechs are not focusing on low-income consumers because they regard them as harder to reach and less profitable. This assumption might have been true when brick-and-mortar branches were the only option for accessing financial services, but it is no longer the case today. Improvements in technology have reduced the cost of offering digital payment mechanisms. In addition, when customers acquire digital bank accounts and transact digitally, this can reduce financial institutions' costs associated with cash, including security requirements and the maintenance of a physical branch infrastructure. The financial sector can offer tailored services for the low-income segment using mobile-based payment technologies at relatively low cost.

### Increase cash-to-digital access points

**Provide numerous access points.** These allow individuals to easily transform their cash into digital money, or vice versa, particularly in areas in which financial services are not widely available. Because much of Mexico's payment infrastructure is in cash, increased access points will create greater opportunities for customers to navigate in and out of the cash economy.





## Design products for low-income users

**Leverage human-centered design.** FSPs should leverage human-centered design to create products that address the needs of the financially excluded.

**Identify new use cases.** Through user research, providers can develop mobile-based payment products that address key financial needs of users. Financially excluded populations rely heavily on cash—replacing conventional payments with mobile-based payment options can offer a strong value proposition to users by saving time and money while building confidence and access to information. Promising use cases include utility bill payment, domestic and international remittances, school fees, digital credit repayment, and small merchant payments.

**Offer bundled and non-traditional products.** Mobile payment platforms can strengthen their value proposition by bundling products (e.g., health insurance plus savings), offering account opening through the app, and providing complementary non-financial services. Such strategies help build consumers' knowledge and confidence in managing their personal and/or business finances, such as tracking invoices, easily checking balances, using financial decision-making tools, and building savings habits.

**Present only the most relevant information.** Mobile payment designs should be simple and intuitive, limiting the text to only the very basics of what a client may need to understand the product.

## Invest in in-person touchpoints to onboard new users

**Develop high-touch communication and activation campaigns to promote the adoption and usage of mobile-based payments.** In-person touchpoints have been key in helping unbanked populations to start using digital financial services. For instance, some financial institutions have started to place digital advice associates in branches to help clients download, register, and learn how to use the new app. In other countries, sales representatives for mobile-based payment platforms go door-to-door to onboard small merchants through hands-on assistance. They later follow up in person to ensure sustained use of the platform and provide additional training. These types of creative ideas can drive innovation and inclusion in the financial sector and help eliminate the barriers to mobile-payment adoption.

## Co-create with Fintechs

**Build partnerships.** Banks and large financial services providers should build innovation areas to collaborate more closely with Fintech startups. Fintechs provide banks with cutting-edge technology and improved customer experience. This could be done in particular by having banks open their application programming interfaces (“APIs”) to Fintechs. This openness is a requirement of the Open Banking regulation. Bank-Fintech partnerships allow banks to lower the investment and risk of targeting low-income customers while ensuring significant outreach numbers and impact. In addition, Fintechs could partner with banks to enable bank account opening through a mobile payment app.





## Ensure diversity and inclusion at all levels

**Invest in company-wide diversity trainings and programs.** Discrimination on the basis of gender and other socio-demographic attributes remains prevalent in the banking sector. Encouraging all staff to appreciate the importance of a diverse customer base and the value of serving the low-income segment should be a priority from the senior level to the branch staff, who interact most directly with clients. Regardless of their gender, ethnicity, or socioeconomic status, all clients should have access to a wide variety of products rather than to a couple of low-value, one-size-fits-all products.

**Embed digital financial capability into how FSPs engage customers with digital payment products.** Without DFC, it is hard for women entrepreneurs to use digital payments. Women entrepreneurs often rely on younger family members to play the role of teaching them the technology. FSPs should help women build their digital financial capability.





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